



2013

**ACEA SUSTAINABILITY
REPORT**

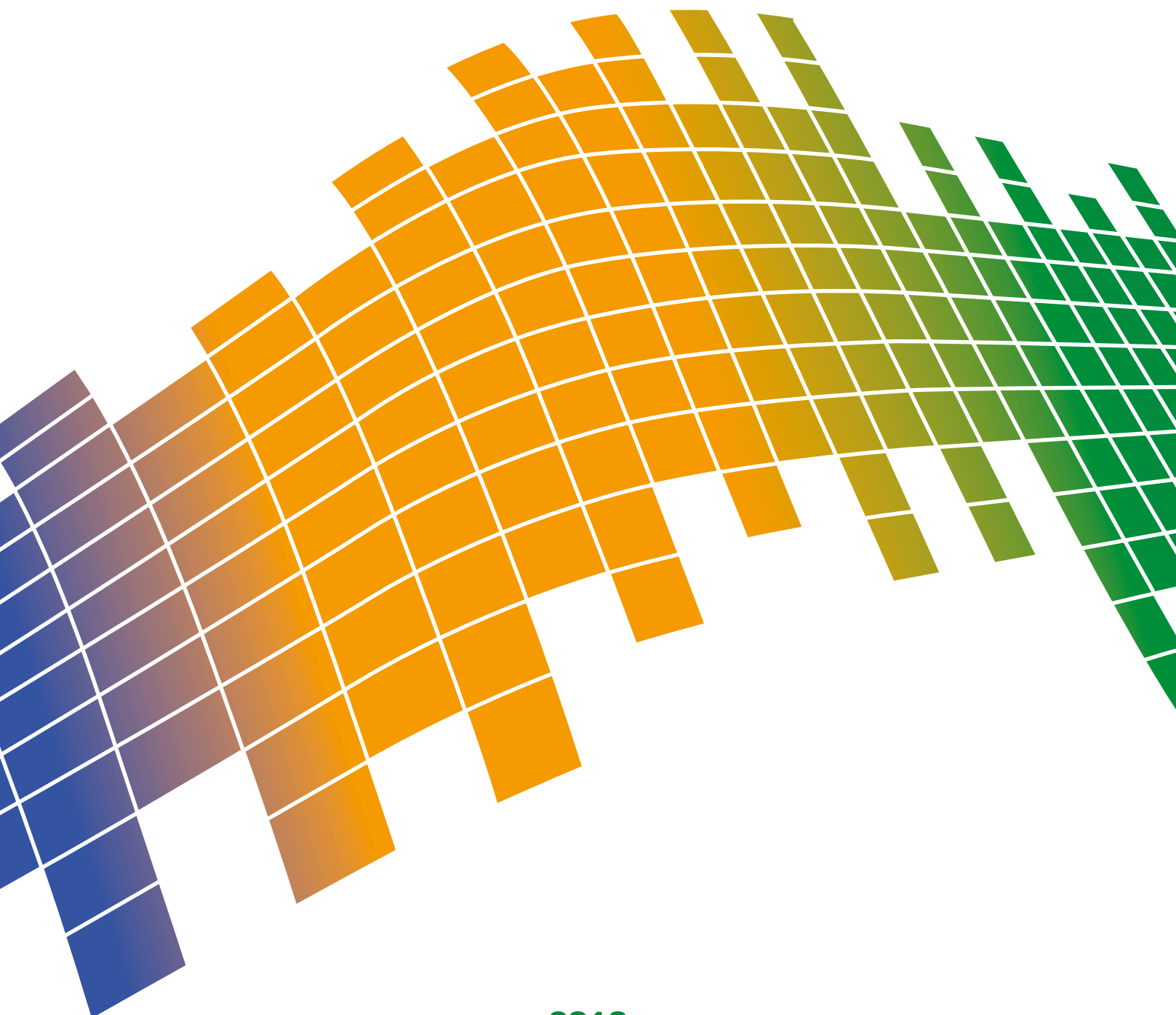
The Corporate Identity

The socio-economic relationships
with the stakeholders

Environmental Issues

Environmental Report





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ACEA 2013 SUSTAINABILITY REPORT CONTENTS

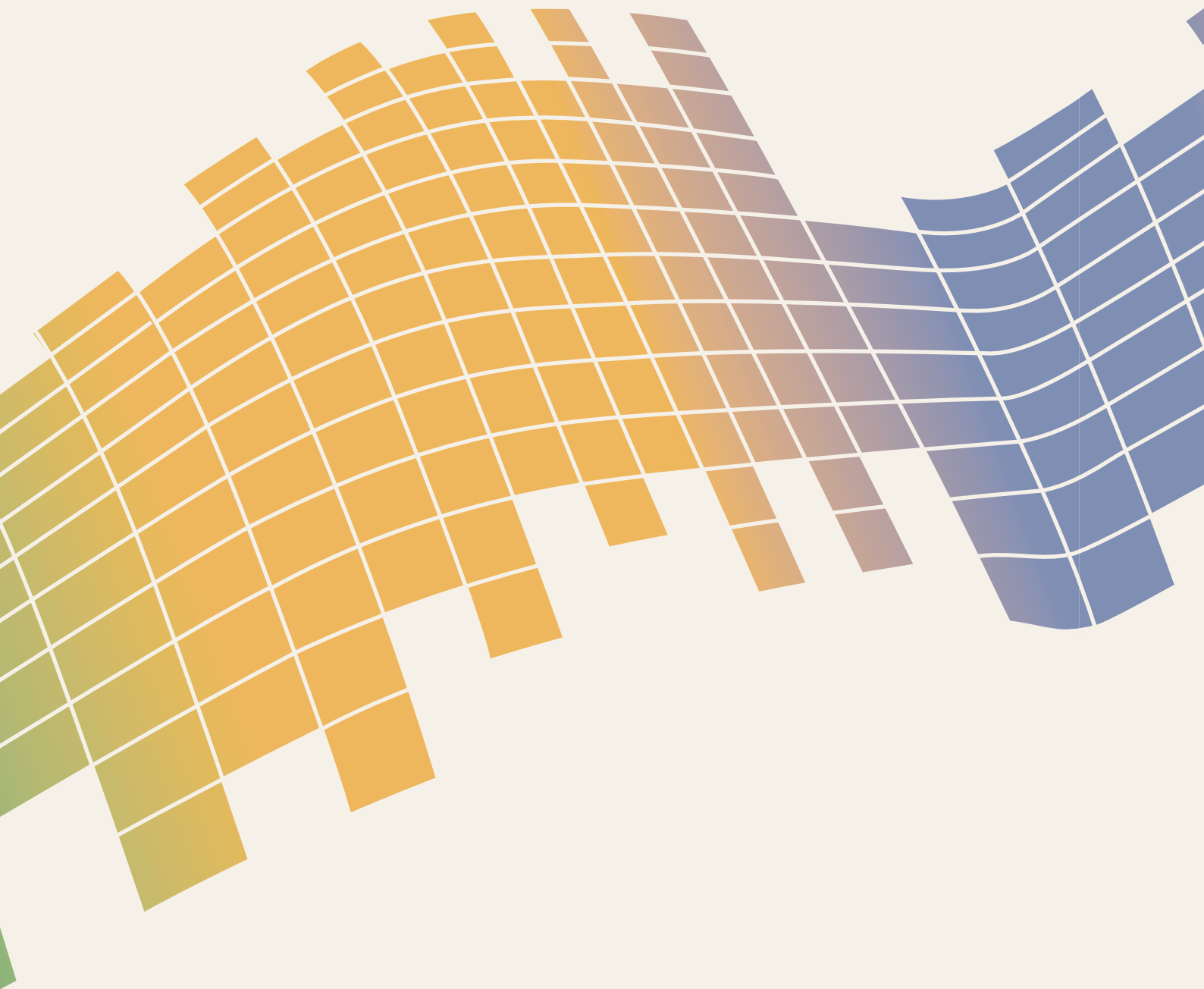
LETTER FROM THE C.E.O. AND THE PRESIDENT	5	THE CORPORATE IDENTITY	
DISCLOSING SUSTAINABILITY: METHODOLOGICAL NOTE	6	Corporate Group Profile	16
CONNECTIONS BETWEEN THE GLOBAL COMPACT PRINCIPLES AND THE GRI INDICATORS	10	Activities and functions of the main companies of the Group	20
ASSURANCE PROVIDER OPINION LETTER	11	General economic indicators	22
		Development and strategic Plan	24
		Strategy and sustainability	26
		Acea: values and contributions to sustainability	26
		Sharing the corporate social responsibility matters	28
		2012-2016 Sustainability plan and mid-term objectives	30
		Corporate governance and management systems	35
		Corporate governance within Acea	35
		Management Systems	40
		Stakeholders and added value distribution	44
		The stakeholders and their involvement	44
		Distribution of Acea's added value	46

THE SOCIO-ECONOMIC RELATIONSHIPS WITH THE STAKEHOLDERS

Customers and community	50
Acea Group Customer	50
Perceived Quality	51
Quality Supplied	57
The tariffs	73
Customer care	76
Communication, events and solidarity	82
Suppliers	90
Consolidated external charges	90
Purchasing policies	90
The supply of goods, services and works	92
Evaluation of suppliers	94
Human Resources	99
Acea's personnel	99
Industrial Relations	103
Diversity and equal opportunities	105
Worked hours and absences	106
Safeguard of health and safety in the workplace	107
Enhancement of human resources and communication	110
Social activities	118
Shareholders and capital providers	120
Economic flows to stockholders and capital providers	120
Agency ratings	120
The financial report	121
Ethical finance	121
Institution and company	123
The relationship with institutions	123
The company as a shareholder	126
Activities abroad	129

ENVIRONMENTAL ISSUES

Acea and protection of the environment	134
Measures to protect the climate	134
A value to share: biodiversity	135
Environmental management	136
The "environmental expenditures"	139
Energy Area	140
Energy production: fossil and renewable energy sources	140
Energy distribution: grids and "smart grids"	146
Energy saving	148
Environment Area – Waste Management	150
Integrated waste treatment: a sustainable management	150
Waste incineration and energy recovery	151
The production of compost	151
Water Area	153
Activities in central Latium: sources and protected areas	153
Water quality	154
Sewerage service and wastewater treatment system	157
The use of energy and water	159
Energy consumption	159
Water consumption	160
Emissions, mobility and waste	162
Emissions in the atmosphere	162
Acea Group's waste	165
Research	166
INDEX OF GRI CONTENTS: STANDARD ELEMENTS AND PERFORMANCE INDICATORS	168
INDEX OF CHARTS AND TABLES	178
ENVIRONMENTAL REPORT	182



LETTER FROM THE C.E.O. AND THE PRESIDENT

The *2013 Sustainability Report*, at its 16th edition, shows through a detailed and comprehensive overview the attention Acea continually pays to its **corporate social responsibility** and **environmental responsibility**. These issues are becoming more and more crucial for our business context, our operations and daily decisions, supported by the constant drive of international entities and the raised awareness in international, national and local institutions.

The principles of sustainable growth and responsible behaviours towards the environment we operate in and the context we interact with, exist since long time in the *Code of Ethics of the Group*, together with the ten principles of *Global Compact*. This demonstrates our commitment to pursue the path undertaken many years ago, **integrating sustainability and doing business in an always more decisive way**.

We have re-drawn the 2012-2016 Sustainability Plan, consistent with the recently approved 2014-2018 Business Plan, following these values and principles.

Amongst the **objectives contained in the Plan**, those of primary relevance refers to: reduction in consumption of natural resources, endorsement of green procurement by the introduction of quality, security and respect of environment parameters for the assessment and selection of suppliers, further promotion of the quality services in order to improve the relationship with customers. Two additional cornerstones of our company competitiveness are technological innovation and enhancement of human resources.

Several goals have been achieved in the past year:

from the governance viewpoint, we introduced in the Articles of Association the gender equity in the administrative and control bodies of quoted companies, with the purpose of extending the same principle to our Subsidiaries. New Company Committees have been established to better involve management and, by the appointment of two external members, the composition of *the Ethics Committee has been completed*.

From a business viewpoint, certain companies of the Group carried out interventions aimed at improving the environmental impact, such as the *revamping* of the plant located in Terni, the strengthening of composting activities, the development of smart grid projects and electric mobility.

Our strong commitment in energy-efficiency and reduction in consumption of natural resources, has led to the achievement of relevant results, as decrease in energy consumption of water companies of the Group (-5%) and consumption of water resource (-25%), whilst the application of LED technology for public lighting has increased.

With regard to human resources, we continually invest in training our personnel, in sharing and expanding our company values and principles related to safety and environmental protection.

Despite the difficult economic period, Acea gave different contributions **to the increase in the quality of life and services for communities**. We are conscious of being a factor of economic competitiveness and a tool of growth in the areas we operate in: over 2,000 companies worked with us, generating an economic value amounting to more than 500 million euros.

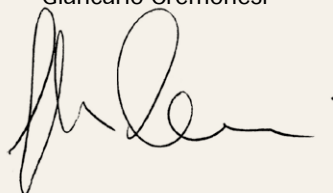
The year 2013 marked a turning point for the Group, where particularly brilliant economic and financial results have been achieved thanks to the increase in profit margins, the continuous reduction of costs and the constant attention to the floating capital.

The approval of 2014-2018 Business Plan, attests, in a medium- long term schedule, that **sustainable development is a core issue** for the strategic decisions of Acea.

The Chief Executive Officer
Paolo Gallo



The President
Giancarlo Cremonesi



DISCLOSING SUSTAINABILITY: METHODOLOGICAL NOTE

A *Sustainability Report* describes the **economic, social and environmental performances of the Group**, with the purpose of providing, as far as possible, the most clear, complete and integrated information to the stakeholders. The reporting herein refers to the year 2013 and is Acea's sixteenth annual edition.

Sustainability Report, after the formal approval of the **Board of Directors**, is published **simultaneously to the Annual Financial Statements** and presented during the Shareholders' Annual General Meeting¹.

THE GUIDELINES

Acea has followed the reporting principles and performance indicators provided by the **GRI-G3.1 Guidelines** completed by the indicators of the **Electric Utility Sector Supplement**.

Furthermore the **Environmental Report** analyses more than **260 items** representing the fluxes generated by the Group operations: production outcomes, factors employed (resources) and external output (waste and emissions).

Since 2007 Acea participates in the **Global Compact (GC)** initiative, recognizing **coherence among the ten principles** supported by the United Nations with the "Global Pact" and the **ethical conduct defined in the Group Code of Ethics**. The **Communication on Progress (CoP)** is integrated in the sustainability report through **connections between GRI Indicators and Global Compact principles**, by virtue of the understanding between the two organizations.

DOCUMENT CONTENTS AND STRUCTURE

The *Sustainability Report* contents, whose main purpose is to provide clear and balance information in order to respond to the different stakeholders, are pointed out on the basis of **GRI-G3.1 Guidelines**, conveniently applied to the company operational context. In drafting the report the **company's legal nature**, listed in the stock exchange, the **relationship among the holding company and its sister companies**, the **operational sectors** (energy, water and environment), the **utility mission**, **the country - Italy - in which its main activities are carried out** and the **types of stakeholders** Acea deals with, have been taken into account.

For a more efficient application of the **materiality principle**, provided by GRI guidelines³, the 2011 report⁴ has been reviewed and updated according to priorities to be reported in 2013. Therefore a **phase of interviews of management has begun**, and will continue into 2014, **external and internal sources⁵ have been analysed** in order to gather relevant and pertinent information aimed at mapping the core topics within the economic, social and environmental fields. Consequent to such activity, an updated framework has been drafted outlining only those topics whose assessment was considered of high and medium relevance – see table n. 1.

¹ The new schedule, starting from 2011, has been implemented for the highest governance bodies and made official by the *CSR Developing Lines and reporting adopted* in November 2011 from the Ethical Committee of Acea SpA.

² The **Global Reporting Initiative (GRI)**, was founded in England in 1997 by the **Coalition of Environmentally Responsible Economies (CERES)**, and became independent in 2002, as the official collaborating organization of the United Nations Environment Programme (UNEP) and operates within the project Global Compact. The GRI-G3.1 Guidelines (2011 edition), available on the website www.globalreporting.org, define the reporting principles of sustainability reports and the economic, social and environmental indicators to issue. **The Electric Utility Sector Supplement** (2009 edition), providing specific sector indicators, is also available on GRI website. In 2013 a new and more challenging edition of the guidelines has been released: G4. Companies should align to G4 guidelines within 2015.

³ Before entering into force of the new GRI- G4 guidelines, released in 2013, which provide more relevant changes in the assessment process of sustainability-related issues.

⁴ In 2011 an external assurance provider was entrusted with identifying, mapping and prioritizing within the economic, social and environmental areas, the most relevant elements to be included in the report, carrying out an analysis of internal factors (documents and interviews) and external factors (focus group with external stakeholder) compared to a specified benchmark.

⁵ Particularly, some internal documents (Acea risk analysis 2013, **Regulatory Monthly Report**) and external documents (GRI – **Sustainability Topics for Sector: what do stakeholders want to know?**, Agenzia dei servizi pubblici Locali di Roma - 2013 Report) have been analysed, completed by a Summary of daily monitoring of press release and by the aforesaid interviews to management.

TABLE N. 1- MATERIALITY: MAPPING OF RELEVANCE

RELEVANCE	ECONOMIC	SOCIAL	ENVIRONMENTAL
High	<ul style="list-style-type: none"> Indirect Economic impacts Governance, commitment and involvement Strategy State subsidies to renewable energy sources (waste to energy, hydroelectric) 	<ul style="list-style-type: none"> Community: involvement of local communities Product responsibility: people exposure to electromagnetic fields 	<ul style="list-style-type: none"> Water: quality of drinking resource, leakage reduction, quality of service and regulation Emissions, effluents and waste Energy-efficiency in electricity generation, transmission and distribution – network leakages. Environmental investment and costs
Medium	<ul style="list-style-type: none"> Market presence Organizational profile Economic performance 	<ul style="list-style-type: none"> Labour: safety, transfer of expertise, outsourced operations 	<ul style="list-style-type: none"> Environmental impacts of products and services Raw materials: restraint in use of natural resources Transport of products and members of the workforce Safeguard and impacts on biodiversity

Acea takes into due account the outcomes of the analysis on the relevant factors according to the priorities defined by the company's strategic decisions and the Guidelines adopted for reporting.

The 2013 Sustainability Report meets the **standard elements and core and additional performance indicators** provided by the *GRI-G3.1 Guidelines* and the *Sector Supplement* with the **highest application level (A+)**, meaning that not only all **indicators have been covered** but the **document has been reviewed by an external assurance provider** with undisputed competence in both the subject matter and assurance practices (see table n. 2). The report also provides further information on the Corporate Group operations, in addition to those requested by the *Guidelines*, in accordance with the materiality principle and the company features.

TABLE N. 2 THE APPLICATION LEVELS OF GRI-G3.1 GUIDELINES

APPLICATION LEVEL	C	C+	B	B+	A	A+
STANDARD DISCLOSURE	PROFILE DISCLOSURE Report on: 1.1 2.1-2.10 3.1-3.8 3.10-3.12 4.1-4.4 4.14-4.15	REPORT ASSESSED EXTERNALLY	Report on all the criteria listed for Level C plus: 1.2 3.9, 3.13 4.5-4.13 4.16-4.17	REPORT ASSESSED EXTERNALLY	Same as requirements for level B	REPORT ASSESSED EXTERNALLY
	DISCLOSURES ON MANAGEMENT APPROACH Not required		Management Approach Disclosures for of each indicator Category		Management Approach Disclosures for of each indicator Category	
	G3.1 PERFORMANCE INDICATORS AND SECTOR SUPPLEMENT PERFORMANCE INDICATORS Report fully on a minimum of 10 performance indicators, including at least one indicator from each of economic, social and environment		Report on a minimum of 20 performance indicators, at least one from each of economic, environment, human rights, work, society, product of responsibility		Report on each core and Sector Supplement indicator of the G3.1 with regard to the principle of materiality by either reporting or explaining any omissions	

The **2013 Sustainability Report** is divided in three sections: **The corporate identity**, **The socio-economic relationships with the stakeholders** and **Environmental Issues**, completed by the *Environmental Report* (see chart n. 1). The report is disclosed through the official publication on the company website - www.acea.it – and the company’s intranet; in addition, it is copied on a pen drive and sent to a selected mailing list (about 750 recipients) and during events.

CHART N. 1 - THE STRUCTURE OF 2013 SUSTAINABILITY REPORT



REPORT BOUNDARY

The area the reporting refers to – “Report Boundary” – is defined in accordance with the size of the Corporate Group (see also paragraph “Corporate Group Profile”) without neglecting information or significant data.

The widest boundary taken into account relates to **economic information**, referring to Acea SpA and other companies included in the consolidation, as defined in the *2013 Consolidated Financial Statements*⁶. **Every change of the boundary**, according to the real availability of data – linked to their progressive centralized management and their relevance - **is outlined in the text**⁷.

Operations fulfilled by the holding company and the main operative companies in the water, energy and environmental supply chains, from which the most important economic, social and environmental performances derive, have been regularly reported, in order to assure a constant comparability over the time.

DEFINITIONS AND BOUNDARY

“Acea Group”, “Acea”: means all companies included in the consolidation, as well as Acea SpA.

“Acea SpA”, the terms “parent company” and “holding company” have the same meaning.

The main companies included in the report boundary, in addition to Acea SpA, are: Acea Distribuzione, Acea Reti e Servizi Energetici, Acea Energia holding, Acea Energia and Acea Produzione; A.R.I.A. (in which EALL, Terni En.A, Enercombustibili and Ergo Ena are merged via incorporation), Aquaser, Acea Ato 2, Acea Ato 5, LaboratoRI, Acque, Gori, Acquedotto del Fiora, Publiacqua, Umbra Acque, Acea8cento.

Whether further companies not belonging to such lists are included in the report boundary, it is specified in the document.

DATA RETRIEVAL SYSTEM AND RELIABILITY

Data and information published in the sustainability report are provided by the responsible Functions (data-owner); they are further integrated and specified through in-depth analysis during meetings among the internal teamwork, entrusted with the drawing of the document, the Industrial Areas and the Functions directly involved, until their final approval. If necessary, data are elaborated and classified again according to the guidelines adopted.

Before being edited, the report is reviewed by an **independent assurance provider**, free from any kind of bounding and common interests with Acea, whose main task is to assess the adequacy of reporting methodologies, analyse the contents, in all parts including the *Environmental Report*, assess the correspondence with the Guidelines of reference (GRI-G3.1 and *Sector Supplement*) and **release an overall final judgment** about its clarity, completeness and transparency (see *Opinion Letter of Assurance Provider*).

6 Available on the website www.acea.it, section stakeholders

7 in some cases, the reporting boundary of section **The social and economic relationship with the stakeholders** and **Environmental Issues**, does not correspond to the consolidation area, even if it refers to the main companies of the Corporate Group. Such disparities occur because not all data are gathered and handled at the centralized level (i.e. for Personnel and Suppliers). Variations on the boundary are always specified in the text, in the boxes called **Reference Boundary**.

MEASUREMENT SYSTEMS

Quantitative, social and environmental data have been obtained:

- Where possible through **direct measurement** of the items linked to the reporting-related issues;
- In other cases, through **calculation** or **estimate** of the item **values** using the best available information.

All data related to the environment can be found in the **explanatory notes to the Environmental Report**, where it is specified if they derive from **calculation, measurement or estimation**.

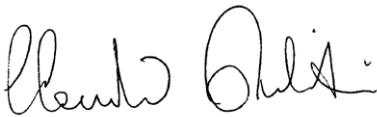
ADDITIONAL INFORMATION SOURCES ON THE CORPORATE GROUP PERFORMANCES: THE WEBSITE

On the website www.acea.it up-to-date information on the Group is available:

- in the section **“Rules and Values”** documents and information about Corporate Governance, the Ethics Committee and the document related to the Group *Code of Ethics* (2012 edition) are available;
- in the section **“Shareholders”** economic and financial statements, press releases, presentations, etc. are also available. Furthermore on the webpage **“Highlight”** it is possible, through an interactive display, to check charts containing the main economic and financial data of the most recent years, to compare charts with those of main domestic competitors. Access to a portal allows the consultation of the *Consolidated Financial Statements* (Italian and English version);
- in the section **“Sustainability”** data and information on the Group performance, data on different stakeholders, a section in pdf with miscellaneous information in addition to the whole *2013 Sustainability Report* and previous editions, are available too; an interactive Italian and English version of the report can also be found;
- in the section **“Quality and Safety”** information on such topics are available;
- in the section **“Suppliers”** information on the regulations in force, Qualification Systems and online tenders are available;
- the section **“Customers”** provides information and access to **websites of service provider companies**;
- the section **“Communication”** is dedicated to press releases and the most relevant news, information on advertising Campaigns and main events realised thanks to Acea’s contribution.

For any further information, please contact the following email address: RSI@aceaspa.it

Claudio Puliti
CSR and sustainability Unit



Ranieri Mamalchi
Institutional Affairs Function



CONNECTIONS BETWEEN THE GLOBAL COMPACT PRINCIPLES AND THE GRI INDICATORS

The Global Compact is an initiative launched by the Secretary General of the United Nations at the end of the World Economic Forum in 1999. In his appeal, he invited the leaders of the world economy to support and disclose the nine universal principles related to **human rights, labour and environment**, to which, in 2004, a tenth principle was added: **fighting corruption**. Since then the network of organisations and businesses embracing the initiative and formally committing themselves, continue to enlarge.

Acea joined the ten principles in 2007, renewing its participation from year to year.

Below is a table containing the connection⁸ between the Global Compact principles and the GRI indicators, that shows the correlation and provides information as defined in the *Communication on Progress*, that every business is entitled to issue.

TABLE N. 3 - GLOBAL COMPACT- GRI CONNECTIONS

GLOBAL COMPACT PRINCIPLES	CORRESPONDING GRI INDICATORS	SUSTAINABILITY REPORT	
Human rights	1: Businesses are required to further and respect the human rights recognised universally within the ambits of the respective sphere of influence.	EC5 ■ LA4 ■ from LA6 to LA9 ■ LA13 ■ LA14 ■ from HR1 to HR9 ■ PR1 ■ PR2 ■ PR8	Pages 110 et seq. ■ 103 et seq. ■ 95 et seq., 108 et seq. ■ 102, 105 et seq., 119 ■ 111 ■ 26, 90 et seq., 94 et seq., 105 et seq., 114 et seq., 119 ■ 40-43, 71, 95, 97, 127 et seq. ■ 175 ■ 175
	2: Businesses must ensure that they are not, even indirectly, party to the abuse of human rights.	from HR1 to HR9	26, 90 et seq., 94 et seq., 105 et seq., 114 et seq., 119
Labour	3: Businesses are required to support freedom of association of workers and recognise the right to collective bargaining.	LA4 ■ LA5 ■ from HR1 to HR3 ■ HR5	Pages 103 et seq. ■ 103 et seq. ■ 90 et seq., 94 et seq., 114 et seq. ■ 173
	4: Businesses must uphold the elimination of all forms of forced and compulsory labour.	from HR1 to HR3 ■ HR7	90 et seq., 94 et seq., 114 et seq. ■ 174
	5: Businesses must uphold the effective elimination of child labour.	from HR1 to HR3 ■ HR6	Pages 90 et seq., 94 et seq., 114 et seq. ■ 174
	6: Businesses must uphold the elimination of any form of discrimination regarding employment and profession.	EC7 ■ LA2 ■ LA13 ■ LA14 ■ from HR1 to HR4	Pages 171 ■ 99 set seq. ■ 102, 105 s, 119 ■ 111 ■ 26, 90 et seq., 94 et seq., 105 et seq., 114 et seq., 119
Waste Management	7: Businesses are required to have a precautionary approach to environmental challenges.	4.11 ■ EC2 ■ EN18 ■ EN26 ■ EN30	Pages 43, 163 ■ 22 et seq., 134, 148 et seq. ■ 147 et seq. ■ 141, 162 ■ 139
	8: Businesses are required to undertake initiatives which further greater environmental responsibility.	PR3 ■ PR4 ■ from EN1 to EN30	Pages 59-64 ■ 59-64, 66 ■ 189 set seq., 74, 91, 128, 135 et seq., 137, 139, 141, 146-149, 154, 159 et seq., 162, 164 et seq., 177, Environmental Report 192, 194
	9: Businesses are required to encourage the development and disclosure of technologies which respect the environment.	EN2 ■ from EN5 to EN7 ■ EN10 ■ EN18 ■ EN26 ■ EN27 ■ EN30	Pages 91 ■ 74, 141, 146-149 ■ 160 ■ 147 et seq. ■ 141, 162 ■ 177 ■ 139
Fight against corruption	10: Businesses undertake to fight corruption in all its forms, including extortion and bribery.	from SO2 to SO6	Pages 39, 114, 123-126, 175
	ALL (1-10)	1.1 ■ 1.2 ■ from 4.1 to 4.10 ■ 4.12 ■ 4.13 ■ 5 (DMA) ■ SO5	Pages 5, 26 et seq. ■ 5, 22-27, 30 set seq. ■ 6, 35-39, 106, 111, 120, 170 ■ 6, 28, 36, 42 et seq., 91, 106, 108, 124 et seq., 127, 135 ■ 123, 125 ■ 22 et seq., 26, 40-43, 51, 57, 76 et seq., 82 set seq., 90 et seq., 94 set seq., 99, 107 et seq., 110, 113 et seq., 117 et seq., 120, 126 set seq., 134, 159, 183 ■ 123 set seq.

⁸ This table has been provided by the UNGlobal Compact and Global Reporting Initiative, and it available online (www.unglobalcompact.org) in the document *Making the Connection. The GRI Guidelines and the UNGC Communication on Progress*.

ASSURANCE PROVIDER OPINION LETTER



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Independent auditors' report on the limited assurance engagement of ACEA Group's Sustainability Report as of December 31, 2013 (Translation from the original Italian text)

To the Shareholders of ACEA S.p.A.

1. We have carried out the limited assurance engagement of the sustainability report (hereinafter the "Report") of ACEA S.p.A. and its subsidiaries (hereinafter "ACEA Group") as of December 31, 2013. The Management of ACEA S.p.A. is responsible for the preparation of the Report in accordance with the "Sustainability Reporting Guidelines 3.1" issued in 2011 by GRI - Global Reporting Initiative integrated by specific indicators included in "Sustainability Reporting Guidelines & Electric Utilities Sector Supplement (EUSS)" issued in 2009 by GRI that are detailed in the paragraph "Methodological Note", as well as for determining the Group's commitments regarding the sustainability performances and the reporting of the achieved results. The Management of ACEA S.p.A. is also responsible for the identification of the stakeholders and the significant matters to report, as well as implementing and maintaining appropriate processes to manage and control internally the data and disclosures reported in the Report. Our responsibility is to issue this report based on the limited assurance engagement described in this report.
2. Our work has been conducted in accordance with the principles and guidelines established by the "International Standard on Assurance Engagements 3000 - Assurance Engagements other than Audits or Reviews of Historical Financial Information" ("ISAE 3000"), issued by the International Auditing and Assurance Standard Board. ISAE 3000 requires the compliance with ethical requirements ("Code of Ethics for Professional Accountants" issued by the International Federation of Accountants - "IFAC"), including professional independence, as well as planning and executing our work in order to obtain a limited assurance, rather than a reasonable assurance, that the Report is free from material misstatements. A limited assurance engagement of the Report consists of making inquiries, primarily with company's personnel responsible for the preparation of the information included in the Report, in the analysis of the Report and in other procedures in order to obtain evidences considered appropriate. The procedures performed on the Report are summarized below:
 - a. Compared the economic and financial information and data included in the Report with those included in the Acea consolidated financial statements as of December 31, 2013, on which we issued our auditor report, pursuant to art. 14 and 16 of Legislative Decree n. 39 dated April 30, 2014;
 - b. Analyzed the operation of the processes that support the generation, recording and management of the quantitative data reported in the Report. In particular, we have carried out the following procedures:
 - interviews and discussions with personnel of ACEA S.p.A., ACEA Illuminazione Pubblica S.p.A., ACEA Ato2 S.p.A., A.R.I.A S.r.l. and ACEA Produzione S.p.A. to obtain an understanding about the information, accounting and reporting

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system in use for the preparation of the Report and about the processes and the internal control procedures supporting the collection, aggregation, data processing and transmission of data and information to the department responsible for preparation of the Report;

- analyzed, on a sample basis, the documentation supporting the compilation of the Report in order to confirm the processes in use, their adequacy and the operation of the internal control for the correct reliability of data and information in relation to the objectives described in the Report;
- c. analysis of the consistency of the qualitative information reported in the Report to the guidelines indicated in paragraph 1. of the present report and the internal consistency, with reference to the strategy, the sustainability policies and the identification of the main matters for any kind of stakeholder;
- d. analysis of the process relating to the engagement of the stakeholders;
- e. attainment of the representation letter, signed by the legal representative of ACEA S.p.A., relating to the compliance of the Report with the guidelines indicated in paragraph 1., as well as to the reliability and completeness of the information and data presented in the Report.

A limited assurance engagement is substantially less in scope than a reasonable assurance engagement performed in accordance with ISAE 3000, and it does not provide a similar level of assurance; as consequence, we may not have become aware of all the significant events and circumstances which we could have identified had we performed a reasonable assurance engagement.

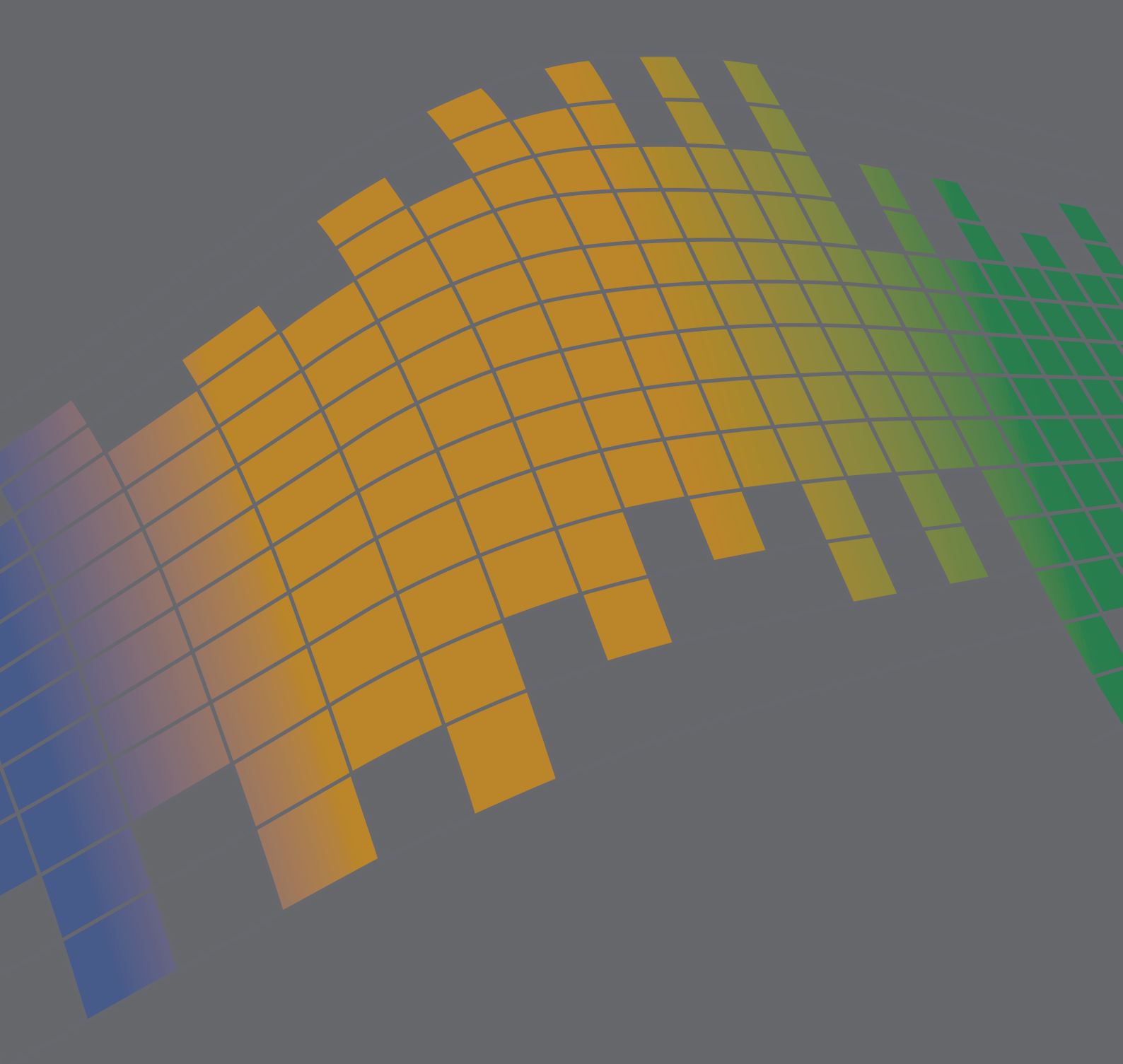
With respect to the data and information relating to the report of the prior year presented for comparatives purposes, reference should be made to the report, issued on March 27, 2013 by another independent auditor.

3. Based on our work, nothing has come to our attention that causes us to believe that the sustainability Report of ACEA Group as of December 31, 2013 is not in compliance, in all material respects, with the "Sustainability Reporting Guidelines 3.1" issued in 2011 by GRI - Global Reporting Initiative integrated by specific indicators included in "Sustainability Reporting Guidelines & Electric Utilities Sector Supplement (EUSS)" issued in 2009 by GRI as stated in the paragraph "Methodological Note" of the Report.

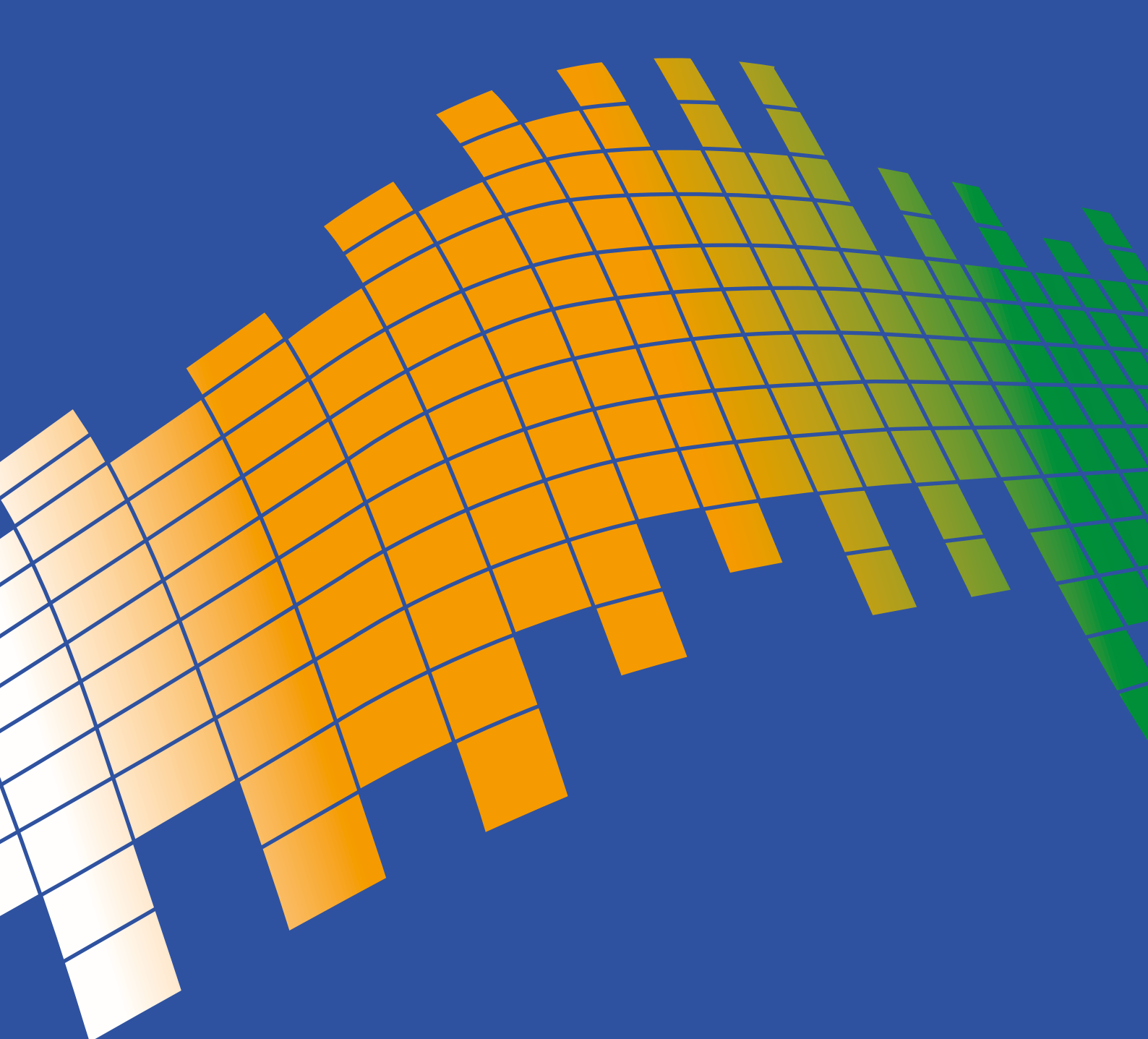
Rome, April 30, 2014

Reconta Ernst & Young S.p.A.
Signed by: Filippo Maria Aleandri, partner

This report has been translated into the English language solely for the convenience of international readers







2013

THE CORPORATE IDENTITY

CORPORATE GROUP PROFILE

Acea is one of the most important Italian multi-utility groups, with a centenary industrial development path focused on the general economic service network. The company started its activity in the territory of Rome, where it keeps a significant presence in the energy and water sectors, then expanding its operations all over the country, thanks to shareholdings and to other local public service businesses. The Group rooted its attitude to the principles of its corporate social responsibility and sustainability, towards each of its operative sectors: energy supply chain (production, distribution and sale of

electricity and gas, public lighting management, energy efficiency), integrated water service (catchment, distribution, wastewater collection and treatment) and environmental services (waste treatment, economic and energy enhancement of waste). Today Acea Group is the leading company, on a domestic level, in the water sector for serviced inhabitants, the third in Italy both for volume of electricity distribution and for volume of final energy sales and the fifth for volume of waste treated on a national level.

THE HISTORY OF ACEA

1909 born as "Azienda Elettrica Municipale" (AEM) of the Municipality of Rome with the purpose of supplying Energy for public and private lighting

1937 becomes "Azienda Governatoriale Elettricit  e Acque" (AGEA), entrusted with the construction of aqueducts

1985 takes over the water waste treatment service, laying the ground for the integrated management of the whole water cycle

1989 changes into A.C.E.A. - Azienda Comunale Energia e Ambiente, and develops its know-how in the artistic and monumental lighting sector

2001-2002 strengthens its presence in Rome, in 2001 purchases the electricity distribution branch in the metropolitan area of Rome from Enel. In 2002, within the integrated water cycle in ATO 2 - Lazio Centrale, it wins the management of the whole sewerage system of Rome. In the same year joint ventured with GdF Suez, creating AceaElectrabel, specialized in the energy sector.

1945 turns into A.C.E.A. - Azienda Comunale Elettricit  ed Acque

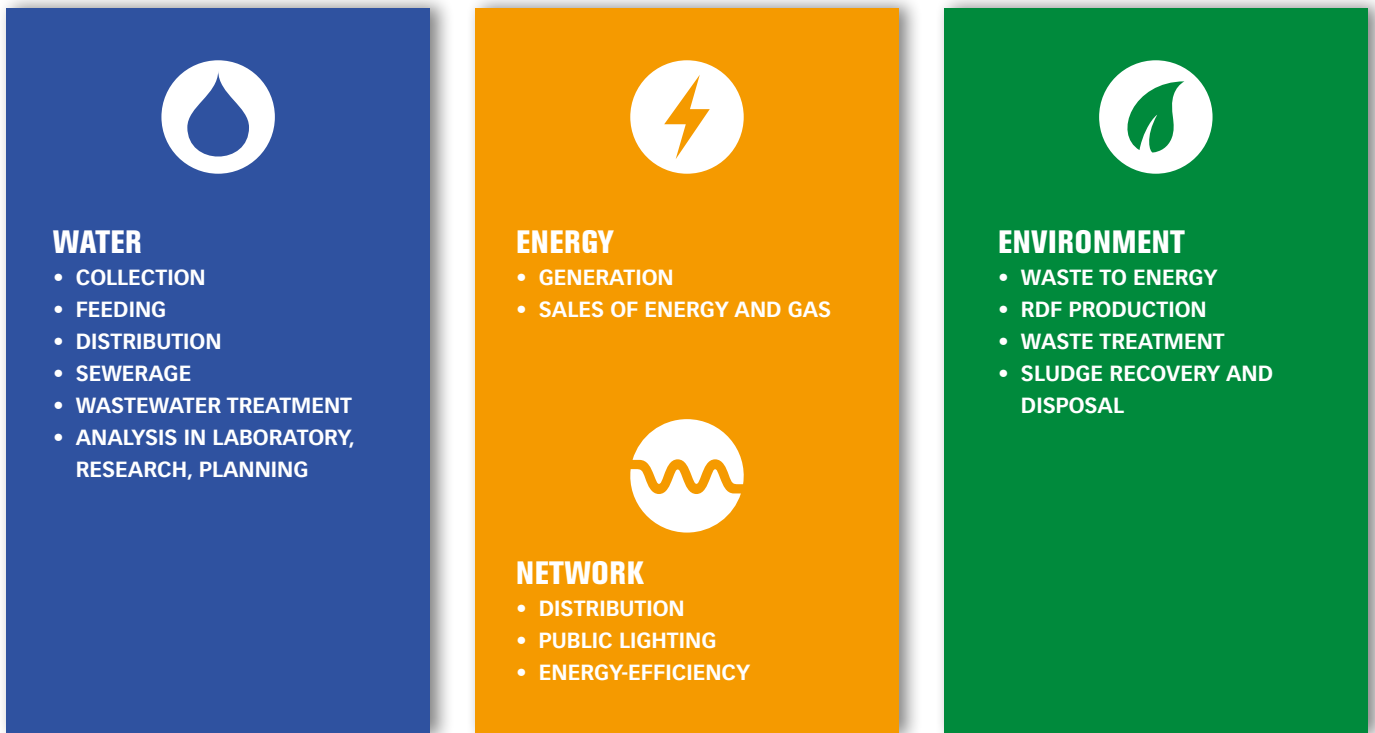
1964 takes over the company Acqua Marcia and becomes the sole operator in the sector of Roman aqueducts

1975 is entrusted by the Municipality of Rome for the implementation of the water purification Plan in the suburbs of Rome

1992 becomes a legal entity, obtains its own autonomy and Article of Associations, maintaining its operating entity for the Municipality of Rome

1998-2000 starts operating as joint-stock company, with the name of Acea SpA. Listed in the stock exchange in 1999, becomes a Corporate Group, beginning a policy of enlargement both on a national and foreign level and investigating new operational sectors

2003-2005 develops its energy production, purchasing a stake in Tirreno Power and further power-generating companies between 2003 and 2004. Within the water sector, it wins the management of integrated water service in new Ambiti Territoriali Ottimali (Optimal Territorial Area) in Latium, Tuscany and Campania.



2006 takes over TAD Energia Ambiente SpA, which operates in the waste to energy sector. Enhances commercial activities and network for gas and energy sales, with an eye on further potential regions (Apulia, Umbria, Tuscany).

2010-2012 winding up of the joint venture AceaElectrabel with GdF Suez, becoming independent in the Energy sector. Thus, in 2011, Acea equips itself with its own production within the company (Acea Produzione, focused mainly on the hydroelectric sector) and with electricity sales (Acea Energia). Develops technological innovations and operational efficiency in the electricity distribution (smart grid and sustainable mobility) and, in the environment area, revamps the waste to energy plants and strengthens the operational activity of the waste treatment and recycling plants. In the end, in full compliance with the new business plan approved in 2012, sells its photovoltaic plants located in Apulia, Latium and Campania.

2007-2009 increases its energy production both from traditional sources, building and starting up new thermal power plants, and from renewable sources, enhancing energy generated from wind and photovoltaic plants and laying the grounds for the waste to energy improvement. Strengthens the management of the integrated water service in Ambiti Territoriali Ottimali in the region of Latium, Campania, Tuscany and Umbria. In 2008 creates Acea8cento for an internal management of contact channels among Acea partners and their customers.

2013 the development of environmental business continues, purchasing the company S.A.MA.CE., focused on sludge and organic waste treatment for composting. Further consolidates the new regulatory paths in the water sector and strengthens its commitment in innovative technology application within the field of energy distribution networks.

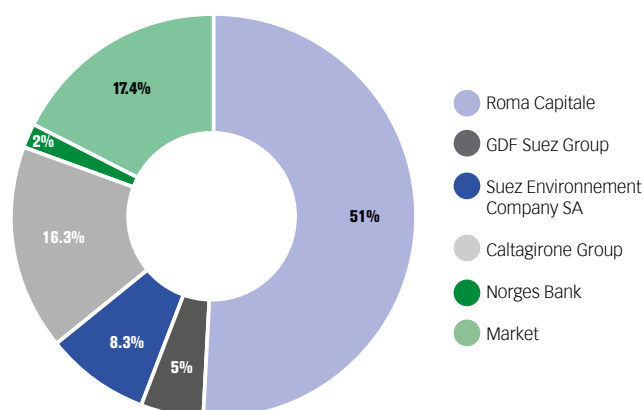
TABLE N. 4 – ACEA GROUP IN FIGURES (2013)

personnel (number, by % of consolidation)	6,304
net revenues (in millions of euros)	3,570.6
total capitalization (in millions of euros)	3,606.4
<i>bonds</i>	1,290.7
<i>equity</i>	1,098.9
<i>long-term loans</i>	1,216.8
total assets (in millions of euros)	7,087.3
electricity	
generation (GWh) (gross)	786
from renewable sources (GWh) (gross)	634
<i>hydro</i>	497
<i>photovoltaic</i>	17
<i>waste to energy</i>	120
distribution (GWh)	11,385
sales (GWh) (free and protected market)	12,616
electricity and gas customers (numbers)	1,471,509
waste to energy (WtE)	
energy generation (GWh) (gross)	260
waste to energy	
<i>RDF (t)</i>	224,220
<i>pulper (t)</i>	69,417
public lighting lighting	
units in Rome (numbers)	189,361
water (integrated water service)	
drinking water supplied (Mm ³)	645.7
analytic controls on drinking water (numbers)	1,200,924
waste water purification (Mm ³)	916.4
inhabitants served in Italy (millions)	8.5
abroad (millions)	5.3

NB: data referring to energy production are generated from Acea Produzione, Acea Reti e Servizi Energetici and A.R.I.A., of which Acea SpA owns 100%; data referring to the water service, 100% ascribed to the Group, are generated from the main water companies società idriche.

Acea SpA is listed in the Electronic Stock Market (*Mercato Telematico Azionario*), organised and managed by the Italian Stock Exchange. The Municipality of Rome is its largest shareholder, owning 51% of share capital. The framework as of **31.12.2013**, was as follows, other major, direct or indirect, stakes in the share capital belong to *Gruppo Caltagirone* (16.3%), to *Suez Environnement Company SA (Ondeo Italia SpA)* (8.3%), to *GDF Suez SA (GDF Suez Energia Italia SpA)* (5.0%), to *Norges Bank* (2.0%). The remaining market owns 17.4% of share capital (it was 21.1% on 31.12.12)

CHART N. 3 – OWNERSHIP STRUCTURE AS OF 31.12.2013



Source: CONSOB – only shares equal to or higher than 2% are indicated

The holding company, Acea SpA, holds the corporate shareholding and fulfils all **strategic and control functions as well as economic and financial coordination activities** of the Group. It also offers management support to the operational businesses through managing, legal, logistic, technical, financial and administrative services. The **macro-structure** of Acea SpA is divided into **corporate functions** and **four industrial areas – water, networks, energy, environment** – which every single company relates to (see chart n. 6).

The consolidation boundary of the Group on 31st December 2013 included the **50 companies** listed in table n. 5 (consolidated in the Financial Statements by line-by-line and proportional method) and further **18 companies** consolidated by equity.

Over the year **non-significant variations occurred** within the consolidation area.

TABLE N. 5- CONSOLIDATION AREA AS OF 31.12.2013 (COMPANIES CONSOLIDATED BY LINE-BY-LINE AND PROPORTIONAL METHOD)

NAME	REGISTERED OFFICE	SHARES IN ACEA SPA	CONSOLIDATION METHOD
Acea Distribuzione SpA	Rome	100.00%	Line-by-line
Acea Ato2 SpA	Rome	96.46%	Line-by-line
Acea Reti e Servizi Energetici SpA	Rome	100.00%	Line-by-line
Acque Blu Arno Basso SpA	Rome	69.00%	Line-by-line
Acque Blu Fiorentine SpA	Rome	69.00%	Line-by-line
Ombrone SpA	Rome	84.57%	Line-by-line
LaboratoRi SpA	Rome	100.00%	Line-by-line
Acea Ato 5 SpA	Frosinone	94.48%	Line-by-line
Sarnese Vesuviano SpA	Rome	99.16%	Line-by-line
Crea SpA (*)	Rome	100.00%	Line-by-line
Crea Gestioni Srl	Rome	100.00%	Line-by-line
Gesesa SpA	Benevento	59.52%	Line-by-line
Lunigiana SpA (*)	Aulla (MS)	95.79%	Line-by-line
Aguazul Bogotà SA	Bogotà-Colombia	51.00%	Line-by-line
Acea Dominicana SA	Santo Domingo	100.00%	Line-by-line
A.R.I.A Srl	Terni	100.00%	Line-by-line
SAO Srl	Orvieto (TR)	100.00%	Line-by-line
Ecoenergie Srl (*)	Paliano (FR)	90.00%	Line-by-line
Aquaser Srl	Volterra (PI)	88.29%	Line-by-line
Kyklos Srl	Aprilia (LT)	51.00%	Line-by-line
Solemme SpA	Monterotondo Marittimo (GR)	100.00%	Line-by-line
S.A.MA.C.E. Srl	Sabaudia (LT)	100.00%	Line-by-line
Acea8cento SpA	Rome	100.00%	Line-by-line
Acea Gori Servizi Scarl	Pomigliano d'Arco (NA)	69.82%	Line-by-line
Acea Illuminazione Pubblica SpA	Rome	100.00%	Line-by-line
Acea Produzione SpA	Rome	100.00%	Line-by-line
Acea Energia holding SpA	Rome	100.00%	Line-by-line
Acea Energia SpA	Rome	100.00%	Line-by-line
Acea Servizi Acqua Srl (*)	Rome	70.00%	Line-by-line
Acque Blu Srl (*)	Montecatini Terme (PT)	55.00%	Line-by-line
Innovazione Sostenibilità Ambientale Srl	Pontercorvo (FR)	51.00%	Line-by-line
Acque SpA	Empoli	45.00%	Proportional
Acque Industriali Srl	Pisa	45.00%	Proportional
Acque Servizi Srl	Pisa	45.00%	Proportional
Consorzio Agua Azul SA	Lima – Peru	25.50%	Proportional
Umbria Energy SpA	Terni	50.00%	Proportional
Voghera Energia Vendita SpA (*)	Voghera (PV)	50.00%	Proportional
Elga Sud SpA	Trani (BT)	49.00%	Proportional
Ecogena SpA	Rome	51.00%	Proportional
Ecomed Srl	Rome	50.00%	Proportional
Publiacqua SpA	Florence	40.00%	Proportional
Publiutenti Srl (*)	Florence	40.00%	Proportional
Gori SpA	Torre Annunziata (NA)	37.05%	Proportional
Umbra Acque SpA	Perugia	40.00%	Proportional
A.PI.C.E. Srl (*)	Rome	50.00%	Proportional
Intesa Aretina Scarl	Milan	35.00%	Proportional
Nuove Acque SpA	Arezzo	16.16%	Proportional
Ingegnerie Toscane Srl	Florence	43.01%	Proportional
Consorzio AZB-HCI (Conazul)	Lima – Peru	60.00%	Proportional
Acquedotto del Fiora SpA	Grosseto	40.00%	Proportional

(*) winding up ongoing or concluded.

ACTIVITIES AND FUNCTIONS OF THE MAIN COMPANIES OF THE GROUP

The Group **operational structure** as of 31.12.2013, is basically shown, according to their sector, in chart n. 4. **Activities carried out by the main operating companies**, synthetically outlined below.

CHART N. 4 – THE OPERATIONAL STRUCTURE AS OF 31.12.2013 (DIRECT INVESTEEES OF ACEA SPA)



WATER

Acea Ato 2 SpA: manages the integrated water service (IWS) in ATO 2 – Lazio Centrale (Rome and other 111 Municipalities of Latium). The IWS provides activities of water collection, feeding and distribution, sewerage and wastewater treatment plants management. Acea Ato 2 deals with the plants and their enhancement, takes care and monitors the sources of drinking water provisions, manages monumental fountains, small fountains, fire hydrants and hose networks.

Acea Ato 5 SpA: manages the integrated water service in ATO 5 – Lazio meridionale – Frosinone, including 86 Municipalities.

Ombrore SpA: holds stakes in **Acquedotto del Fiora SpA**, contractor for the integrated water service in ATO 6 – Ombrore, Tuscany, including 56 Municipalities in the province of Grosseto and Siena.

Sarnese Vesuviano Srl: holds stakes in **Gori SpA**, contractor for the integrated water service in ATO 3 – Sarnese Vesuviano, Campania, including 76 Municipalities in the province of Naples and Salerno.

Acque Blu Arno Basso SpA: holds stakes in **Acque SpA**, contractor for the integrated water service in ATO 2 – Basso Valdarno, Tuscany, including 57 Municipalities in the province of Pisa, Florence, Siena, Pistoia and Lucca.

Acque Blu Fiorentina SpA: holds stakes in **Publicacqua SpA**, contractor for the integrated water service in ATO 3 – Medio Valdarno, Tuscany, including 49 Municipalities in the province of Florence, Prato, Pistoia and Arezzo.

Gruppo Crea: controls some water service operators located in **Ambiti Territoriali Ottimali** (Optimal Territorial Area) of Lucca, Terni, Rieti and Benevento.

Intesa Aretina Scarl: held by **Acea SpA** with a 35% share, controls **Nuove Acque SpA** a management company for the integrated water service in ATO 4 – Alto Valdarno, including 37 Municipalities in the province of Arezzo and Siena.

Umbra Acque SpA: contractor for the integrated water service in ATI 1 and 2 - Umbria, including 38 Municipalities, including Perugia and Assisi.

NETWORKS

Acea Distribuzione SpA: deals with distribution and measurement of low, medium and high voltage energy (HV, MV, LV) in the municipalities of Rome and Formello; is entrusted with planning, engineering, construction and maintenance of HV primary distribution plants and secondary MV and LV distribution networks. In addition, it deals with the cemetery lighting of the Municipality of Rome.

Acea Illuminazione Pubblica SpA: deals with the management of public, functional, urban and artistic lighting and related plants.

Acea Reti e Servizi Energetici SpA: cares for, on behalf of Acea Distribuzione, all those operations related to energy efficiency improvement (Ministerial Decree of 20th July 2004); ensure the preservation of technological innovation within the energy-efficiency field; develops the implementation of renewable sources in energy production and cogeneration and tri-generation operations; provides energy services as an **energy service company** (E.S.Co.)

Ecogena SpA: is a joint venture between Energia Alternativa and A.R.S.E (holding respectively a 49% and a 51% share), plans and builds high-efficiency cogeneration/tri-generation plants (CCHP -Combined Cooling, Heating and Power) for civil and industrial buildings. The company holds 49% of **EUR Power Srl**, a company specialised in the realisation and management of cogeneration/tri-generation plants and heat pump power generators with geothermal integrations.

ENERGY

Acea Energia holding SpA: supervises the development of administrative functions of its subsidiaries - **Acea Energia** and **Acea Produzione**. It carries out activity of **energy management** in favour of those ensuring the supply of electricity, gas and fuels. Monitors the reference markets and values tradable allowances linked to the Energy generation of plants (green certificates, CO₂ emission rights, RECs-COFER)

Acea Energia SpA: deals with the sales of electricity and gas in the free and protected market. Acea Energia holds shares in the capital of **Elgasud SpA** and **Umbria Energy SpA**, companies whose operations mainly focus on energy, gas and optional services trading in Apulia, Basilicata, Umbria.

Acea Produzione SpA: manages operations of electricity and heating production, through its power plants made up of 7 hydroelectric plants and 2 thermal power plants, mainly located in Latium.

ENVIRONMENT

A.R.I.A. (Acea Risorse e Impianti per l'Ambiente): carries out its activity in the environmental sector. Mainly focuses on energy generation and waste management, through waste treatment and waste disposal plants: it manages two waste to energy plants, in Terni and in San Vittore del Lazio and one RDF (Refuse-Derived Fuel) production plant in Paliano (Frosinone). The subsidiary **SAO Srl** manages a composting plant, with adjacent landfill, in Orvieto.

Aquaser Srl: operates within the recovery and disposal of sludge from wastewater treatment and integrated water service. The companies **Kyklos Srl**, **Solemme SpA** and **S.A.M.A.CE. Srl** belong to the Aquaser Group, which operate in composting and sludge from wastewater treatment, and Innovazione **Sostenibilità Ambientale Srl** (ISA), that deals with logistics and transport of sludge.

OTHER SERVICES

Acea8cento: its task is to manage the customer care activities, and particularly the remote contact channels, for the companies of Acea Group.

LaboratoRI SpA: provides services of research and development, laboratories, studies and consulting, engineering (planning and project management) mainly in the water-environmental sector for companies of Acea Group and for the external market; supplies technical and scientific support for the development of the Group at a national and international level.

GENERAL ECONOMIC INDICATORS

The results obtained in 2013 are higher than market expectations, confirming Acea as a fundamental player within the local public service division. The main financial indicators underline a relevant increase: despite the current weak economic framework, revenues reflect the figures of last year (3,570.6 million euros, -1.2% against

2012), the **EBITDA** moves to 776 million euros (+10.2% compared to 2012) and the **operating result (EBIT)** grows to 383.8 million euros (+30.6% with respect to 2012), with a final **group profit** of about 142 million euros (+83.3% compared to 2012).

TABLE N. 6 - MAIN ECONOMIC AND EQUITY DATA OF ACEA GROUP (2012-2013)

(IN MILLIONS OF EUROS)	2012	2013
net revenues	3,612.7	3,570.6
payroll and related costs	282.0	279.5
external costs	2,635.3	2,525.0
operating costs	2,917.3	2,804.5
EBITDA	695.2	766.1
EBIT	293.8	383.8
financial management	(120.6)	(97.4)
share management	0.9	(4.8)
result before tax	174.1	281.6
income tax expense	88.8	128.3
net result	85.3	153.2
profit/loss attributable to minority interests	7.9	11.3
group net result	77.4	141.9

Consolidated revenues in 2013 amounted to **3,570.6 million euros** (3,612.7 million euros in 2012). Within the **energy supply chain**, revenues equal **2,414.2 million euros**, in accordance with the figures of 2012, are determined by the balance between the lower sales revenues, including photovoltaic, and increases in sales for operations related to electricity and heating transport, measurement and generation. Gas sales are around **60 million euros** (+12.6% against 53.4 million in 2012). An overall decrease in revenues from certificates (**white certificates**⁹, **green certificates**¹⁰, and **CO₂ emission rights**¹¹), with about **16.4 million euros** (-56.2% compared to 37.4 million in 2012), mainly due to the termination of activities aimed at the production of energy-efficiency certifications. Revenues from **public and cemetery lighting** are around **68.4 million euros** (79.8 million euros in 2012).

Revenues from **environmental services** (water treatment, landfill management, composting production and RDF) reach about

35 million euros, showing an increase of about 3 million euros compared to 2012.

Revenues from **water management**, in Italy and abroad are 819.8 million euros, showing a 1.2% decrease compared to 830.2 million euros in 2012, due to the contract expiration with Aguazul Bogotà in Colombia.

Figure referring to **EBITDA** is **766.1 million euros**¹², with a 10.2% increase (695.2 million euros in 2012) thanks to the contribution of all industrial areas and energy-efficiency interventions fulfilled by the holding company. With the exception of the corporate area, the overall value is determined by:

- **Water industrial area**, 48% with 372.5 million euros (340.6 million in 2012), on which the FIN (*Fondo nuovo investimenti* – New Investment Fund) tariff plan weighs, for the years 2012 and 2013 upon due authorization of competent authorities;

9 The Ministerial Decrees dated 20th July 2004 introduced the so-called white certificates (Energy efficiency certificates -EEC) into Italian Legislation, fixing the annual primary energy saving goals that every energy and natural gas supplier shall achieve through the implementation of energy efficiency projects. The inter-ministerial decree dated 28th December 2012 sets the goals up to 2016, transferring the responsibility for the energy-saving certification from AEEG to GSE.

10 Until 2012, the green certificates were the main incentive tool for electricity generated from renewable sources (exclusive of the photovoltaic) according to the provisions of Legislative Decree n. 79/99 (What is known as "Bersani Decree"). This model has been outdated by the Decree of the Ministry for Economic Development 6/6/2012 to implement art. 24 of Legislative Decree n. 28/11. The subsidy for energy generated from plants fuelled by the above-mentioned renewable sources, whose nominal power is higher than fixed threshold values and operational since 1st January 2013, is allocated on the basis of Dutch auctions managed by GSE. In any case, auction procedures provide the value of the subsidy, determined by taking into account the need to recoup the investments made.

11 **The Emission Trading System** (Directive 2003/87/CE) is an administrative tool, in force in the EU frame work, aimed at promoting the reduction of greenhouse gas emissions (CO₂) in industrial productions. At the beginning of the year, production plants subject to the Directive, assimilated in Italy through the Legislative Decree n. 216/2006, receive allowances to issue maximum level of CO₂ emissions, according to several factors, such as the technology employed: more advanced plants receive higher shares of allowances. The following year, after verifying effective emissions, if the maximum has been surpassed, the plant operator shall buy additional CO₂ allowances on the market, shall sell the spare allowances in case emissions are lower than the cap assigned. Therefore a real and true market of trading allowances is established which rewards best practices in low-emission production and hinders performance under the preset benchmark.

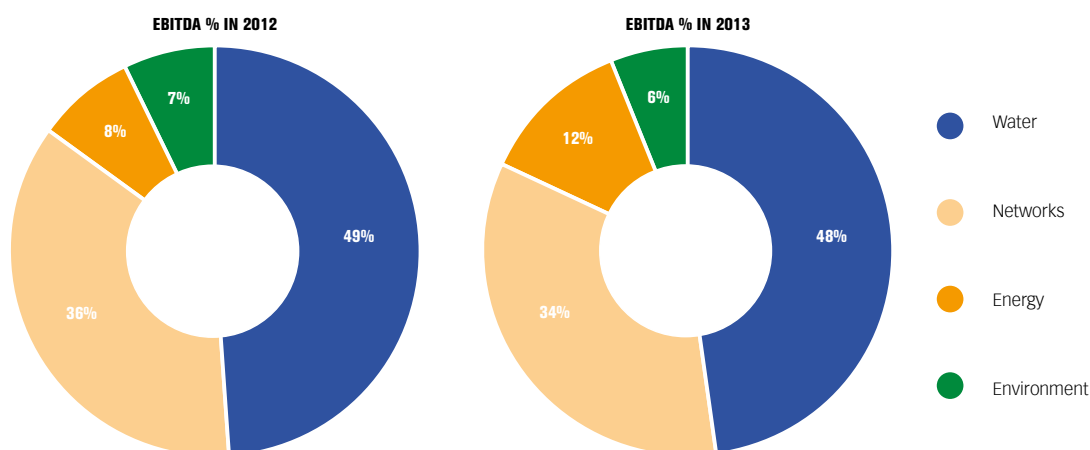
12 Revenues from foreign water management weigh 1.6% on total water revenues and about 0.4% on the Group's total revenues. For a brief description of foreign management, see chapter *Foreign operations*.

- **Network** industrial area, 34% with 257.3 million euros (260.7 million euros in 2012);
- **Energy** industrial area, 12% with 90.7 million euros (61 million euros in 2012), thanks to the improvement of commercial margins, to higher

revenues from green certificates and to higher quantities of energy produced;

- **Environment** industrial area, 6% with 48.4 million euros, data that keeps constant compared to the previous year (49.3 million euros in 2012).

CHART N. 5 - INDUSTRIAL AREAS CONTRIBUTION TO OVERALL EBITDA (2012-2013)



The figure referring to **EBIT (383.8 million euros)**, shows 30.6% increase compared to the previous financial year (293.8 million euros). EBIT value is determined by **amortisation, provisions and depreciation** equal to 382.3 million euros, showing a decrease of 19.9 million euros with respect to 2012. This positive variation mainly relies upon a

reduction of amortisation, ascribed to Acea Distribuzione network plants, and a reduction of risks provisions occurred over the year, only partially balanced by larger allocations for personnel (income-deprived voluntary early retirement and redundancy) and linked to Acea Distribuzione energy-efficiency objectives.

TABLE N. 7 - EQUITY DATA AND NET FINANCIAL POSITION OF ACEA GROUP (2012-2013)

(IN THOUSANDS OF EUROS)

	31.12.2012	31.12.2013
non-current financial assets (Liabilities)	2,060	2,461
intra-group non-current financial assets (Liabilities)	30,899	32,328
payables and other non-current financial liabilities	(2,211,609)	(2,507,623)
Medium/long-term financial position	(2,178,650)	(2,472,834)
cash balances and securities	423,771	589,483
short-term account due to banks	(753,850)	(466,245)
current financial assets (liabilities)	(56,898)	(141,455)
intra-group current financial assets (liabilities)	70,149	22,860
short-term financial position	(316,828)	4,643
total net financial position	(2,495,478)	(2,468,192)
equity	1,316,060	1,405,439
invested capital	3,811,538	3,873,631

Results for the year positively affect the profitability ratios both of own capital (ROE) and invested capital (ROIC).

TABLE N. 8 - PROFITABILITY MAIN INDICATORS (2011-2013)

	2011	2012	2013
Return on own capital			
ROE = Profit for the year after taxes /shareholders' equity	7.1%	5.9%	10.1%
pre-tax ROIC = EBIT/invested capital	6.1%	7.7%	9.9%

DEVELOPMENT AND STRATEGIC PLAN

The year 2013 represented a significant evolution for Acea within **the framework of integrated water service**. The **Italian Regulatory Authority for electricity, gas and water system – Autorità per l'energia elettrica, il gas ed il sistema idrico** (AEEGSI), after acquiring, last year, regulatory and control functions of water services, carried out several interventions, outlining the new regulatory structure of the sector: from the approval of the new tariff scheme to the definition of the amount to be refunded to users, consequently to the abrogative referendum related to tariff remuneration of capital invested by operators; from surveys on water service assessment, aimed at identifying the minimum quality and efficiency levels of water services, to proceedings, in favour of water companies, useful in finding out all the methods needed to identify the obligations in case of users' arrearage. Such interventions lay a new trend sector, regulated on the basis of efficiency and quality criteria, with the scope of propelling, for the water system, the same system progressions obtained in the electricity sector.

Within the corporate context, Acea, **in prospect of a smart utility**, steadfastly achieved relevant projects of **technological innovation**, cooperating with important industrial entities and obtaining significant results. Within this framework an agreement with the company NEC, operating in the technological innovation sector, has been undersigned for the implementation of energy storage systems, with the purpose of improving quality in distribution





services and managing efficiency in distributed power-generating plants; in addition, a protocol with Telecom Italia and Fastweb has been agreed upon to enlarge, through Acea Distribuzione network plants, optical fiber employed for ultra-wideband internet services. The improvement of the operating efficiency of the Group's business resulted in positive profit industrial performance. Such commitments had favourable feedback into the financial market, which drew *corporate bonds* for 600 million euros, used by Acea for the Group capital and financial strengthening.

The **2012-2016 Acea Strategic Plan, currently in force**¹², is rooted on five strategic lines: consolidation of its position in **regulated activities** within the water and energy sector; development of projects and strengthening of environmental operations for **waste management** in waste to energy, waste treatment and composting fields; commitment to achieve ongoing **energy-efficiency** improvements and **attention towards new managing technologies for networks** (smart grid); business profitability increases and creation of a sustainable plan of dividends aimed at generating **value for the shareholders**; despite the already existing relevant plan of investments, improvement of **debt position** is envisaged through reduction of outstanding loans. Such strategic lines found their implementation in economic commitments and goals according to every single business area¹⁴.

13 On 10th March 2014, the BoD approved the new 2014-2018 Business Plan, available on the website – www.acea.it -, section **Shareholders, 2014 Presentations**.

14 The Business Plan is available on the website, section **Shareholders, 2012 Presentations**.

STRATEGIC LINES OF ACEA 2012-2016 BUSINESS PLAN

BUSINESS AREA	STRATEGY
 ENVIRONMENT: waste to energy and environmental services	<ul style="list-style-type: none"> • completion of already launched projects for extension/revamping of waste to energy plants, organic waste treatment plants, composting plants • development of new initiatives, as well as in partnerships with other operators
 ENERGY: generation, supply and sale of electricity and gas	<ul style="list-style-type: none"> • development of energy supply policies suitable for covering sales and defending the commercial margins • optimization of customer mix and development of dual fuel offers • completion of hydroelectric plants repowering and starting of Tor di Valle plant repowering
 WATER: integrated water service (aqueduct, distribution, purification, sanitation)	<ul style="list-style-type: none"> • consolidation of leadership in the Italian water market • investments in existing networks and plants provided in the various ATO Plans
 NETWORKS: electricity distribution, energy efficiency, technological innovation, public lighting and photovoltaic	<ul style="list-style-type: none"> • implementation of new smart grid projects • energy-efficiency initiatives • modernisation and operating efficiency interventions in distribution networks

BUSINESS DEVELOPING LINES IN 2013

<p>ENVIRONMENT</p> <ul style="list-style-type: none"> • Aquaser purchases S.A.MA.CE. located in Sabaudia (LT), owning an organic waste and sludge composting plant and liquid waste treatment plant, therefore covering with Kyklos (100% Aquaser) the entire province of Latina, already operative in the same territory. • The waste-to-energy plant (pulper from paper mill) in Terni is rebooted, generating 58 GWh/year; • within SAO a division operating for the anaerobic treatment of waste organic matrix converting the resulting biogas into energy is initiated. Kyklos receives the permit to create a new division of anaerobic digestion, recovering the biogas emitted into energy and heat; • the two lines of the plant located in San Vittore del Lazio treated 224,220 tons of RDF obtaining a gross production of electricity equal to around 203 GWh; 	<p>ENERGY GENERATION</p> <ul style="list-style-type: none"> • operations of hydroelectric plants register, after the repowering, positive performances both in terms of generated energy and related certificates (green certificates); • energy generated from renewable sources covers 81% of total production (634 GWh of 786 GWh); • energy generated from waste to energy (RDF and pulper) is approximately 260 GWh (46% from renewable source). <p>SALES</p> <ul style="list-style-type: none"> • customers having a contract with Acea Energia in the free market of electricity and gas, reach around 400,000 units (withdrawal points); • development of initiatives aimed at promoting the use of company remote contact channels for electricity consumers, with a positive feedback: customers registered to Acea Energia online help desk at the end of the year are about 100,000 (+230% against 2012). The new bill for the free market customers 	<p>is launched, with the scope of promoting better knowledge of the service provided and a better relationship with the company.</p> <p>WATER ITALY AND ABROAD</p> <ul style="list-style-type: none"> • no acquisitions nor shareholders have been registered within the water sector but a full commitment for the consolidation of the existing operational activities remain in place. Companies absorb the contents of new regulatory interventions provided by AEEGSI. The contract for foreign operational activities attributable to the company Aguazul Bogotá expires. 	<p>wideband internet in the Roman territory;</p> <ul style="list-style-type: none"> • processing of the 2014-2018 Strategic Plan has started in which renovation and maintenance interventions towards all energy infrastructures are envisaged (primary and secondary substations, power lines and high, medium and low voltage grids) with the purpose of improving transmission capacity, losses and reduction in voltage. <p>COGENERATION (COMBINED HEAT AND POWER GENERATION)</p> <ul style="list-style-type: none"> • building operations for the realization of the new tri-generation plant for the business complex "Europarco", in Rome, begin and works for the tri-generation plant for the theme park "Cinecittà World", in Castel Romano, have begun. <p>PUBLIC LIGHTING</p> <ul style="list-style-type: none"> • The overall new lighting units installed amount to 1,147 units, of which 443 use LED technology.
<p>ENVIRONMENT</p> <ul style="list-style-type: none"> • customers having a contract with Acea Energia in the free market of electricity and gas, reach around 400,000 units (withdrawal points); • development of initiatives aimed at promoting the use of company remote contact channels for electricity consumers, with a positive feedback: customers registered to Acea Energia online help desk at the end of the year are about 100,000 (+230% against 2012). The new bill for the free market customers 	<p>ENERGY GENERATION</p> <ul style="list-style-type: none"> • operations of hydroelectric plants register, after the repowering, positive performances both in terms of generated energy and related certificates (green certificates); • energy generated from renewable sources covers 81% of total production (634 GWh of 786 GWh); • energy generated from waste to energy (RDF and pulper) is approximately 260 GWh (46% from renewable source). <p>SALES</p> <ul style="list-style-type: none"> • customers having a contract with Acea Energia in the free market of electricity and gas, reach around 400,000 units (withdrawal points); • development of initiatives aimed at promoting the use of company remote contact channels for electricity consumers, with a positive feedback: customers registered to Acea Energia online help desk at the end of the year are about 100,000 (+230% against 2012). The new bill for the free market customers 	<p>is launched, with the scope of promoting better knowledge of the service provided and a better relationship with the company.</p> <p>WATER ITALY AND ABROAD</p> <ul style="list-style-type: none"> • no acquisitions nor shareholders have been registered within the water sector but a full commitment for the consolidation of the existing operational activities remain in place. Companies absorb the contents of new regulatory interventions provided by AEEGSI. The contract for foreign operational activities attributable to the company Aguazul Bogotá expires. 	<p>wideband internet in the Roman territory;</p> <ul style="list-style-type: none"> • processing of the 2014-2018 Strategic Plan has started in which renovation and maintenance interventions towards all energy infrastructures are envisaged (primary and secondary substations, power lines and high, medium and low voltage grids) with the purpose of improving transmission capacity, losses and reduction in voltage. <p>COGENERATION (COMBINED HEAT AND POWER GENERATION)</p> <ul style="list-style-type: none"> • building operations for the realization of the new tri-generation plant for the business complex "Europarco", in Rome, begin and works for the tri-generation plant for the theme park "Cinecittà World", in Castel Romano, have begun. <p>PUBLIC LIGHTING</p> <ul style="list-style-type: none"> • The overall new lighting units installed amount to 1,147 units, of which 443 use LED technology.

STRATEGY AND SUSTAINABILITY

ACEA: VALUES AND CONTRIBUTIONS TO SUSTAINABILITY

Services of public utilities handled by Acea are the main tools of intervention both for the economic development and improvement of the environmental and the social quality of communities and territories. Therefore, sustainability is a core value of Acea's corporate identity and operational goals which the Group commits to put into effect starting from the definition of its values and congruent conduct, availing itself of company management tools

and through the engagement of its stakeholders, until support and direct participation in the main institutional initiatives of sustainable development are oriented.

Aware of the responsibility of its role, the Acea Group has adopted a **Code of Ethics**, pursuing **policies** and **means** suitable for implementing a responsible corporate governance.

TABLE N. 9 – ACEA TOOLS FOR SUSTAINABLE DEVELOPMENT AND SOCIAL RESPONSIBILITY

	1998-99	2000-01	2002	2003	2004-05	2006	2007-08	2009	2010	2011	2012	2013
VALUES, RULES AND PROCEDURES	Service Charter	•	•	•	•	•	•	•	•	•	•	•
	Company mission and environmental policy	•	•	•	•	•	•	•	•	•		
	Regulations for protecting men and women's dignity	•	•	•	•	•	•	•	•	•	•	•
	Quality Policy	•	•	•	•	•	•	•	•	•		
	Corporate Governance Code	•	•	•	•	•	•	•	•	•	•	•
	Ethics Committee		•	•	•	•	•	•	•	•		
	Charter of Values				•	•	•	•	•	•	•	•
	Code of Ethics for Tenders				•	•	•	•	•	•	•	•
	Code of Ethics					•	•	•	•	•	•	•
	Organisational, management and control Model (ex Legislative Decree)					•	•	•	•	•	•	•
	OHSMS (Guidelines UNI-INAIL) – Safety policies						•	•	•	•	•	
	Quality and environmental certifications and EMAS	•	•	•	•	•	•	•	•	•	•	•
	Company protection Policy								•	•	•	•
	OHSAS and Safety Policy								•	•	•	
Quality, Environmental, Safety and Energy Policy											•	•
REPORTING	Social Budget and Environmental Report	•	•	•								
	Sustainability Report (from 2002: GRI Guidelines, from 2006: GRI-G3; from 2009: GRI-G3 + utility sector; from 2011: GRI-G3.1+ utility sector)			•	•	•	•	•	•	•	•	•
	CoP reporting for Global Compact							•	•	•	•	•
LISTENING	Customer satisfaction	•	•	•	•	•	•	•	•	•	•	•
	online listening		•	•	•	•	•	•	•	•	•	•
ACCESS AND RATINGS	Access to WEC					•	•	•	•	•	•	•
	Accession to CSR manager network						•	•	•	•	•	•
	Access to Global Compact						•	•	•	•	•	•
	Sustainability Rating		•	•	•	•	•	•	•	•	•	•

Acea pays great attention to the institutional, public and private context, where corporate social responsibility and sustainability issues are matters for discussion and exchange of views, so that such topics are further developed and widespread.

To this end, in 2013, two international initiatives have been undertaken which have a relevant impact on corporate social responsibility: reporting on sustainability in company management. It is the EU-proposed Directive (COM 2013/207) whose objective is the reporting on sustainability and *diversity* matters when

disclosing financial and governance information about the company (see specific box) and the introduction of the guidelines concerning the currently most-qualified sustainability reporting requirement: GRI-G4. These guidelines focus on the need of developing adequate methods and contents in sustainability reports, in order to enable the companies involved to issue up-to-date, consistent (with the current changes in society) reports, as well as to speed up the pace of organisations committed to this topic (for further information see in-depth box).

THE EU PROPOSED DIRECTIVE ON DISCLOSURE OF NON-FINANCIAL AND DIVERSITY INFORMATION

In April 2013, the European Commission published a proposed Directive on disclosure of non-financial and diversity information within the framework of legal reporting of companies. The *diversity* matters do not only cover gender aspects but different aspects in the composition of the highest governance bodies. In compliance with EU regulations certain large companies (with higher than 500 employees and with a total turnover higher than 40 million euros or a balance sheet showing a profit over 20 million euros) are required to disclose material information on policies, results and risks concerning key sectors of sustainability: environment and society, human resources and human rights, governance and anti-corruption.

The adoption of this Directive was needed since a better transparency and disclosure of information related to such topics, will benefit not only the internal and external stakeholders but the companies themselves. Capital providers will have a more comprehensive understanding of a company's results and performances, from which orienting their investment-decision processes in line with their values and conduct; whilst companies will improve their emerging risk analysis, affecting their operating management – i.e., in case of environmental accidents and related costs for damage repair and compensation, interruption of operations, media exposure, litigation with competent authorities. Proceedings of the proposal have already been examined by the entrusted Commissions of the European Parliament. Approval of the final document is envisaged by the European bodies within 2014.

THE GLOBAL REPORTING INITIATIVE NEW GUIDELINES FOR REPORTING ON SUSTAINABILITY: G4

The guidelines issued and upgraded over the years by the multi-stakeholder international organization, Global Reporting Initiative (GRI), are the most qualified standard worldwide for companies' reporting on sustainability. In 2013, after a complex process of analysis, consultation and engagement of stakeholders, already launched in 2011, GRI issued the last version of the guidelines, called G4, following a tour of presentations that also took place in Italy.

This most recent version shows some further innovations. The "materiality" principle has been deeply analysed: companies are required to better structure systems concerning the stakeholders' engagement and the identification and processing of relevant matters, in order to determine, in coherence with the company's context, the point it impacts on sustainable development. Another aspect subject to review is corporate governance, through the introduction of new indicators that cover conflicts of interest, remuneration and diversity policies, significant involvement of decision-makers in sustainability policy. Last but not least, subject to review is the attention given to the mechanisms and fluxes of supply chains, considering that a comprehensive evaluation and view of company sustainability hinges upon the integration of such factors in the organisation's supply chain.

Companies have until 2015 to start reporting in compliance with the new guidelines G4.

SHARING THE CORPORATE SOCIAL RESPONSIBILITY MATTERS

Acea endorses its corporate management to fully respect corporate social responsibility and sustainability values, defining policies and strategies aimed at assuring balanced interaction among the concerned parties.

The three key aspects of sustainability - economic, social and environmental – and their evolution, are fostered by the participation of networks of experts, working groups, think tank and projects promoted by universities, civil society, institutions and other national and international organisations.

Among the main initiatives Acea took part in 2013 are:

- renewal of the partnership with *CSR Manager Network*, created by Altis-Università Cattolica of Milan, which reunites the most active Italian companies in the field of sustainability, participation in in-depth meetings and webinars organised during the year;
 - renewal of its alignment of the ten principles issued by the *Global Compact*, with active participation in meetings and seminars organised by the Italian Network. In particular, in 2013,
- Acea pursued its engagement in the Working Group: *Sustainable Supply Chain* (see in-depth box), Anti-corruption and Reporting;
 - participation in the *2013 CSR Forum (Forum CSR 2013)* organised by ABI, an annual event on corporate social responsibility, with the participation of the representatives of national and international institutions and the principal experts of the sector;
 - participation, as a sponsor or speaker to postgraduate masters students regarding sustainable development and corporate responsibility management: Master in *Management and regulation for sustainable energy* organised by LUISS University, Master in *Management of energy and environment*, organised by the Business School of Il Sole 24 Ore; Master in *Management and corporate social responsibility*, organised by the Pontificia Università San Tommaso d'Aquino – Angelicum (see in-depth box);
 - participation in the most important conferences and seminars on different sustainability-related matters.

STATEMENT OF A STUDENT WHO ATTENDED THE 1ST LEVEL MASTER'S DEGREE IN MANAGEMENT AND CORPORATE SOCIAL RESPONSIBILITY (PUST)

A student attending, thanks to the contribution of Acea, the **1st level master's degree Management and corporate social responsibility** organised by *Pontificia Università San Tommaso d'Aquino – Angelicum*, says: «As the last financial scandals and the Euro-zone crisis proved, markets left to chance are disruptive and the rules "profit at all costs", and "all and now" risk to become a crime against society. Attending this course I became more aware that CSR is the best road to take for a better future but also the only possible way. I am convinced this masters is definitely helping me to enrich myself and my knowledge, in order to become a better manager for the future ».

ACEA WITHIN THE WORKING GROUP SUSTAINABLE SUPPLY CHAIN IN THE GLOBAL COMPACT NETWORK ITALIA

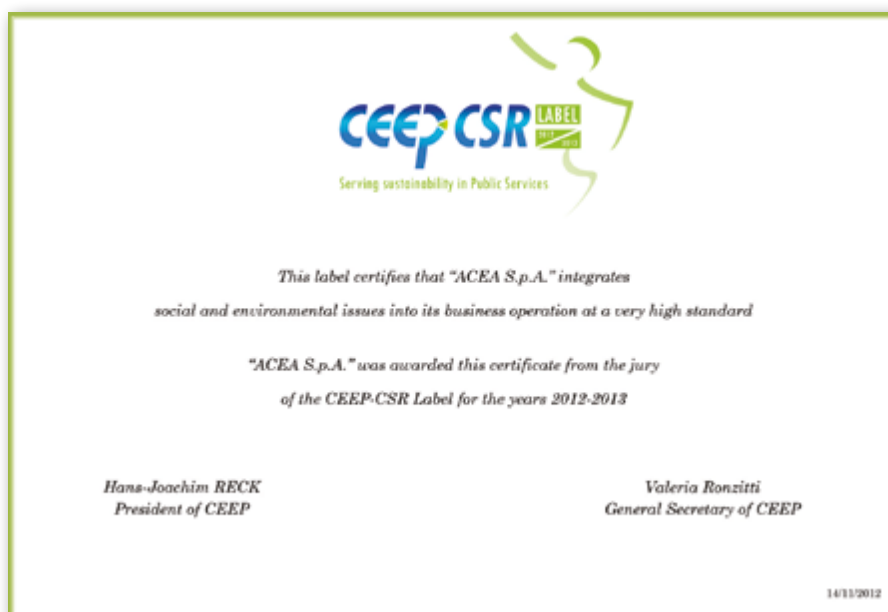
The Unit for Qualification and Rating of Suppliers, within the Safety and Protection Function of Acea SpA, during 2013, pursued its participation – in synergy with the CSR and sustainability Unit – to the Working Group Sustainable Supply Chain, activated in the Global Compact Network Italia framework.

The Working group had the purpose of **sharing and implementing a monitoring tool** of sustainable **performances** carried out by the **companies dealing with the supply chain of the Network members**, identifying and implementing adequate means to support companies' sustainable performances and boosting in suppliers the adoption of best practices, in terms of **respect of human rights, labour rights, environmental responsibility and business ethics**.

To this purpose, an **evaluation questionnaire for suppliers** has been defined and a **specific portal has been implemented** in order to allow the Network members to share the information collected. During the year 2014, the questionnaire will be submitted to a sample of suppliers.

Furthermore, in line with the UN Global Compact provisions, in accordance with the application boundary of the ten principles supported by the initiative, that involves, as far as possible, even the supply chain and in coherence with the upgrade of the international guidelines for reporting on sustainability (GRI-G4), in 2014 the Working Group will seek to integrate in the pre-qualification criteria, the supplier-related indicators, as required by the Guidelines.

Acea is subject to **external observers** and its **CSR performances** are subject to **evaluation** (see also chapter *Shareholders and Capital Providers*, paragraph *Ethical Finance*). Last year, Acea Group was awarded with **CEEP CSR Label 2012-2013**, within the initiative promoted by the European Commission and by CEEP (European Centre of employers and enterprises providing Public Services), aimed at supporting and valuing the development of CSR practices.



In 2013 the company took part in the **Top Utility Award 2013 second edition** and placed **second in the Sustainability category**. The award, sponsored by the European Commission, the Ministry for the Economic Development and by ENEA, is conceived by experts and consultants, belonging to Universities and research centres, and is developed by Althesis. The survey carried out involves the **first 100 Italian public and private utility enterprises**, and **assesses their performance with an integrated view** (153 indicators) **to economic, financial, environmental and social aspects**, paying attention to technological innovation, communication and relations with clients and territory, with the scope of identify and **appraisal of excellence**, following impartial standards that ensure neutrality and transparency. Results from the analysis of 54 indicators employed for the sector "economic, social and environmental sustainability" show that: *«sustainable policies are more and more important for Utility companies and have become their distinguishing feature».*

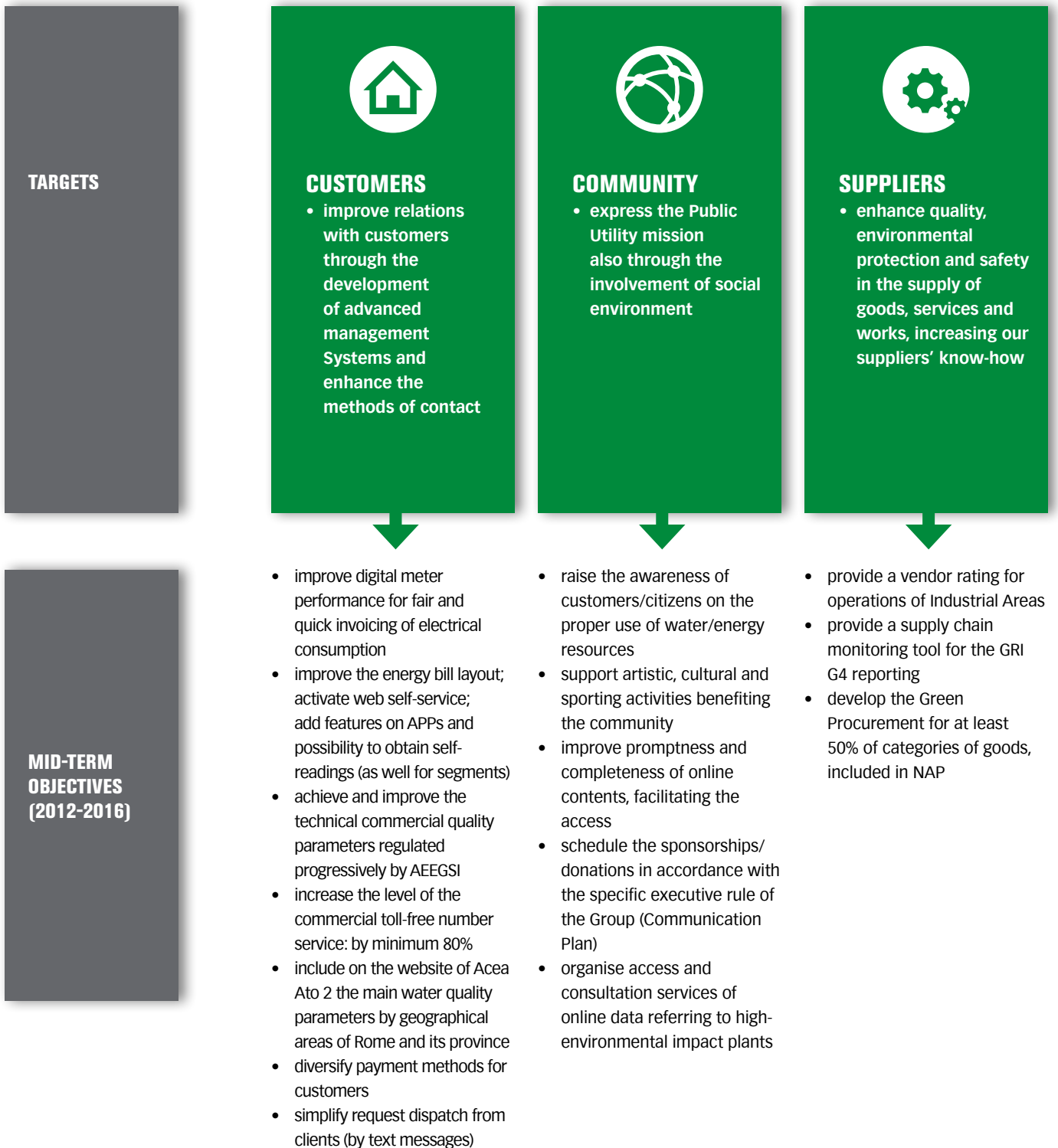
The Group also participated in the **European Business Awards**, promoted by the European Commission, within the category *Millicom Award for Environmental & Corporate Sustainability*. In particular, Acea has been judged by a panel of specialists, together with 15,000 participating organisations, and fell within the 527 National Champions (among which 45 were Italian) representatives of 31 Countries.

In conclusion, the company has been included in the **CSR Online Awards**, this year as well. The research, carried out by Lundquist, at its sixth edition, evaluates the largest European and Italian companies with regard to the **disclosure of corporate social responsibility, sustainability and engagement of stakeholders using digital channels**, and draws a ranking of the best performing companies. The research is on progress and its results will be disclosed in March 2014.

2012-2016 SUSTAINABILITY PLAN AND MID-TERM OBJECTIVES

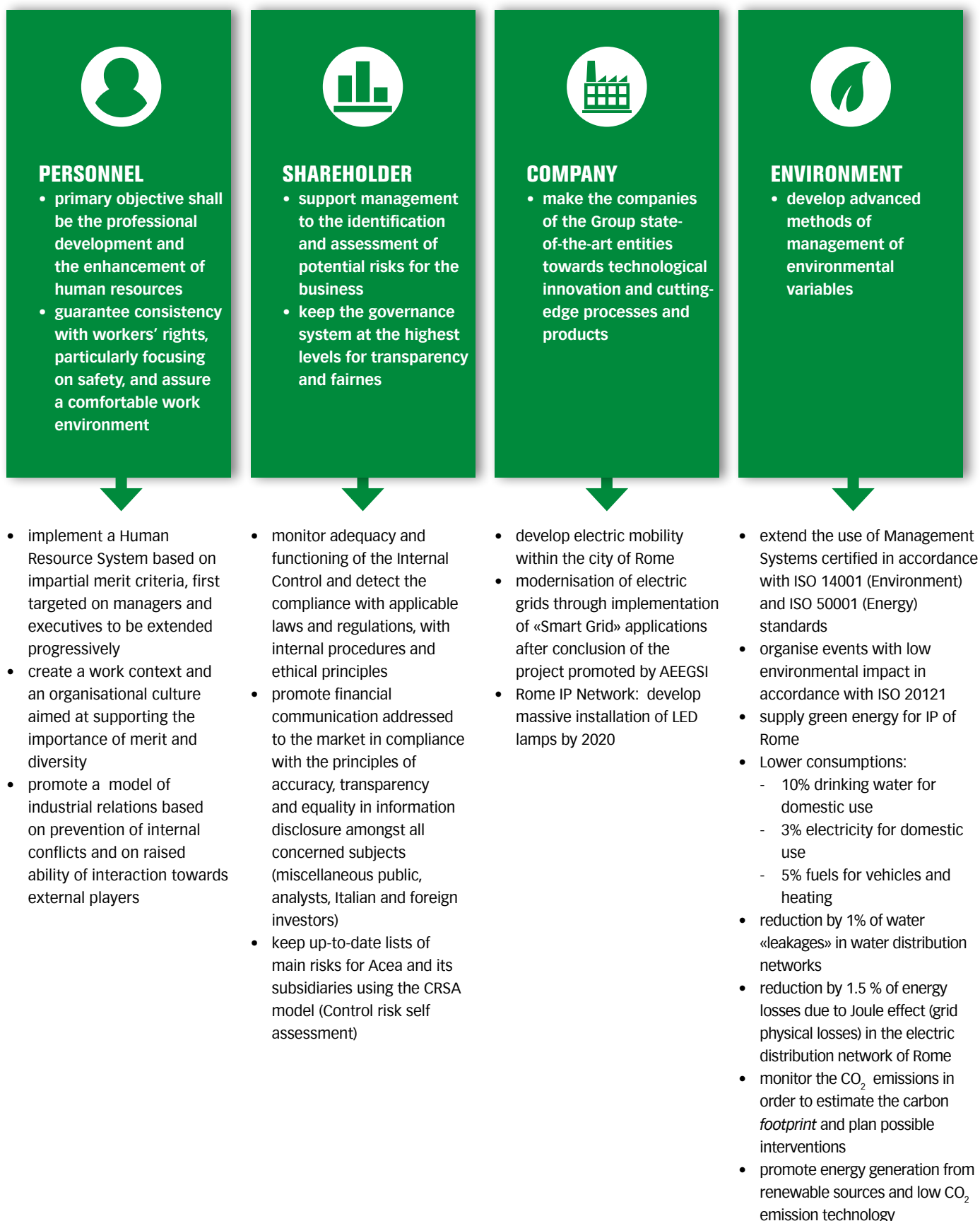
In this edition an info-graph has been used to briefly show the **2012-2016 Sustainability Plan: the targets** fixed by the Group, in relation with the interests of the stakeholders and the **mid-term objectives**.

Such objectives, consistent with the contents of the 2012-2016 Business Plan¹⁵ (see paragraph *Development and Strategic Plan*) have



¹⁵ Acea SpA Board of Directors approved the Corporate Group Business Plan for the period 2012-2016 during the session of 22nd February 2012.

been drawn up and upgraded in 2013, by the heads of the industrial areas and the Functions involved and approved by the C.E.O. The table below shows the objectives and the main actions carried out during the year, analysed in-depth in the chapters of this document.



THE MID-TERM (2012-2016) SUSTAINABILITY OBJECTIVES AND 2013 MAIN ACTIONS

CUSTOMERS AND COMMUNITY	
MID-TERM OBJECTIVES (2012-2016)	2013 MAIN ACTIONS
<ul style="list-style-type: none"> Reach and improve the technical and commercial quality parameters progressively regulated by the Authority for electricity, gas and water system (AEEGSI) Increase the level of the commercial toll-free number service by minimum 80% Include on the website of Acea Ato 2 the main quality water parameters by geographical areas of Rome and its province 	<ul style="list-style-type: none"> Companies are replying to the consultation documents provided by the national Authority of the sector. Goal reached. Goal reached.
WATER AREA - Acea Ato 2	
<ul style="list-style-type: none"> Diversify payment methods for clients Simplify the request dispatch from clients (by text messages) 	<ul style="list-style-type: none"> Activation of payment via LIS (Lottomatica Italia Servizi). Self-reading via text messages.
WATER AREA - Acea Ato 5	
<ul style="list-style-type: none"> Improve the energy bill layout; activate web self-service; add features on APPs and possibility to obtain self-readings (as well for segments) 	<ul style="list-style-type: none"> Launch of the new free-market bill. Web Billing: bills display on the website aceaenergia.it or sent through email (service dedicated to customers with direct debit). Online tutorial services have been activated to show features and usage tolls of each service. Upgrade of Apple IOS 7. Extension of self-reading data to web channels, apps, IVR. Campaign of self-reading communication (videos, web, bill, etc.)
ENERGY AREA - Acea Energia	
<ul style="list-style-type: none"> Improve digital meter performances to enhance a fair and fast billing of electrical consumption 	<ul style="list-style-type: none"> Systematic analysis of problems linked to easy reaching and experimentation of possible solutions.
NETWORK AREA - Acea Distribuzione	
<ul style="list-style-type: none"> Raise the awareness customers/citizens on the proper use of water/energy resources 	<ul style="list-style-type: none"> The company laid the ground for a series of projects among which a three-year agreement with Eataly, envisaging, from 2014, important initiatives to raise the awareness of citizens towards the value of water resource and quality food.
HOLDING - External Relations and Communication Function	
<ul style="list-style-type: none"> Schedule the sponsorships/donations (in accordance with a specific executive rule of the Group) 	<ul style="list-style-type: none"> Drafting of "Communication Plan" scheduling around 80% of donations and sponsorship envisaged in the Plan.
HOLDING - External Relations and Communication Function	
<ul style="list-style-type: none"> Support artistic, cultural and sporting activities benefiting the community 	<ul style="list-style-type: none"> Interventions mainly affected the cultural and sporting fields, in countertrend with the economic crisis effects that saw a significant decrease in investments in these two sectors.
HOLDING - External Relations and Communication Function	
<ul style="list-style-type: none"> Improve promptness and completeness of online contents, facilitating access 	<ul style="list-style-type: none"> Undergoing study of web identity definition through a more pronounced use of sustainability
HOLDING - External Relations and Communication Function	
<ul style="list-style-type: none"> Organise access and consultation services of online data referring to high-environmental impact plants 	<ul style="list-style-type: none"> Access and consultation services of online data referring to emissions of waste to energy plants have been created.
ENVIRONMENTAL AREA	
SUPPLIERS	
MID-TERM OBJECTIVES (2012-2016)	2013 MAIN ACTIONS
<ul style="list-style-type: none"> Provide a vendor rating for operations related to Industrial Areas 	<ul style="list-style-type: none"> A vendor rating model has been defined with implementing regulation for electric, water and electro-mechanical works; 70 inspections took place (with regard to contractors with works underway). Within the vendor rating operating in Acea Distribuzione 902 inspections on operating sites have been carried out. Within the Environmental Area inspections have been carried out on suppliers of main technological components employed for the revamping of the waste to energy plant in Terni (A.R.I.A.) and for the plant of Orvieto (SAO). Inspections on site by Acea Ato 2 have begun.
HOLDING - Safety and Protection Function	
<ul style="list-style-type: none"> Provide a supply chain monitoring tool for the GRI G4 reporting 	<ul style="list-style-type: none"> Arrangement of a shared model to monitor the supply chain: a first draft shall be issued by 31.12.2014. Pursuing participation in the Working Group <i>Sustainable Supply Chain</i>, activated within the Global Compact Network Italia to implement a monitoring tool of sustainable performances carried out by the companies dealing with the supply chain of the Network members.
INDUSTRIAL AREAS	
HOLDING - Safety and Protection Function	
HOLDING - Institutional Affairs Function	

- Develop the Green Procurement for at least 50% of categories of goods, included in NAP

- Introduction of a pilot tool, called «Green Flag» to be used when indicating “sustainable” products and services, in completing Purchase Orders.
- Recommendations to Minimum Environmental Criteria in Special Tender Specifications of some categories of goods, have been integrated.
- Energy-efficiency and dematerialisation criteria have been employed to assess technical offers in large size calls for tenders.

INDUSTRIAL AREAS

HOLDING – Purchasing and Logistics Function

PERSONNEL

MID-TERM OBJECTIVES (2012-2016)

- Implement a Human Resource management System based on impartial merit criteria, first targeted to managers and directors, to be extended progressively

2013 MAIN ACTIONS

- 451 CVs of Managers and Directors plus 2,435 CVs of Employees and Workers have been integrated in the Group’s centralised database.
- Overall assessment of 207 Management/Middle Management positions has been completed.
- Management Training:
 - two experiential training courses have been organised: *Essere leader* - 108 hours and 136 individuals involved - and *La Squadra nel Gruppo Acea* – 72 hours and 111 individuals involved.
- Training on Code of Ethics and Privacy (Legislative Decree 196 of 2003):
 - within the training framework of all the Group’s employees, roughly 300 workers of companies Acea Ato 2 and Acea Ato 5 have been trained.
- Launch of the individual coaching project addressed to directors and managers of the Network Area (15 individuals).
- Participation in the Training Project *Talent Training Programme*, with 50 individuals involved and for a total amount of 1,104 training hours.

HOLDING – Human Resources and Organisation Function

- Create a work context and an organisational culture aimed at supporting the importance of merit and diversity

- Creation of a cross-functional Working Group on diversity and welfare-related issues.

HOLDING – Human Resources and Organisation Function

- Promote a model of industrial relations based on prevention of internal conflicts and on raised ability of interaction towards external players

- Agreements on increase of performance, quality, and competitiveness for the companies of Acea Group (historical Boundary), Acea8cento and those falling within the Environmental Area, have been undersigned.
- Signing of the agreement to renew the electric contract.
- Signing of the agreement to renew the gas-water contract.
- Signing of the agreement to renew the Company Collective bargaining Agreement Acea8cento (call center).
- Completed review of agreements for the regulation of working hours in Acea8cento.
- Precautionary information and consultation of Trade Unions on all the changing processes of the Group organisational structures.
- Conclusion of regulating process of relations between the Company and the workers’ health and safety representatives.

HOLDING – Human Resources and Organisation Function

SHAREHOLDERS AND CAPITAL PROVIDERS

MID-TERM OBJECTIVES (2012-2016)

- Monitor adequacy and functioning of the Internal Control System and detect the compliance with applicable laws and regulations, with internal procedures and ethical principles

2013 MAIN ACTIONS

- Support to the Supervisory Board (holding company and subsidiaries) in the upgrade of *Organisation, management and control Models* and control of their adequacy.
- Support to the Ethics Committee on the implementation and compliance with the principles defined in the Group Code of Ethics (activity on whistle-blowing has been reported)
- Pursue and monitor training on the *Code of Ethics* and Legislative Decree 231/01.
- Whistle-blowing procedure for activities of receipt, assessment and controls has been overseen.

HOLDING –Audit Function

- Keep up-to-date lists of main risks for Acea and its subsidiaries using the CRSA model (*Control risk self-assessment*)

- Reports on main risks shared with the Board of Directors, the Audit Committee and the Board of Statutory Auditors have been arranged.
- Adoption of trends for the arrangement of ‘risk based’ reports of Audit Function.

HOLDING – Audit Function

- Promote financial communication addressed to the market in compliance with the principles of accuracy, transparency and equality in information disclosure among all concerned subjects (miscellaneous public, analysts, Italian and foreign investors)

- Meetings with more than 250 **equity** investors, **buy side** analysts and **credit** investors/analysts took place. In occasion of the approval of the annual and mid-term balance results, conference calls with the market and financial journalists have occurred.
- «Spazio Azionisti» constantly updated on the official website with economic and financial information.
- Attention to relations with ethical investors, promptly replying to requests of information by sector operators interested in Acea’s shares.

HOLDING –Investor Relations Function

HOLDING – Institutional Affairs Function

INSTITUTIONS AND COMPANY

MID-TERM OBJECTIVES (2012-2016)

- Develop electric mobility within the city of Rome

NETWORK AREA - Acea Distribuzione

- Modernisation of electric networks through implementation of «Smart Grid» applications after conclusion of the project promoted by AEEGSI

2013 MAIN ACTIONS

- Installation of the first 12 (by 100) charging stations duly authorised.

NETWORK AREA - Acea Distribuzione

- Public lighting network in Rome: develop massive installation of LED lamps by 2020

- Modernisation of electric networks through implementation of «Smart Grid» applications has continued, as per the project.
- The project "Smart Network Management System" (network technological innovation) has been pursued.
- Continuation of the Project ORBT (Ottimizzazione della Rete di Bassa Tensione – Optimisation of the LV grid): the application provides the detection of critical conditions in the single network segments and the identification of fluctuations to optimise the functioning, balancing the loads.
- Signing of a memorandum of understanding among Acea, Fastweb and Telecom with the scope of extending, in the territory of Rome, the ultra-wideband network, allowing Internet connection at speed 100 Mbps.
- Acea, together with other entrepreneurial entities, was awarded, thanks to the project RoMA (Resilience enhancement of Metropolitan Area) - the announcement Smart cities, Communities, Social Innovation launched by the Ministry for Education, University and Research, whose purpose is to develop a Security Centre in Rome with urban facilities, in the territory, in traffic and in infrastructure, capable of supplying state-of-the-art network services.

- Procedure for call for tenders for the purchasing of a first lot of 15,000 lamps has been activated.

NETWORK AREA - Acea Illuminazione Pubblica

ENVIRONMENT

MID-TERM OBJECTIVES (2012-2016)

- Extend the use of Management Systems certified in accordance with ISO 14001 (Environment) and ISO 50001 (Energy) standards

2013 MAIN ACTIONS

- Energy Management System new certifications ISO 50001:
 - ARSE;
 - Acea Distribuzione;
 - Acea Illuminazione Pubblica.
- Environmental Management System new certifications ISO 14001:
 - Acea Ato 5;
 - CREA GESTIONI Srl.
- Acea Ato 2 started procedures to obtain certification for Environmental Management System ISO 14001.
- Implementation of an integrated safety and environmental management system in Kyklos, Solemme and Aquaser has continued.
- already-certified management systems have been held.

HOLDING - Safety and Protection Function INDUSTRIAL AREAS

- Organise events with low environmental impact ISO 20121

- In 2014 the first event organised in compliance with ISO 20121 standards will take place experimentally, in occasion of the Annual Shareholders' meeting.

HOLDING - External relations and Communication Function

- Supply of green energy for IP of Rome

- Ongoing commercial negotiations for the supply of green energy to fuel the IP network of Rome starting from 2015.

NETWORK AREA - Acea Illuminazione Pubblica

- Lower consumptions:
 - 10% drinking water for domestic use
 - 3% electricity for domestic use
 - 5% fuels for vehicles and heating

- Launch of a project to carry out energy analysis in electric Operating Centres, to determine the best energy-efficient systems in consumption.
- Launch of a project to replace light sources in squares where Primary substations are located, with LED lamps.
- Replacement of 300 Euro 3 vehicles with Euro 5 vehicles.
- Reuse in waste to energy plants of buffer tank water as slag cooling system instead of using external water.

HOLDING INDUSTRIAL AREAS

- Reduction by 1% of water «leakages» in water distribution networks

- Scheduling of interventions for reduction in real water leakages in main aqueducts handled by companies of Water Industrial Area.

WATER AREA

- Reduction by 1.5 % of energy losses due to Joule effect (grid physical losses) in the electric distribution network of Rome

- The decision to utilise reduced-losses MV/LV power Transformers has been taken.
- Change in MV from 8.4 to 20 kV and in LV from 220 to 380 V.
- Optimisation of MV pattern network.
- Optimisation HV network (in cooperation with Terna).

NETWORK AREA - Acea Distribuzione

- Monitor of CO₂ emissions from processes in order to estimate the *carbon footprint* and plan possible interventions

- Cross-functional Working Group to monitor CO₂ emissions (carbon footprint) and report on *Carbon Disclosure Project* (CDP) has been created.

HOLDING - Safety and Protection Function

HOLDING - Institutional Affairs Function

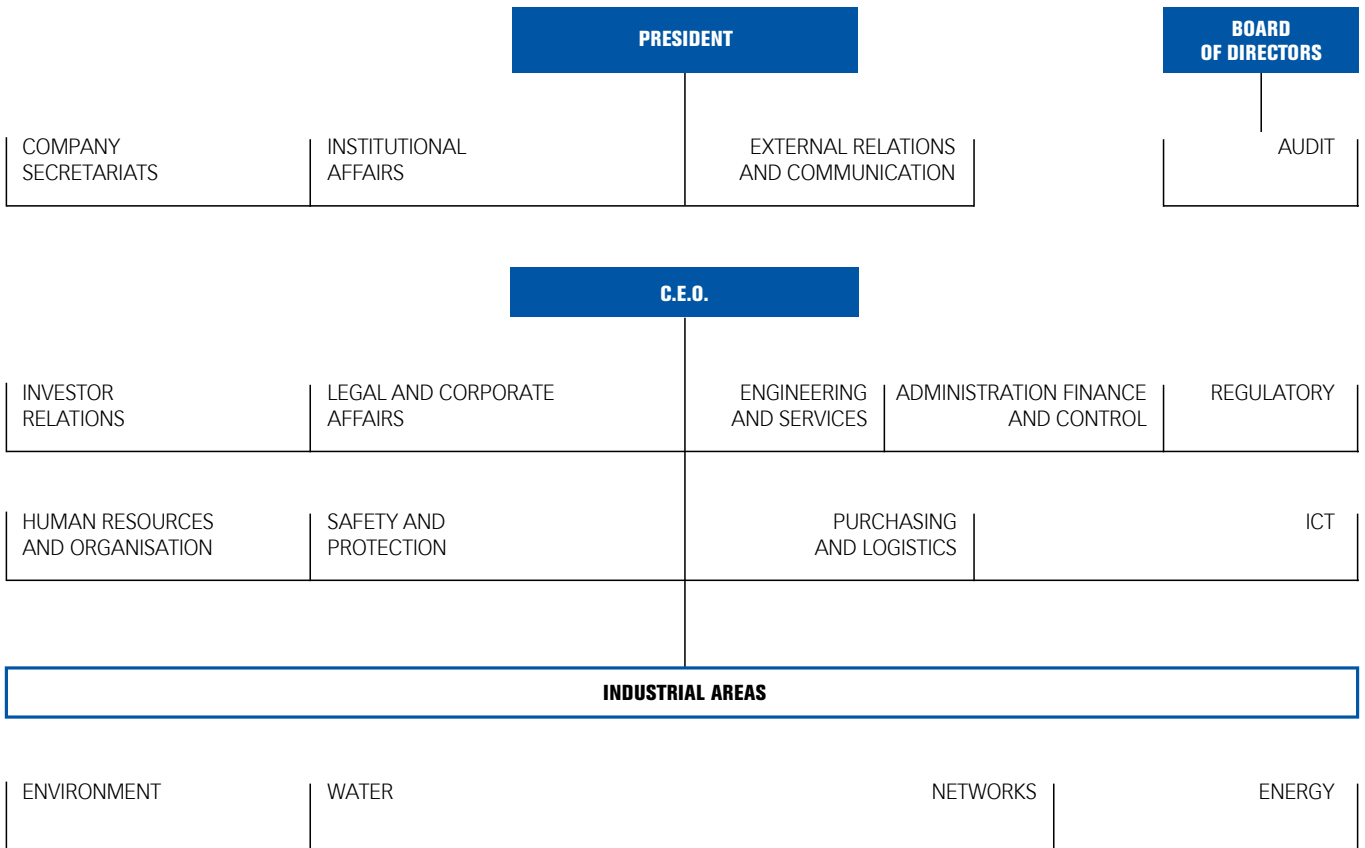
- Promote energy generation from renewable sources and low CO₂ emission technology

- Studies for modernisation of the plant in Tor di Valle and completion of district heating network in the southern area of Rome.

ENERGY AREA - Acea Produzione

CORPORATE GOVERNANCE AND MANAGEMENT SYSTEMS

CHART N. 6 - ACEA SPA ORGANISATIONAL CHART AS OF 31.12.2013



CORPORATE GOVERNANCE WITHIN ACEA

Acea adopts a governance pattern complying with provisions contained in the *Corporate Governance Code* (Corporate Governance principles applicable to Italian Listed companies) conforming to the principles of transparency, balance and separation among policy, management and control activities.

Acea SpA Board of Directors defines the **strategic policies of the Group** and is responsible for the management thereof. Within the holding Company, **two Committees** (*Control and Risks and Appointments and Remuneration*) have been established to hold **proposal and advisory functions** which interact with top management. The Board of Statutory Auditors is responsible for supervisory activities.

THE MAIN STAGES OF ACEA GROUP CORPORATE GOVERNANCE

1999

- The document related to *Corporate governance* is approved and lays the foundations for the progressive application of the *Corporate Governance Code*.
- Establishment and running of Internal Audit Committee and Remuneration Committee
- Establishment of *Investor Relations* Function

2000-2002

- Adoption of *Regulations of Annual Shareholders' Meetings*
- Adoption of *Charter of Values* (2001) and of *Code of Conduct on Internal Dealing* (2002)

2003-2005

- Approval of *Code of Ethics for Tenders* (2003) and of *Code of Ethics* (2004), establishment of *Ethics Committee*
- Entrustment to the President of the *Control and monitoring function of the Group's social and environmental performances* (2003) and establishment of the Risk control Unit and Customer Care Unit (2005)
- Adoption of the first *Organisation, management and control models* in compliance with Legislative Decree n. 231/2001 and establishment of the Supervisory Board starting from the Holding (2004) and embracing, consequently, all main companies operating in the water, network and energy sectors
- Adoption of Guidelines for collection and dissemination of personal data, in accordance with Legislative decree n. 196/03, in the framework of data privacy (2005)
- Implementation of "Internal Rules System" (group policies, processes of strategic governance, procedures for handling shareholdings, operating processes and functioning processes) (2005)

2006-2008

- Adoption of the new version of the *Corporate Governance Code (Borsa Italiana)* (2006)
- Alignment of the Articles of Association to the regulation provided by the Law 262/05 (2006)
- New *Regulations for internal management and outside disclosure of corporate documents and information* and new regulations on Internal Dealing (2006)
- Adoption of a Procedure for a decision-making process of transactions with related parties consistent with the principles of accuracy and transparency (2008)

2009-2011

- Review of the Internal Control System (ICS) and approval of its *Guidelines* (2010)
- Adoption of new regulations on composition and functioning of Committees (2010)
- Approval of a new procedure on transactions with related parties and establishment of Committee for Transactions with Related Parties (TRP) (2010, into effect from 1.1.2011)
- Adjustment of Articles of Association to latest legislative provisions (Law 34/08, Legislative Decree n. 27/10) with regard to the methods for selecting and electing the corporate bodies and to the participation in the Annual Shareholders' meetings (2010)
- Introduction of the position of General manager
- Winding-up of the joint venture between Acea SpA and GdF Suez Energia Italia SpA, terminated on 31st March 2011
- Composition of the Ethics Committee by the designation of two external members completed. The Ethics Committee, in the meeting held on 21st November 2011, approved the *CSR and reporting developing lines*, to which the publication of the *Sustainability Report* and the *Financial Statements* have been aligned, respecting the wishes of the highest governance bodies
- Introduction and adjustment, also for the previous years, of *Organisation, management and control models*, in compliance with Legislative Decree n. 231/2001, within several companies of the Group, in order to meet the organisational changes and the extension of contemplated violations, introduced by the Legislative Decree. n. 121/11

2012

- Approval of the new *Code of Ethics*, in which all previous Acea codes of conduct and values (*Charter of Values, Code of Ethics and Code of Ethics for Tenders*) have been integrated with procedures for presumed violations of the *Code*
- Adjustment of the *Internal Dealing* procedure
- Designation of the new Manager Appointed to draw Corporate Accounting Documents
- Adoption of the new version of *Corporate Governance Code (Borsa Italiana 2011)* and pursuant governance upgrades
- Up-to-date of *Organisation, management and control models*, in compliance with the Legislative decree. n. 231/2001, in all Acea SpA's subsidiaries with regard to environmental violations
- The Group executive provision for antitrust compliance has been approved
- Establishment of the Operating Risk Committee within the Energy Area, to control and monitor risks linked to commodities management

2013

- Adjustment of Acea SpA Articles of Association to the rule provided by the Law 120/2011, with regard to gender equity in administration and control bodies of listed-companies
- Renewal of the highest governance bodies
- Adoption of the regulations concerning the composition and functioning of Internal Committee of the BoD
- Review of Acea SpA organisational macro-structure
- Reconsideration and upgrade of the Transactions with Related Parties procedure
- Establishment of the new corporate Executive Committees
- Up-to-date of *Organisation, management and control model* of Acea SpA, in compliance with Legislative Decree n. 231/2001, with regard to violations of: non-European citizens with irregular residence permit for labour, malfeasance in public office, and private sector corruption. The new Supervisory Board of the holding company has been appointed, thus coinciding with the relevant Board of Statutory Auditors.

Management of the company is assigned to the **Board of Directors** (BoD), whose composition varies from 5 to 9 members, pursuant to the decision made at the Shareholders' Meeting. Members of the BoD can be re-elected and their mandate lasts for three years. The election process adopted (criteria of ratios on the votes obtained from the minority lists) guarantees: gender progressive balance, the appointment of an adequate number of **Directors representing minorities** and a number of **Independent Directors** provided by Law¹⁶.

The Board in office, appointed during the Shareholders' meeting held on 15th April 2013, **is made up of nine members** (see specific box, where additional offices covered by the members of the Board within the Internal Committees are also indicated); members of the Board of Directors met 12 times over the year.

The **President** and the **CEO** are the only **executive Counsellors** while the remaining seven are directors without any managerial power.

The **Report on corporate governance and the structure of ownership**, available online on the official website (www.acea.it), provides detailed information on Acea SpA's Directors: *curricula*, independence requirements, attendance at the Board and Committees they are part of, and additional offices held in other companies. Remuneration of the members of the BoD is set by the Shareholders' meeting while additional compensation for those who are also members of the Committees, is established by the Board itself upon the Appointment and Remuneration Committee's proposal, after consulting the Board of Statutory Auditors. Remuneration of Directors are illustrated in a specific table attached to the *2013 Consolidated Financial Statements*¹⁷.

COMPOSITION OF ACEA SPA'S BOARD OF DIRECTORS (AS OF 31.12.2013)

Giancarlo Cremonesi	(President)
Paolo Gallo	(Chief Executive Officer)
Maurizio Leo	(President of the Control and Risk Committee and member of the Appointment and Remuneration Committee)
Andrea Peruzu	(President of the Ethics Committee; Member of the Control and Risk Committee and member of the Appointment and Remuneration Committee)
Antonella Illuminati	(Member of the Control and Risk Committee, of the Appointment and Remuneration Committee and the Ethics Committee)
Paolo Di Benedetto	(President of the Appointment and Remuneration Committee and member of the Control and Risk Committee)
Giovanni Giani	(Member of the Control and Risk Committee and the Appointment and Remuneration Committee)
Francesco Caltagirone	(Member of the Ethics Committee)
Diane D'Arras	

ROLES AND POWERS OF THE BOARD OF DIRECTORS WITHIN ACEA

Among the powers assigned to the Board of Directors by Law, the Articles of Association and in compliance with the recommendations provided in the *Corporate Governance Code*, are:

- definition of general and strategic approaches as well as the company developing lines; coordination of economic and financial operations of the Group through the approval of strategic plans, including financial plans, investment plans and annual budgets;
- definition of the entity and size of risk compatible with the strategic goals of the company;
- approval and amendment of internal regulations with regard to the general organisational structure of the company;
- establishment of Committees required by the Corporate Governance Code and the appointment of their members;
- adoption of *Organisation, management and control models*, in compliance with Legislative Decree n. 231/01;
- assessment of the organisational, administrative and accounting structure of Acea and its subsidiaries having strategic relevance;
- interaction with the shareholders and promotion of activities aimed at encouraging their participation and effortless exercise of their rights;
- establishment of audits on the protection of personal data or third party's sensitive data, integrated with an annual report of a program document on security (Legislative Decree 196/03);
- adoption of all necessary procedures to protect the health of workers and the appointment of subjects entrusted with the control of safety in the workplace (Legislative Decree 81/08).

¹⁶ Pursuant art. 147 ter., c. 4, of Legislative Decree 58/98, c.d. *Testo Unico della Finanza* (TUF), the minimum number of Independent Directors shall be equal to 1 for BoD composed of up to 7 members, and equal to 2 for BoD composed of more than 7 members. During the year 2013, the BoD verified if its Directors had provided conditions in order to be qualified as independent: on 31.12.2013, 5 Directors out of 9 were verified as independent.

¹⁷ Published each year in the institutional web site, section Shareholders.

FUNCTIONS OF THE PRESIDENT AND THE CHIEF EXECUTIVE OFFICER

The **President**, apart from having the faculty of summoning and chairing the Board and the Shareholders' meeting, is the company's legal representative and legal authority. He is entrusted with: supervision of the Group's activities and control of the implementation of the resolutions issued by the Board and the *corporate governance* regulations; control of activities and company's processes with regard to the quality delivered and perceived, the environmental impacts and the *corporate social responsibility*; supervision of the company secretariats both of the Holding company and its subsidiaries.

The **Chief Executive Officer** is entrusted with ordinary company management, legal authority, the company's legal and procedural representation and is entitled to all further powers in accordance with the restrictions provided by Law and the Articles of Association. He acts according to long-term plans and annual budgets approved by the Board and assures and controls the accordance with management guidelines, making organisational and procedural variations to the holding company's operations, in compliance with the guidelines approved by the BoD. In addition, he chairs the **Management Committee**, an advisory body entitled to assess the economic management context of the Group and single business and further slippage or departure from the targets fixed. Furthermore he guarantees the proper handling of company information. The current C.E.O. also functions as the General Manager.

The **President** and the **Chief Executive Officer** report, at least every three months, to the BoD and the Board of Statutory Auditors, with regard to the general management trend and development expected.

The President and C.E.O. can jointly adopt, if necessary, acts pertaining to the BoD with regard to tenders, purchases, calls for tenders, issues of bank guarantees and designation of members of BoD and Board of Statutory Auditors of the main subsidiaries and investee companies, if in case of emergency summoning is not possible, by giving notice to the Board, during the first available meeting, which ascertains the legitimacy of operations.

An ordinary or extraordinary **Shareholders' Meeting can be summoned** by the **Board of Directors**, and **upon the shareholders' request**, if said shareholders represent at least 5% of share capital; furthermore, in compliance with the terms provided by the rules, the shareholders, representing at least 2.5% of share capital can request additional matters to discuss, integrating further topics or can request the resolution of matters on the agenda. Furthermore, additional computerised methods of interaction exist, such as the electronic notification of shareholders' representative proxy during the Meeting and publication on the website of the summons notice.

In conclusion, before the date fixed for the Meeting, the shareholders can question matters on the agenda, through registered letters or via email. There are no shares with limited rights of vote or devoid of the right thereof¹⁸.

The Articles of Association, exclusive of the shareholder *Roma Capitale*, requires a limitation of the right to vote on shares exceeding 8% of the share capital. No shareholders' agreements nor special rights of veto or further decision-affecting factors exist, beyond the exclusive right held by the shareholding.

REVIEW OF THE PROCEDURE ON TRANSACTIONS WITH RELATED PARTIES

In December 2013, Acea's BoD, as required by CONSOB regulations, submitted and modified the procedures on **Transactions with related Parties** to a three-year assessment. This procedure ensures transparency and accuracy of transactions of resources, services or bonds taking place among Acea – or its subsidiaries – and the natural or legal subjects defined as *related*, pursuant to the criteria provided in the regulations (i.e., subjects controlling Acea or controlled by Acea, joint ventures, managers with steering responsibilities, etc.). In particular, the application of such procedures has been extended to natural and legal subjects holding, at any title, 5% of Acea share capital. Furthermore, economic thresholds for small transactions have been increased, for which, consistent with further requirements, the procedure finds no application. Further cases of procedure exclusion are transactions related to the execution of legal proceedings or other public authorities. The new procedure will come into force in 2014.

ESTABLISHMENT OF NEW COMPANY COMMITTEES

In 2013, with the purpose of **improving company integration mechanisms and the decision-making processes**, by the optimisation of operating and cooperating capacities among the company Functions, some new **Committees**, within the holding, entrusted **with technical and advisory powers**, have been established, providing the participation of the Industrial Areas and Functions of Acea SpA. The Committees, all headed by Acea SpA's Chief Executive Officer, are:

- the **Steering Committee**, that guarantees the monitoring of paramount projects, the implementation of business decisions and changes in functioning models, identifying, as well, the corrective and improving actions of operating management;
- the **Management Committee**, that shares the actions detected by the Steering Committee and suggests possible actions to solve cross-functional and inter-company problems;
- the **Business Review Committee**, identifies the corrective and improving actions of social and economic results as well as capital results;
- the **Regulatory Steering**, analyses regulatory matters impacting on Acea business and identifies the corrective and improving actions.

¹⁸ With the exception of 416,993 shares owned (corresponding to approximately 0.2% of total shares) for which the right to vote is suspended in accordance with art. 2357-ter of the Civil Code. See also the *Report on corporate governance and the structure of ownership*

The **Acea Internal Control and risk management system (ICRMS)**, a core element in the corporate governance structure, is a set of rules, policies, procedures and organisational structures, aimed at:

- **identifying potential events which could** positively affect (opportunities) or negatively affect (risks) **the achievement of the goals set by the Board of Directors;**
- encouraging the execution of **decisions using awareness principles** and the contribution to company management consistent with the company's objectives;
- contributing and ensuring the **protection of the business' assets, efficacy and efficiency of its processes, reliability of financial information and compliance with the laws,** regulations, Articles of Association and internal procedures.

This system **embraces the entire company structure**, involving, regardless of the title, the following subjects:

- **the Board of Directors (BoD)**, whose primary objective is the protection of company interests and the generation of value for the shareholders in the medium-long term, by the promotion of actions oriented to the implementation of the provisions issued by law, the Articles of Association, the *Corporate Governance Code*, as well the principles contained in the *Code of Ethics* of the Group. The BoD determines, in cooperation with the Control and Risk Committee, the approaches of ICRMS, **in order to detect, evaluate and handle the main risks for Acea SpA and its subsidiaries.** The BoD is invested with the appointment and revocation of the members of the Committees and the subjects operating in the system: the Director, entrusted with the supervision of ICRMS, the Audit Function Manager and the Manager Appointed to draw the Corporate Accounting Documents;
- **the Control and Risk Committee**, performs proposal and advisory functions against the Board of Directors pursuant to the tasks defined by the *Corporate Governance Code*. In 2013, the Committee has met eight times;
- **the Appointment and Remuneration Committee**, performs proposal and advisory functions towards the Board of Directors with regard to the remuneration of directors and managers fulfilling strategic functions and to the size and composition of the BoD itself, with particular attention to those professional positions, whose presence is deemed fundamental. During the year, the Committee has met four times;
- **the Board of Statutory Auditors**, which, by the powers and obligations provided by the law in force, performs audit functions on the compliance with existing laws, on the administration accuracy and effective implementation of the *Corporate Governance Code*. The shareholders' meeting appoints the President, while Statutory Auditors are elected from minor shareholders;
- **the Chief Executive Officer**, who corresponds to the Director entrusted with the supervision of ICRMS, **allows the implementation of the System approaches** provided by the BoD and defines, through the Audit Function, the main risks of the company and periodically reports to the BoD;
- **the Manager Appointed to draw the Corporate Accounting Documents**, is entitled to establish and maintain the Internal Control System on

Financial Disclosure and to release relevant statements, jointly with the Chief Executive Officer

- **the Supervisory Board (SB)**, has full rights of initiative and action, with regard to the functioning and effectiveness of the *Organisation, management and control Model*, adopted pursuant to Legislative Decree n. 231/01, with the purpose of **preventing the risks of offences** from which the administrative responsibility of the company shall be deemed liable for. The Supervisory Board of the holding company and subsidiaries monitors all those paramount operations which may be at risk of offence - ex Legislative Decree n. 231/01 - including environmental crimes, crime against workers' safety and corruption, by means of systematically sharing information, transmitted by the companies' structures, supplemented by risk indicators. With regard to the operations at risk of offence, the SB provides an annual plan of controls; it can also require specific controls in terms of the periodic information received;
- **the Ethics Committee**¹⁹ entrusted with the promotion of the *Code of ethics* within the Group – carried out through an online training plan dedicated to the employees (see chapter *Human Resources*, paragraph *Enhancement of Human Resources and Communication*) – also controls its implementation and defines the functional procedures on the conformity to the principles contained. During the year the Committee held two meetings;
- **the Audit Function**, performs, in compliance with the standards of the sector, **independent assessments – regularly or according to specific needs – on the System efficiency and suitability**, by means of an Audit Plan approved by the BoD, which monitors the *action plans* issued after verification. The Function, that reports to the BoD and does not perform any operational business, is entitled to make verifications concerning the crimes provided in the Legislative Decree n. 231/01. In the framework of assessments required by the Supervisory Board, referring to the effective implementation of the *Organisation, management and control Model*, in 2013 audit activities have been carried out on the company's litigation management process, since potentially conducive to the crime of **corruption**. The person responsible for the Audit Function, in conclusion, supports the Director Appointed to detect the main risks for Acea SpA and its subsidiaries and the implementation of the approaches of ICRMS, also by a functional connection with second-level **auditing** structures;
- **the Risk Control and internal control Unit**, within the Audit Function, have the task, among others, of **defining, implementing and handling processes and means useful in detecting and assessing risk**, raising the awareness within the Group, of those factors that can potentially jeopardise the achievement of the company's goals and providing assistance to the management of the identification of possible corrective actions;
- **all Managers and Employees**, are responsible, each for his/her pertaining field, of necessary interventions to ensure the efficient functioning of the Internal Control and Risk Management System.

¹⁹ In accordance with the regulations in force, the members of the Ethics Committee are 5, of which two are appointed externally. At the end of the year, dott. Ivanhoe Lo Bello and Attorney Francesca Rosetti have been appointed as external members.

Risk management is therefore a cross process, providing widespread responsibilities and the involvement of the company at all levels, it helps to assess the risk exposure and to identify the functional tools aimed at preventing, mitigating – through procedures or management systems – or transferring – by insurance coverage for example – the unacceptable risks.

The **audit units** are developed with operations at the base and created to guarantee their proper execution (**first level**). Gradually,

further actions are undertaken, aimed at verifying the adequacy and efficiency of first-level controls (**second level**), by the person responsible for the organisational Units where the risk has been detected, and by the holding company's other structures, reporting on their operations to the Director Appointed to ICRMS and to the Audit Function. In conclusion, this Function intervenes with a last control (**third level**) to verify the overall pattern and functioning of the system and to monitor necessary plans of improvement.

MANAGEMENT SYSTEMS

The *Internal Rule System* (see chart n. 7) supervises the proper functioning of the Group's corporate governance operations, from the issue of general provisions to the formal statement of particular aspects according to the following pattern:

- **executive provisions of the Group**, by which the holding company, within its executive, coordination and control functions, gives instructions to all components of the company;
- **processes**, divided in governance, functioning and operating processes, according to strategic, across-the-board and single business matters respectively;
- **procedures**, which define the methods of implementation of the company's processes.

Adequacy and suitability of the system are regularly submitted to evaluation with respect to the company's needs. In particular

in 2013, the Group's procedures have been reviewed and adopted aimed at identifying roles, responsibilities and functions concerning the activities of: definition and upgrade of the internal organisational and regulatory system; training of personnel; handling of suppliers' database; internal audit and report, management and control of recording in order to adequately implement the Quality and Security management Systems.

Issues related to the compliance with the environmental regulations in force and those regulating the energy generation from renewable sources, featured by complexity and developing aspects, are subject to in-depth analysis and attention. To this end, in 2013 the company established a centralised unit, called Environmental Regulatory Unit, within the Holding's Legal and Corporate Affairs Function (see box).

THE ENVIRONMENTAL REGULATORY UNIT

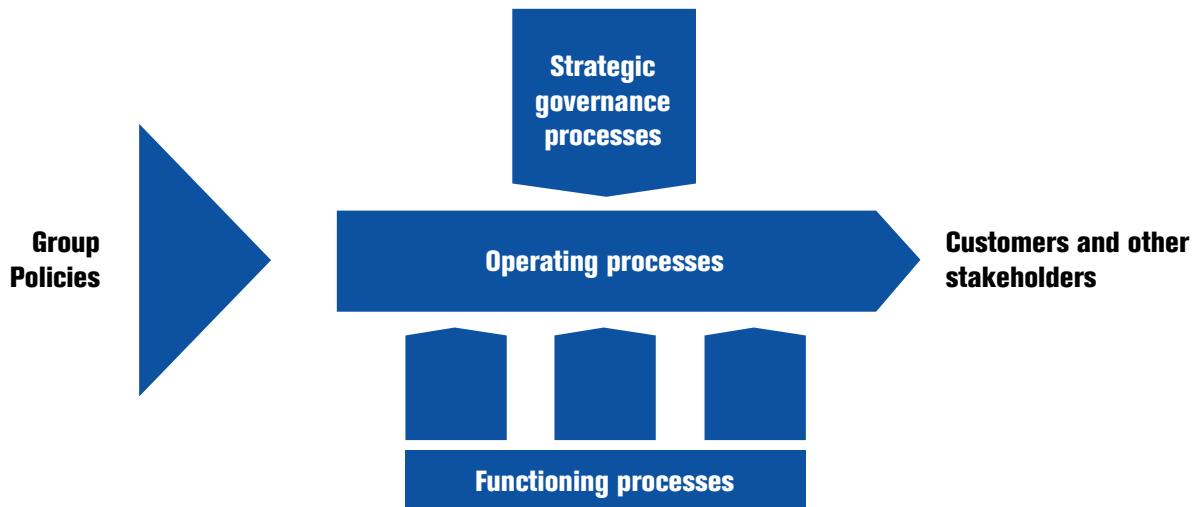
All environmental-related issues are of paramount importance when taking into consideration the spheres of business intervention of the Group's companies. The Environmental Regulatory Unit, established within Acea SpA in 2013, is the specialised centre for the **protection and control of management aspects that may have potential impacts on the environment**. First, this unit fulfils activities which are informational in nature, approaches and coordinates the entire Group, with the purpose of preventing deviations and defining policies and compliance standards among operational activities in the legal and environmental framework of reference.

To such aim, training sessions have been carried out on environmental matters with the participation of different corporate entities positioned within the territory. Furthermore, the unit gives support to companies in administrative proceedings for the release and management of environmental-related provisions or regarding support system for the energy generation from renewable sources, it also gives assistance to the Group's operators in occasion of technical tables and discussions with Public Authorities as well.

The *Information and Communication Technology* plays an important role in the management of such a complex and diversified public utility like Acea. In 2013, in conformity with the developing plan and ICT Unit, significant projects aimed at increasing the data protection level and related recording systems have been realised, in addition

to technological innovation and modernisation of information and management process platforms (See chapter *Institutions and the Company*, paragraph *The company as a stakeholder*).

CHART N. 7 – INTERNAL RULE SYSTEM



The **Safety and Protection Function** of Acea SpA, throughout specific operating Units, has been established to define, implement and control the fulfilment of the Group’s policies with regard to **quality, environment, energy, safety in the workplace, qualification of suppliers, security and protection of the company’s tangible and intangible property**, (see chapters *Suppliers* and *Company and Institutions* - for the protection of the Company’s property).

The person responsible for this Function – also performs the function of *Energy Manager* and *Mobility Manager* of the Group (see specific box) – acting as the Representative of the Executives

for Certified Management Systems of Acea, is entrusted with the periodic examination and upgrade of **Quality, Environment, Safety and Energy Policy**.

By the **adoption** of this policy **last year**, Acea opted for a **levelled approach and integrated to matters which were the object of management systems**. At the organisational level, the Representatives of the Executives for the Management Systems of the Group’s companies, report, according to their function, to the Safety and Protection person Responsible, using the related units for developing and maintaining the Management Systems respectively.

THE MOBILITY MANAGER OF THE GROUP

In December 2013, in accordance with the principles of corporate, social and environmental responsibility, Acea availed itself of a *mobility manager*. The main scope of the mobility manager is to **contribute to the reduction of environmental impacts due to employees’ commutes between home and the workplace**, by means of reducing the use of private vehicles, promoting the development of sustainable mobility policies (i.e., car-pooling, car sharing). The main goals of this function are: to boost common means of transport, disclosure of issues regarding mobility and support to progressive widespread of eco-friendly vehicles.

Most of the companies of the Group and energy-generating plants – thermoelectric, hydroelectric and waste to energy - have Management Systems certified in compliance with **quality and environmental standards**²⁰; some plants have also obtained **EMAS**

Registration and many companies of the Group are provided with the **occupational health and safety** management systems certified in compliance with the standard **OHSAS 18001:2007** as well as energy management systems consistent with the standard **ISO 50001:2011** (See specific boxes).

²⁰ Obtaining certification consistent with the standards UNI EN ISO 9001:2008 allows some companies to achieve the SOA certification enabling the execution of public works according to pertaining categories.

CERTIFICATIONS TO UNI EN ISO 9001:2008 QUALITY FOR THE COMPANIES OF ACEA GROUP AS OF 31.12.2013

- **Acea SpA** – planning, building, maintenance and refurbishment of networks and plants for integrated water service, and public lighting (both artistic and functional)
- **Acea Reti e Servizi Energetici SpA** – planning and supplying of energy services; planning and realisation of energy-efficient intervention also through renewable sources; planning, building, maintenance and operation of energy-generating plants and stations employing renewable sources; generation and sale of electricity by means of renewable sources
- **Acea Distribuzione SpA** – planning, building, operation, maintenance and refurbishment of networks and plants for the management of the licensed electricity distribution service in Rome and Formello
- **Acea Illuminazione Pubblica SpA** - planning, building, operation, maintenance and refurbishment of networks and installations for the global and integrated management of artistic and functional public lighting
- **LaboratoRI SpA** – scheduling and planning of water and environmental works; project management of water, environmental and waste treatment works; water-environmental monitoring and controls on purification and waste treatment plants; studies and optimisation of drinking water and wastewater treatment, sludge treatment and waste disposal and recycling processes; studies and modelling of drinking water networks, sewerage and leakage detecting; consulting on the waste treatment sector; studies and monitoring in hydrology, hydrogeology and protection and management of water resources and specialised services in the geological and geotechnical fields
- **Acea Ato 2 SpA** – planning, building, operation, maintenance and refurbishment of networks and plants for the management of the integrated water service in ATO 2 – Lazio Centrale
- **Acea Ato 5 SpA** - planning, building, operation, maintenance and refurbishment of networks and plants for the management of the integrated water service in ATO 5 – Lazio Meridionale - Frosinone
- **Acque SpA** – is certified **Best4 (quality, environment, safety and social responsibility)**
- **Acquedotto del Fiora SpA** – management of the integrated water service, planning and realisation of aqueducts and sewerage, including waste treatment plants and water chemical analysis service
- **Publiacqua SpA** – planning and management of procurements for the construction of wastewater treatment plants, water pipelines and sewerage systems; as well as for potabilisation service and wastewater treatment
- **Publiacqua Ingegneria SpA** – planning, project management and inspection of infrastructure for the management of water resources. Supply of technical services to support water resources management
- **Umbra Acque SpA** – drinking water distribution service and, limited to certain areas, sewerage and wastewater treatment service; planning, realisation and maintenance of aqueducts in certain municipalities
- **Nuove Acque SpA** – handling of integrated water service
- **Acea Servizi Acqua Srl** – pipelines and maintenance of wastewater treatment plants and sewer lift stations
- **Acea Gori Servizi Scarl** – engineering services in the field of integrated water service and energy service; information services in territories; analysis on drinking water and waste water
- **S.A.M.A.C.E. Srl** – treatment and recycling of organic-derived solid waste, treatment and purification of civil and industrial wastewater, generation and sale of compost
- **Aguas de San Pedro SA**, (Honduras) – handling of integrated water service in the city of San Pedro de Sula

In conclusion, in 2013 **Acea SpA** launched a process aimed at **obtaining corporate certification**, an integrated certification for all subsidiaries of the Group.

CERTIFICATION TO ENVIRONMENTAL, SAFETY AND ENERGY MANAGEMENT SYSTEMS OF ACEA GROUP'S COMPANIES AS OF 31.12.2013

- **Acea SpA** – certified to **OHSAS 18001:2007** for the occupational health and safety management System for general clerical staff: management, coordination, administration, finance and control.

ENERGY

- **Acea Produzione SpA** – certified to **UNI EN ISO 14001:2004** for EMS addressed to centralised offices (Rome) for activities of planning, building, inspection and maintenance of district heating networks and for heat energy activities in the **Thermal Power Plants of Tor Di Valle** and **Montemartini** (Rome) and **Hydroelectric Plants of Salisano (RI), Marconi (TR), Volta (RM) and Ferraris (RM)**. The company Acea Produzione is also certified to **OHSAS 18001:2007** for its occupational health and safety management System
- **A.R.I.A. Srl** – certified to **UNI EN ISO 14001:2004** for EMS for the **waste to energy plant** in San Vittore del Lazio and is **EMAS Registered**. The sites of Terni and S. Vittore del Lazio are certified for their occupational health and safety management System in compliance with **OHSAS 18001:2007** standard
- **SAO Srl**, a company operating in the management of environmental services, has an **integrated Safety and Environmental management System** within **UNI EN ISO 14001:2004** standards for EMS and **OHSAS 18001:2007** for its occupational health and safety management System. It is also **EMAS Registered**
- **Acea Distribuzione SpA** - certified to **OHSAS 18001:2007** for its occupational health and safety management System; certified to **UNI EN ISO 14001:2004** standard for EMS and **since 2013**, to **UNI EN ISO 50001:2011** for the Energy Management System
- **Acea Illuminazione Pubblica SpA** – certified to **OHSAS 18001:2007** for its occupational health and safety management System, to **UNI EN ISO 14001:2004** standard for EMS and **since 2013**, to **UNI EN ISO 50001:2011** standard for the Energy Management System
- **Acea Reti e Servizi Energetici SpA** – certified to **UNI EN ISO 14001:2004** for EMS for planning and management activities concerning: energy services; intervention and assessments for energy-efficiency; planning, building, maintenance and operation of plants and stations and, **since 2013**, is certified to **UNI EN ISO 50001:2011** standard for the Energy Management System
- **Acea Energia Holding SpA** – certified to **OHSAS 18001:2007** for its occupational health and safety management system
- **Acea Energia SpA** - certified to **OHSAS 18001:2007** for its occupational health and safety management System

During the year the implementation of an integrated safety and environmental management system in the companies **Kyklos, Solemme** and **Aquaser**, have continued.

WATER

- **Acea Ato 5 SpA** - certified to **ISO 50001:2011** for the Energy Management System and, **since 2013**, to **OHSAS 18001:2007** for its occupational health and safety management System and to **UNI EN ISO 14001:2004** for the EMS
- **LaboratoRI SpA** – accreditation **ACCREDIA in compliance with the UNI CEI EN ISO/IEC 17025:2005** standard for the development of laboratory analytical tests: analytical tests submitted for the ACCREDIA accreditation, carried out by the laboratory working for the Group's companies, are over 80%; certified to **OHSAS 18001:2007** for its occupational health and safety management System
- **Acea Gori Servizi Scarl** - certified to **UNI EN ISO 14001:2004** for the EMS and to **OHSAS 18001:2007** for its occupational health and safety management System
- **CREA GESTIONI Srl** – since **2013**, is certified to **OHSAS 18001:2007** for its occupational health and safety management system and to **UNI EN ISO 14001:2004** for the EMS
- **Acque SpA** (together with the subsidiaries **Acque Industriali** and **Acque Servizi** and with the related company **Ingegnerie Toscane**) - **BEST4** integrated certification – inclusive of **UNI EN ISO 14001:2004** standard (environmental system), **OHSAS 18001:2007** standard (safety system), **SA 8000:2008** standard (social responsibility) and **UNI EN ISO 9001:2008** standard (quality system) – concerning the management activities of integrated water service; planning, building and operation of water pipelines and sewerage; wastewater and liquid waste treatment; polluted site reclamation
- **Publiacqua SpA** - certified to **UNI EN ISO 14001:2004** for the EMS of all business operations: centralised offices and purification plants (San Colombano) and drinking water and potabilisation plants (Anconella and Mantignano) for the territory of Medio Valdarno
- **Consorcio Agua Azul SA**, (Peru) obtained a certification for the integrated **quality and environmental** management System, in compliance with **UNI EN ISO 14001:2004** and **9001:2008** standards. The **safety management System**, updated in conformity with the new local standards (Supreme Decree N. 005-2012-TR), is still in force

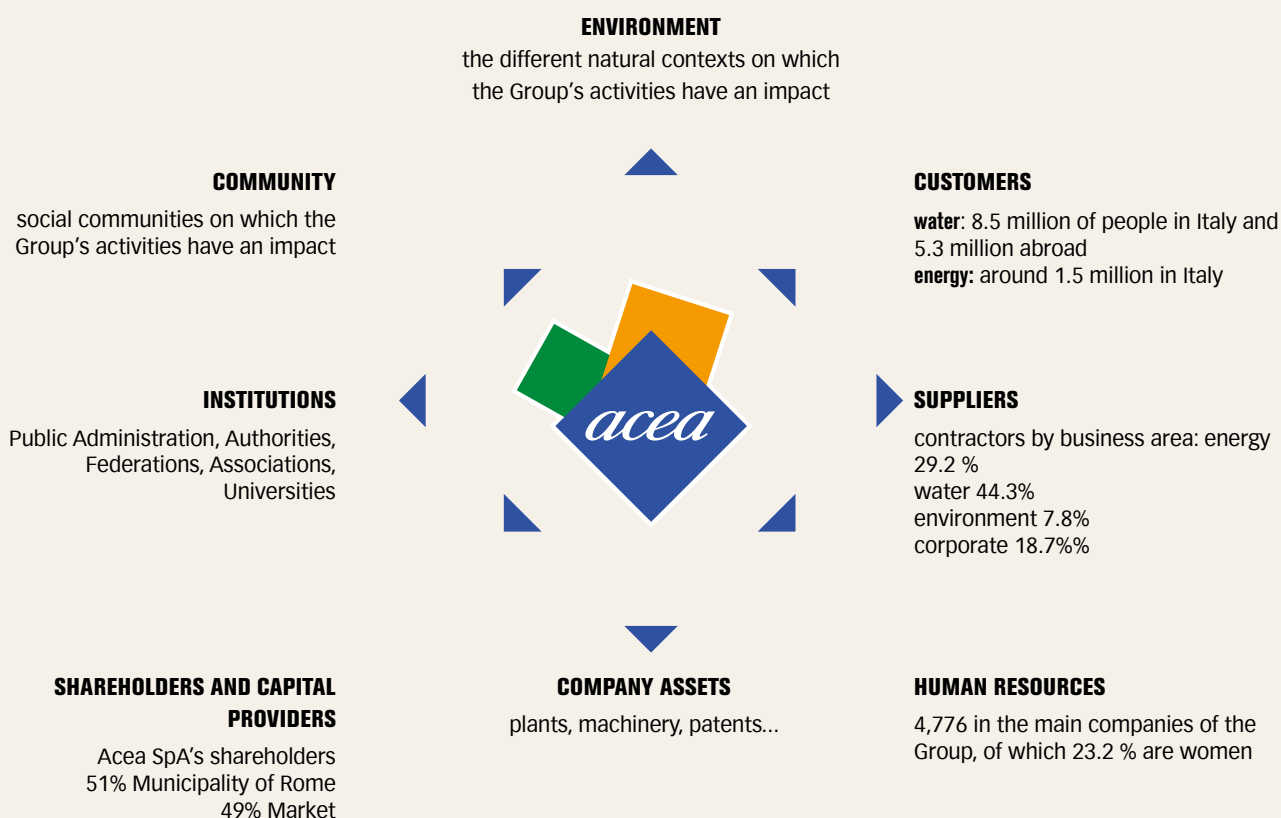
In **2013 Acea Ato 2** undertook operations to obtain certification for occupational health and work safety management System, in compliance with **OHSAS 18001:2007** standard and for EMS in compliance with **UNI EN ISO 14001:2011** standard. The procedure to obtain the certification for the laboratory consistent with **ISO 17025** standard, for **Aguas de San Pedro SA** (Honduras), has carried on.

STAKEHOLDERS AND ADDED VALUE DISTRIBUTION

THE STAKEHOLDERS AND THEIR INVOLVEMENT

Acea, following the principles and conduct criteria of its *Code of Ethics*, promotes the dialogue and interactions with its stakeholders²¹. A first mapping to identify the macro-categories of the concerned parties, has been carried out systematically in occasion of the stock market listing; such categories, over the time, further enriched and diversified simultaneously to the development of the Group's business sector. The exchange and relational mechanisms established between the company and the stakeholders involved, engender, for both, a sense

CHART N. 8 – ACEA AND ITS STAKEHOLDERS



NB: The type and features of Stakeholders as well as their relations with the company, are illustrated, quantified and analysed in-depth in the sections of the *Sustainability Report*.

²¹ *Stakeholders* mean those subjects (considered as individuals, groups, organisations) having important relations with the company and whose interests are, at different titles, involved in the business operations both for the interchange relations with the company itself and/or for the relevant influence they withstand.

of responsibility and awareness of their role, while encouraging participation in a scenario in which further development is shared. All this occurs in the daily business operations, with the single stakeholders' segments involved in projects performed by the Group's companies in the various spheres of reference.

CHART N. 9 – ACEA VALUE SYSTEM TOWARDS ITS STAKEHOLDERS



Ordinary and extraordinary activities of debate and involvement, due to the continual interactions between the group's companies and their stakeholders, lead to the creation of a **resource of information and relations** fundamental both for the business development and for the consolidation and extension of the right to operate granted to Acea by its stakeholders.

With regard to the **community**, Acea demonstrates its availability and transparency in all requests it is called for, giving its contribution in supporting cultural, sporting and social initiatives of the community in which it is settled in.

Relationship with **customers** is developed beginning with the mapping of critical situations, where claims can rise, through the collection and study of customers' feedback, by means of surveys on customer satisfaction, concerning the service supplied and the contact methods with the Group's companies, in order to create solutions to optimise operating processes. Such a relationship is also provided if a proper infrastructure, capable of facilitating dialogue and improving the information and service exchange within the company, the customers and consumers' associations, paying particular attention to the IT application (as for online

help desks of companies supplying services). Relationship with the **financial stakeholders** is performed by the appointed business Function, whose main tasks are the monitoring, interaction and acknowledgement of requests from potential mainstream and ethical investors. Interactions with **local and national institutions** and with **competent authorities** basically regard audits, information exchanges and specific projects. Among such projects, the most important are those having an impact on the improvement of management levels of critical infrastructures or related to security of urban territory, both in the event of national emergencies and daily management (see chapter *Customers and the Community*, paragraph *Quality Supplied* and chapter *Institutions and the Company*). The recent regulatory changes in the water sector led

to a further enhancement of participation and involvement in the relationship with AEEGSI.

Regarding **human resources**, Acea is deeply committed to the adoption of an approach aimed at enhancing its human resources, both through an extensive training activity – for the development and adjustment of personal skills – and through the widespread use of the Management System of people and the Leadership Model (see chapter *Personnel*).

Relationship with **suppliers** are handled and controlled through the system – i.e., round tables with employer organisations of the territory - and through single operators – i.e., rating of suppliers and qualification processes of Acea Group handled by the appointed business function (see chapter *Suppliers*).

DISTRIBUTION OF ACEA'S ADDED VALUE

The economic value generated by the Acea Group in 2013, including the revenues deriving from core business management and financial operations, amounts to **3,606.2 million euros** (versus 3,647.6 million euros in 2012).

Distribution of this value among stakeholders is divided as follows: **69.9%** to **suppliers** under operating costs, **12%** to the **company**, under re-invested resources; **7.8%** to **human resources**; **6.6%** to **shareholders and capital providers** under dividends and interests on capital supplied; **3.6%** to **public administration**²² as taxes paid and **0.1%** to **community** as donations and sponsorship for events and public performances.

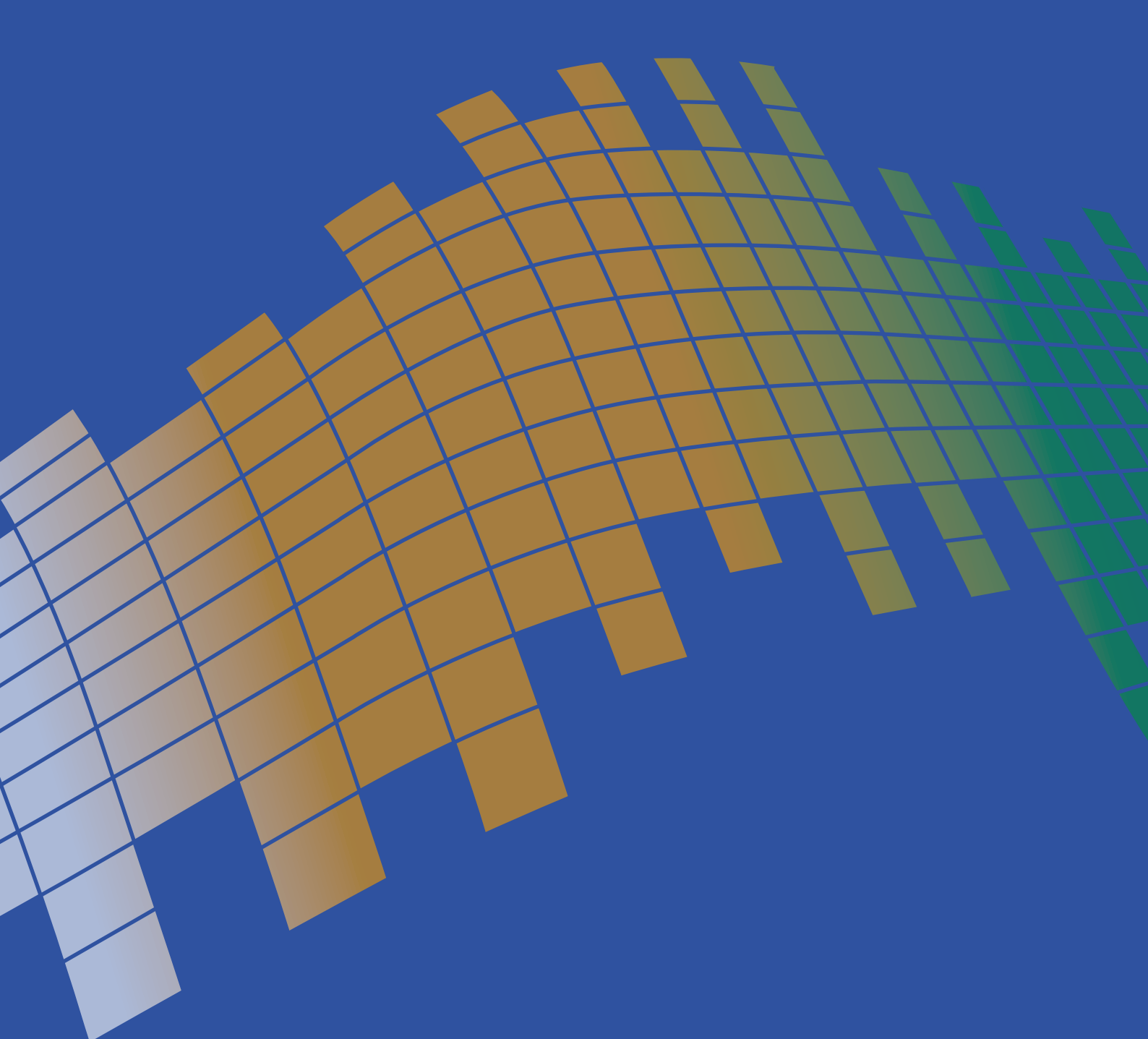
TABLE N. 10 – ECONOMIC VALUE DIRECTLY GENERATED AND DISTRIBUTED (2012-2013)
(IN MILLIONS OF EUROS)

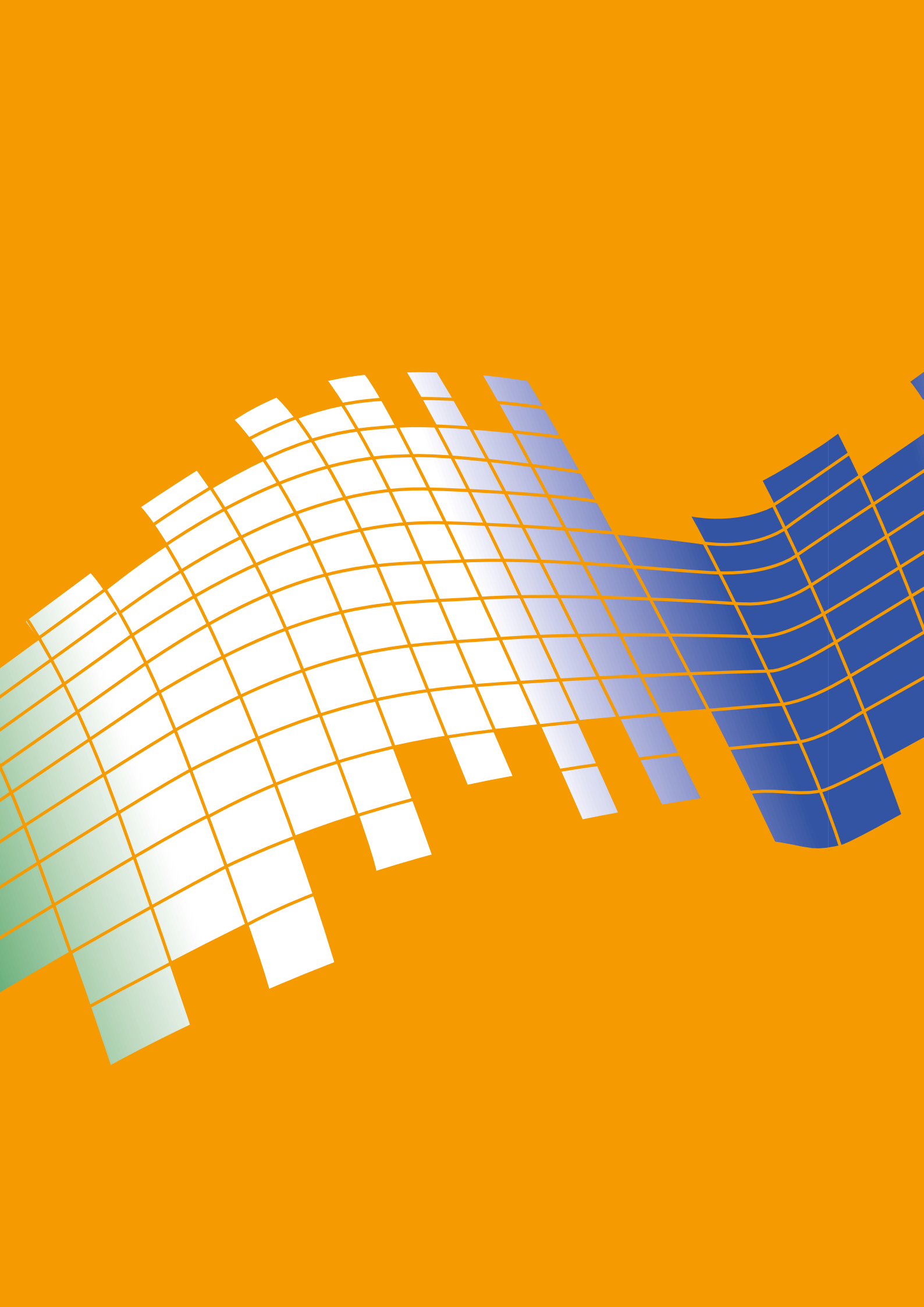
	2012	2013
total economic value directly generated	3,647.6	3,606.2
distribution to stakeholders		
operating costs (suppliers)	2,630.6	2,519.9
human resources	282.0	279.5
shareholders and capital providers	226.6	238.6
public administration	88.8	128.3
community	4.7	5.1
company	414.9	434.8

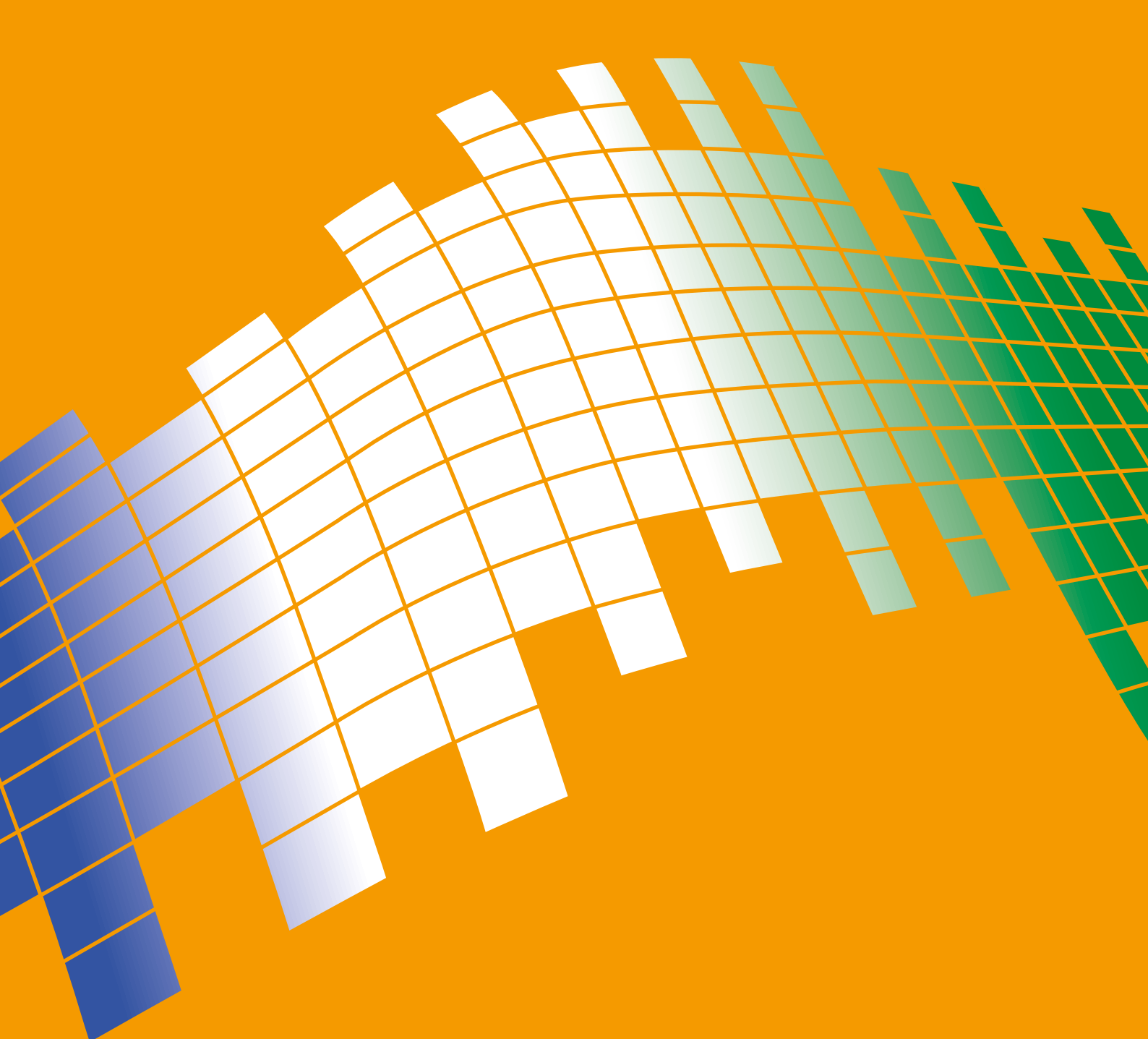
TABLE N. 11 – DISTRIBUTION OF ADDED VALUE BY STAKEHOLDER (2012-2013)

(%)	2012	2013
suppliers	72.1	69.9
human resources	7.7	7.8
shareholders and capital providers	6.2	6.6
public administration	2.5	3.6
community	0.1	0.1
company	11.4	12.0

²² The amount paid to public administration excluding regional and state public grants that Acea receives from said stakeholder is equal to 112.7 million euros.







2013

**SOCIO-ECONOMIC
RELATIONSHIPS WITH
THE STAKEHOLDERS**

CUSTOMERS AND THE COMMUNITY

REFERENCE BOUNDARY

The figures relating to the volume of customers refer to the Group; the figures relating to perceived quality, delivered quality, customer care, tariffs and communication activities refer to a more limited frame and to the specific operational companies referred to in the text.

We will improve the relationships with our customers by developing advanced Management Systems and empowering contact channels.



We want to express our Public Utility mission through our involvement in society.

This chapter describes the interactions both between Acea and **the community** and between **its customers** and the community, since the data and the information about provided services - perceived quality, delivered quality, customer care - mainly refer to Rome and its province, where the two stakeholders almost coincide²³; the number of electricity and water service customers includes, instead, all of the served areas.

ACEA GROUP CUSTOMERS

ELECTRICITY AND GAS SERVICE CUSTOMERS

According to the most recent data by the Italian Regulatory Authority for Electricity Gas and Water²⁴, **Acea Energia** holds **third place among Italian dealers** as far as volumes marketed in the **final energy sales market** are concerned, with a **market share of 4,3%**.

Competition in the free market allows slight or relevant movement to occur every year: on the one hand, Acea acquires new customers through its commercial campaigns, on the other hand

it renounces a part of these as they are attracted by its chief competitors. Observing variations between 2013 and 2012 in every market segment managed by Acea Energia, customers prove to be **basically steady, both in the protected and in the free market**, in compliance with Acea's customer loyalty strategy.

TABLE N. 12 – ELECTRICITY AND GAS SALES: ACEA GROUP CUSTOMERS BY MARKET TYPE (2011-2013)

	2011	2012	2013
protected market (n. of withdrawal points)	1,147,771	1,088,701	1,071,557
free market - mass market (n. of withdrawal points)	218,105	236,652	224,733
free market - large customers (n. of withdrawal points)	110,251	61,336	76,543
free gas market (n. of delivery points)	95,083	97,607	98,676

In 2013, through the annex to Resolution 500/2013/R/COM, the Authority updated the *Glossario della bolletta elettrica (Electricity Bill Glossary)*, from which the definitions of the energy market segments have been taken (see box).

THE ENERGY MARKET SEGMENTS

- **protected market:** this is the electricity supply service under the economic and contract conditions imposed by the Italian Regulatory Authority for Electricity Gas and Water. Household customers and small enterprises - with up to 50 employees and annual turnover not exceeding 10 million euros, connected to the low voltage grid - are served in the **protected market** service if they have never changed supplier, or if they have once again requested those conditions after having entered into contracts on the free market with other suppliers. The **protected market** service conditions also apply to the household customers and small enterprises without suppliers, for example in the event that a supplier has gone bankrupt.
- **free market:** as of 1st of July, 2007 the energy market has been liberalized: therefore, every customer can freely choose from which supplier and under which conditions they purchase electricity. In the free market the economic and contract conditions for electricity supply are agreed between the parties and not imposed by the Regulatory Authority. In this case, the bill shows "mercato libero" ("free market").

Source: AEEGSI (Italian Regulatory Authority for Electricity Gas and Water), *Glossario della bolletta elettrica (Electricity Bill Glossary)*, annex to Resolution 500/2013/R/COM of 7th November, 2013

²³ In Rome and its province Acea manages the integrated water service, the electricity supply (to over 1 million customers), the energy distribution and the public lighting service. Therefore, customers and the community almost coincide in this particular area. The economic, environmental and social data relating to the investee companies, operative in other areas for the integrated water service, are available in various paragraphs of this report - often in aggregate form.

²⁴ See the *Annual Report on the State of Services and Regulatory Activities*, 2013 edition, chapter *Structure, Prices and Quality in the Electricity Sector*, available on the Regulatory Authority website. Moreover, Acea is the second dealer in Italy as for volumes sold to protected-market customers, with a market share of 4.5%, and the sixth as for volumes sold to the free market, with a market share of 4.5%.

WATER SERVICE CUSTOMERS

Acea is the leading dealer in Italy for **integrated water service** (catchment, feeding, purification, wastewater collection and treatment) **in terms of population served**, with a customer base of **around 8.5 million inhabitants in Italy**. The Company - which is the historic water service operator in Rome - has progressively expanded, becoming the reference operator for other Optimal Territorial Areas

("Ambiti Territoriali Ottimali" - ATOs)²⁵ in the provinces of Rome and Frosinone (Latium), Pisa, Florence, Siena, Grosseto, Arezzo and Lucca (Tuscany), in the areas which range from the Sorrento peninsula to Vesuvian towns, in the provinces of Naples and Salerno (Campania) and in the area of Perugia and Terni (Umbria). The Group also operates in a number of South American countries²⁶.

TABLE N. 13 – CUSTOMERS AND INHABITANTS SERVED IN ITALY BY THE MAIN ACEA GROUP WATER COMPANIES (2012-2013)

COMPANY	CUSTOMERS SERVED		POPULATION SERVED	
	2012	2013	2012	2013
Acea Ato 2	584,477	590,499	3,700,000	3,700,000
Acea Ato 5	188,214	188,487	460,000	460,000
Gori (*)	539,866	541,438	1,437,000	1,441,170 (**)
Acque (*)	321,807	321,807	718,418	718,418
Publiacqua (*)	382,417	384,290	1,226,376	1,229,691
Umbra Acque	230,000	230,439	511,000	501,351 (**)
Acquedotto del Fiora	234,132	234,286	412,372	412,372
Total	2,480,913	2,491,246	8,465,166	8,463,002

(*) some data concerning Gori, Acque and Publiacqua referring to 2012 have been amended after databases have been updated; moreover, final data concerning Acque for 2013 are not still available and figures on 31.12.2012 have been reported.

(**) Source ISTAT at 01-01-2013

PERCEIVED QUALITY

Each year Acea entrusts a specialized external company - selected by means of tender - with **customer satisfaction surveys** aimed at measuring the level of customer and citizen satisfaction with electricity, water²⁷ and public lighting services.

The Institutional Relations Unit co-ordinates the process, together with the operational companies, following the survey procedure: from defining the questionnaires to identifying the samples to be interviewed, presenting the results and providing a shared interpretation of the output.

During 2013, like in previous years, two six-month surveys were carried out using a method²⁸ which made it possible to develop specific indicators²⁹:

- the **overall opinion** on the general quality of the service (expressed on a 1-10 scale), an index of customers' "impulsive" opinion;
- **summary satisfaction indices**, both overall and on the macro-components of the service (**Customer Satisfaction Index - Satisfied Customers Percentage CSI**, 0-100 scale) based on the portion of customers who declared themselves satisfied, and processed taking into account the opinions related to individual aspects of the service;
- **satisfaction degree indices**, both overall and on the macro-components of the service (**Customer Satisfaction Index - Satisfaction Degree CSI**, 1-10 scale)³⁰ which measure "to which extent" customers were satisfied or dissatisfied with the service.

25 The Italian territory, in compliance with Law 36/1994 - Legge Galli - which reorganized water service, is divided into 92 Optimal Territorial Areas (ATOs) based on drainage basins. With regard to the ATOs in which Acea operates through investee companies, please see the paragraph dedicated to the main Group Companies in *Corporate identity*.

26 See chapter *Activities Abroad*.

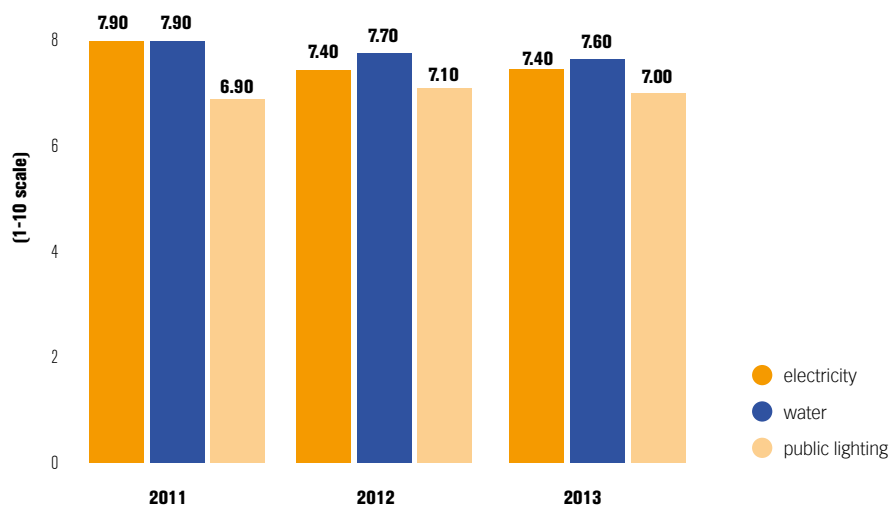
27 With regard to the water service, besides the surveys carried out in Rome and other municipalities served by ATO 2 - Lazio Centrale, Acea SpA carried out perceived quality surveys on other ATOs, in which it operates through investee companies.

28 CATI Method - *Computer Assisted Telephone Interviewing*, through a structured questionnaire, on a sample stratified according to variables - such as residence areas, consumption times - with a maximum statistical error of 2.8% and a level of significance of 95%.

29 Please note that the surveys about "contact channels" involved customers selected through a "call back" procedure, namely people who had recently used telephone services (commercial toll-free number for sales or that for reporting faults) or had referred to the help desk or requested technical intervention, giving their authorisation to be called back.

30 The Satisfaction Degree CSI Indices have been created on the basis of the average satisfaction index and of the importance assigned to each aspect.

CHART N. 10 - OVERALL OPINIONS ON THE SERVICES SUPPLIED (2011-2013)



NB: the values are the average of the two six-month surveys for each year

ASSESSMENT OF THE ELECTRICITY SERVICE

The surveys regarding the **perceived quality of the electricity supply service** were carried out in May/June and November/December 2013, by means of telephone interviews on a **total sample of 9,225 customers: 5,012 for energy sale-related issues**, managed by Acea Energia and **4,213 for technical and managerial issues** related to the energy distribution grid, managed by Acea Distribuzione.

The **overall rating on electricity service**, both as regard to technical and sales-related issues, remained positive, despite a slight decrease in the former, and the percentage of the interviewees rating the service **between sufficient and excellent** remained globally high: 89% (Grid: 91.5%, Sale: 86.5%) (see table n. 14).

TABLE N. 14 - OVERALL OPINION ON THE ELECTRICITY SERVICE (2012-2013)

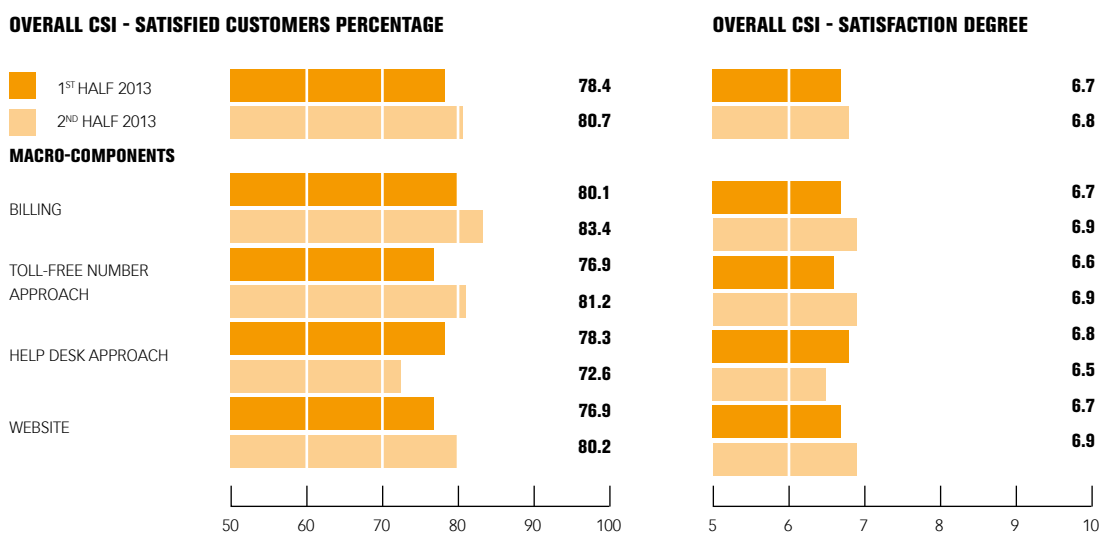
RATING	SCALE	2012 (AVERAGE OF THE TWO SIX-MONTH PERIODS)		2013 (AVERAGE OF THE TWO SIX-MONTH PERIODS)	
		GRID	SALES	GRID	SALES
excellent	9 - 10	24.0%	21.5%	25.0%	15.5%
good	8	35.0%	35.5%	37.5%	36.0%
sufficient	6 - 7	31.0%	32.0%	29.0%	35.0%
insufficient	1 - 5	10.0%	11.0%	8.5%	13.5%
final average:		7.5	7.3	7.6	7.1

As for **sales** - commercial and contact management - the results of both six-month surveys revealed a **steady good overall satisfaction index** - 79.55 out of 100 - **for the protected market customers**, with a moderate satisfaction degree - 6.75 out of 10; satisfaction with **the help desk service** and the **website** slightly decreased if compared to last year (see chart n. 11). Regarding the percentage of the interviewees satisfied³¹ with **single quality factors** of the service, most of them appreciated the two items deemed as the most relevant for billing: **"amount accuracy"** - 82% of customers were satisfied, as average of the two surveys - and **"bill readability"** - 79%; as regard

the toll-free number, 74% of customers were satisfied with the **"operator's problem-solving skills"**, 78% and 88.5% respectively with the **"thoroughness of the answers"** and the **"operator's politeness"**. The most important quality factors about the help-desk service were the operator's **"competence"** and **"politeness"**, which met with complete satisfaction - 81% and 87.5% respectively. **"Waiting time"**, instead - 58.5% - didn't achieve an adequate satisfaction index; finally, as far as our website is concerned, 76.5% of the interviewees were satisfied with its **"ease in navigation"** and 77% with the **"range of available operations"**.

31 In order to better understand these figures, please consider that 75% or above (threshold level) can be considered an adequate customer satisfaction index.

CHART N. 11 - ELECTRICITY SERVICE - PROTECTED MARKET SALES: SATISFIED CUSTOMERS PERCENTAGE CSI AND SATISFACTION DEGREE CSI - OVERALL AND ON MACRO-COMPONENTS (1ST AND 2ND HALF OF 2013)

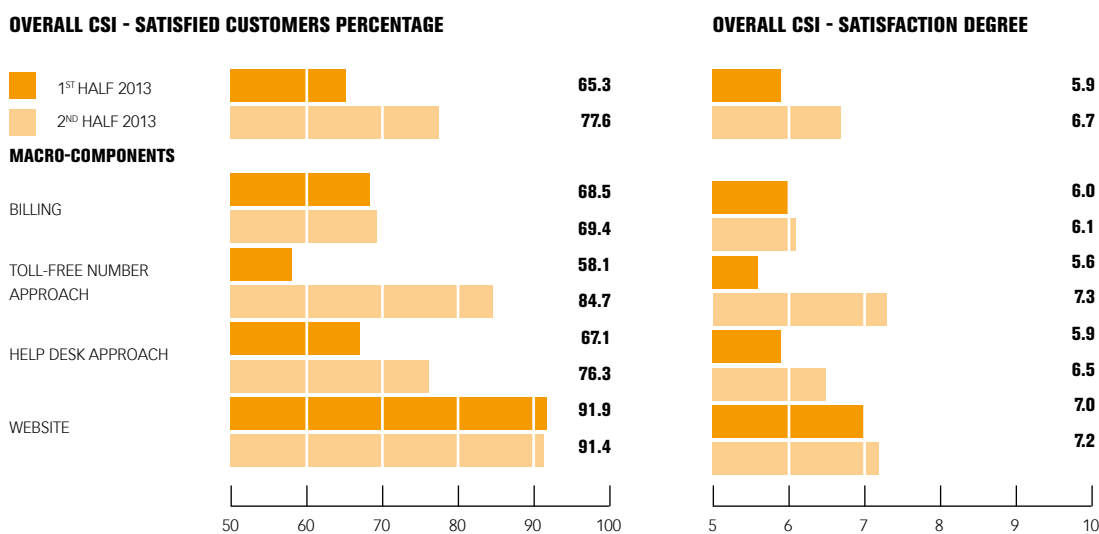


Within the **free market**, the overall range of satisfied customers was 71.45 out of 100, a decrease if compared to 2012 (76.4), mainly because of two poorer macro-components - billing and commercial toll free number; however, the latter decreased only in the first half of the year. The already high satisfaction index on the website, instead, increased. (see chart n. 12).

Among the main **quality factors** assessed by **free market customers**, "amount accuracy" and "bill readability" did not meet with complete satisfaction, with 68% and 66% of satisfied customers respectively, as average of the two surveys; at the same time, the two most relevant items about the commercial toll-free number -

the "problem solving skills" (67.5%) and the "thoroughness of the answers provided by the operator" (71%) - didn't achieve a good satisfaction percentage, although both surveys showed strongly rising percentages in the second half of the year; as far as the help desk service is concerned, "waiting time" was the most problematic item, with 57% of satisfied customers, while 75.5% were satisfied with the "operator's competence" and 84.5% (on average) with the "operator's politeness"; finally, the website was very positively assessed, with 90% of people satisfied with the "range of available operations", 93% with the "ease in navigation" and 91% with the "amount of information on the website".

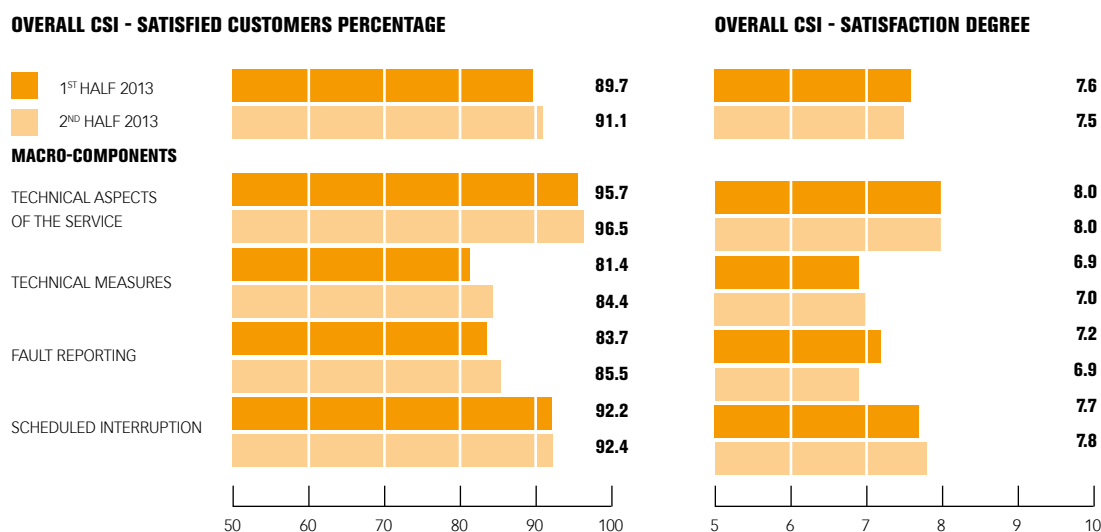
CHART N. 12 - ELECTRICITY SERVICE - FREE MARKET SALES: SATISFIED CUSTOMERS PERCENTAGE CSI AND SATISFACTION DEGREE CSI - OVERALL AND ON MACRO-COMPONENTS (1ST AND 2ND HALF OF 2013)



With regard to customer satisfaction with the **energy distribution grid**, the **overall indices** of both halves of 2013 revealed high **satisfactory appreciation (90.4 out of 100)** and a fair satisfaction degree (7.5 out of

10). The four analysed macro-components, consistently with 2012, were given very positive assessments (see chart n. 13).

CHART N. 13 - ELECTRICITY SERVICE - GRID: SATISFIED CUSTOMERS PERCENTAGE CSI AND SATISFACTION DEGREE CSI - OVERALL AND ON MACRO-COMPONENTS (1ST AND 2ND HALF OF 2013)



The percentage of customers satisfied with the individual quality factors of the electric distribution grid macro-components were consistently high: in particular, 96.5% of the interviewees - as average of the two six-month periods - were satisfied with the “continuity of the service” - considered the most relevant among technical issues - 81.5% and 83% were satisfied, respectively, with the “efficacy” and “rapidity of technical measures”; as for reporting faults, 75.5% of customers were satisfied with the “service intervention”, while the other two main items - the “thoroughness of the answers” and the “waiting time before being transferred to an operator” - revealed wider satisfaction - 87% and 84% respectively; finally, as for scheduled interruption, 92.5% and 92% of the interviewees were respectively satisfied with the “accuracy of information about restoration time” and the “notice time before service interruption”.

ASSESSMENT OF THE WATER SERVICE

The surveys about the perceived quality of the water service were carried out in April/May and December 2013, by means of telephone interviews on a total sample of 3,226 residents in the Municipalities of Rome and Fiumicino, composed of household customers and managers of condominiums.

The overall rating on the water service remained positive and steady, with 96% of the interviewees rating it between sufficient and excellent, although customers rating it as excellent decreased and those rating it as sufficient increased (see table n. 15).

TABLE N. 15 - OVERALL OPINION ON THE WATER SUPPLY SERVICE IN ROME (2012-2013)

RATING	1-10 SCALE	2012 (AVERAGE OF THE TWO SIX-MONTH PERIODS)	2013 (AVERAGE OF THE TWO SIX-MONTH PERIODS)
excellent	9 - 10	21.5%	16.5%
good	8	41.5%	41.0%
sufficient	6 - 7	33.0%	38.5%
insufficient	1 - 5	4.0%	4.0%
final average		7.7	7.6

The surveys for the two six-month periods revealed a satisfactory level of appreciation for water service overall (86 out of 100) and a fair degree of satisfaction (7.2 out of 10). Except for the toll-free number for reporting faults, whose ranking decreased if compared with 2012, all the other macro-components of the service showed good satisfaction levels, including the macro-factor “technical intervention”, introduced in 2013 (see chart n. 14).

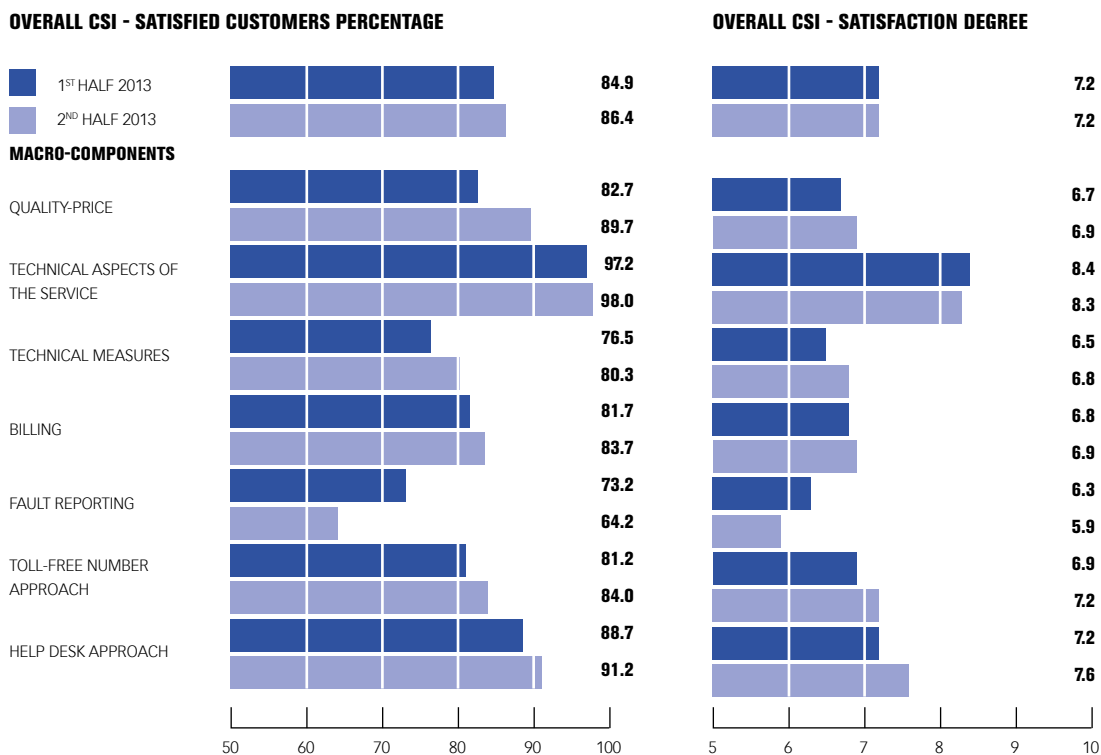
Observing the analysed items³² through each one of their macro-factors, the very good rating of the water supply continuity was evident among technical issues, with 98.5% of satisfied customers - as average of the two six-month surveys; the two quality factors considered as the most relevant as for technical intervention - that is “rapidity” and “efficacy” were considered satisfactory respectively by 69.5% and 83.5% of customers. With regard to billing, 86% and

³² 75% or above (threshold level) can be considered the adequate customer satisfaction index.

75.5% of customers were satisfied, respectively, with the two most relevant items, that is “amount accuracy” and “regular intervals in meter readings”; as for reporting faults, the items with the lowest satisfaction indices were, at the same time, the most relevant: the “operator’s competence” (67.5%) and the “waiting time” (62%); as for the

commercial toll-free number, the same two components rendered satisfactorily at 84% and 77% respectively; finally, as for help-desk service, 90% of those interviewed were satisfied with the “operator’s competence”, 83% with the “waiting time” and 91.5% with the “request processing time”.

CHART N. 14- WATER SERVICE: SATISFIED CUSTOMERS PERCENTAGE CSI AND SATISFACTION DEGREE CSI - OVERALL AND ON MACRO-COMPONENTS (1ST AND 2ND HALF OF 2013)



SATISFACTION SURVEYS ON THE WATER SERVICE IN OTHER MUNICIPALITIES OF ATO 2 - LAZIO CENTRALE AND OTHER ATOS

The customer satisfaction surveys aimed at indicating customers’ level of satisfaction with the water service provided are carried out not only in Rome and Fiumicino, but also in other municipalities in the Province of Rome.

In 2013 the two six-month surveys were carried out on a representative sample of household customers in the Municipalities of ATO 2 - Lazio Centrale, divided into 4 areas of competence (north, east, south, west). A total of 2,419 residents of Monterotondo, Tivoli, Guidonia Montecelio, Albano Laziale, Frascati and Cerveteri were surveyed. The overall ranking was 7 (1-10 scale).

Acea also carried out customer satisfaction surveys with customers of other Companies of the Group that manage the integrated water service in other ATOs (in Latium, Campania, Tuscany and Umbria), sharing with them both the arrangement of the surveys and their results.

ASSESSMENT OF THE PUBLIC LIGHTING SERVICE

The surveys about the perceived **quality of the public lighting service** were carried out in April and October 2013, by means of telephone interviews on a total sample of **2,406 inhabitants**, representative of all the Municipalities, grouped into 3 urban macroareas: central-north, east-southeast, south-west Rome.

The **overall rating** remained positive and steady, with **86%** of the interviewees rating it between sufficient and excellent (6-10) (see table n. 16).

TABLE N. 16 - OVERALL OPINION ON THE PUBLIC LIGHTING SERVICE IN ROME (2012-2013)

RATING	1-10 SCALE	2012 (AVERAGE OF THE TWO SIX-MONTH PERIODS)	2013 (AVERAGE OF THE TWO SIX-MONTH PERIODS)
excellent	9 - 10	13.0%	13.5%
good	8	29.5%	28.5%
sufficient	6 - 7	46.0%	44.0%
insufficient	1 - 5	11.5%	14.0%
final average		7.1	7.05

The survey covered **2 macro-components of the service** - technical issues and the toll-free number for fault-reporting.

With regard to the **“technical aspects of the service”**, differentiation was made between those attributable to Acea - lighting service continuity (i.e., the absence of faults or inefficiencies in the city); switching on and off times and colour of lights - and those determined by other parties³³ - service presence and extension; lighting intensity in streets, parks and gardens; lighting of monuments – these have been graphically represented by two separate items.

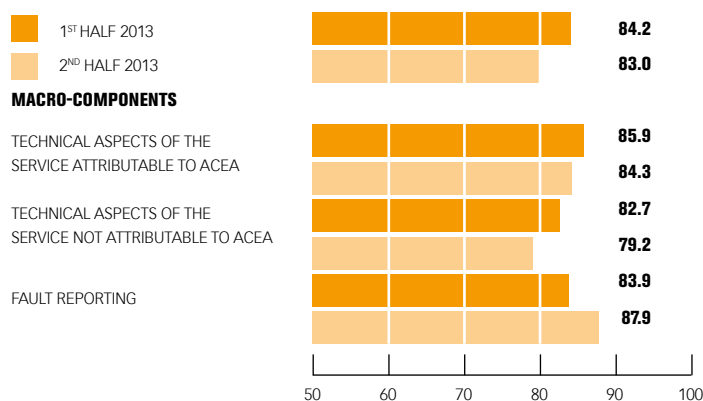
The results of the surveys for the two six-month periods (see chart n. 15) **disclosed a satisfactory level of appreciation for the service overall (83.6 out of 100)** and a fair satisfaction degree (6.85 out of 10).

As for the **technical issues referable to Acea Illuminazione Pubblica**, each

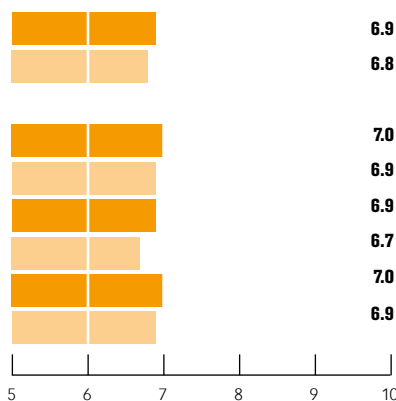
analysed item claimed a high percentage³⁴ of satisfied customers: the **“continuity of the service”**, considered the most relevant by the interviewees, claimed 83.5% of satisfied customers, as average of the two six-month surveys. Even **technical aspects not directly related to the Company** - in particular the **“intensity of the street lighting”** and the **“service presence and extension”**, which are considered the most relevant items - received overall positive assessments, respectively 80% and 84% of satisfied users. Finally, even the surveyed quality factors related to the **“fault reporting”** were well appreciated; the three items considered as the most relevant were remarkable: the **“operator’s competence”**, with an average percentage of satisfied customers in the two six-month periods of 89%, the **“free line availability”** (81%) and the **“waiting time before being transferred to an operator”** (79.5%).

CHART N. 15 - PUBLIC LIGHTING SERVICE: SATISFIED CUSTOMERS PERCENTAGE CSI AND SATISFACTION DEGREE CSI - OVERALL AND ON MACRO-COMPONENTS (1ST AND 2ND HALF OF 2013)

OVERALL CSI - SATISFIED CUSTOMERS PERCENTAGE



OVERALL CSI - SATISFACTION DEGREE



33 The public lighting measures in the urban area, indeed, follow the guidelines by the Municipality of Rome, for which Acea performs the service. The intensity of lighting in streets, pavements, parks and gardens can also be altered by factors not depending on the Company’s management, such as the presence of tree foliage, before pruning is performed.

34 75% or above (threshold level) can be considered the adequate customer satisfaction index.

QUALITY SUPPLIED

Every year Acea - through specific operational companies - performs actions **aimed at renewing or improving infrastructure** (grids and plants), optimizing their management and ensuring more effective and rapid service restoration in the event of faults, in order to **constantly improve the final quality of the service**. It also cares about those processes that improve the direct contact with customers, by training dedicated staff and implementing adequate commercial management systems. Finally, monitoring and performance analysis systems contribute to controlling the quality of services supplied and planning improvements in services.

A number of "supplied quality" factors are measured on the basis of parameters established by the specific Authorities or indicated in the service contracts and the management agreements with the local bodies:

- the technical and commercial quality standards in the **energy sector** - both for distribution and for sales **and water service**, are defined by a unique national Authority - the Italian Regulatory Authority for Electricity Gas and Water (AEEGSI)³⁵. With regard to the water sector - which, since 2012, has been controlled by the Authority, that is progressively issuing the regulatory acts - reference is made to the Service Charter, the User Regulations and other quality standards provided for by the Management Agreements, which regulate the relationship between the operator and the Autorità degli Ambiti Territoriali Ottimali (AATO - "Optimum Territorial Zone Authority");
- for the **public lighting** service, the contract between Acea and the Civil Service also regulates its quality parameters - i.e., performance standards.

The Company is obliged to comply with quality parameters established by the counterparts, which also provide for incentive systems, **with bonuses for good performances and penalties in the event of failure to comply with standards**. Customers are also entitled to automatic rebates for services in the event of failure to comply with quality standards.

Both Acea SpA and the operational companies - as explained later - operate in compliance with Certified Management Systems³⁶ (see also *Corporate Identity*, paragraph *Management Systems*).

MEASURES IMPLEMENTING THE MV PLAN

The measures implementing the MV Regulation Plan are aimed at reconciling two different needs: on the one hand, ensuring the high quality standard of electricity service, imposed by the specific Authority, on the other hand, optimizing the investment and management costs of the service.

The program includes building two new dorsal lines in order to better organize and empower the grid and, at the same time, change its voltage from 8.4 kV to 20 kV.

Obtaining higher voltage is necessary in order to significantly **increase the transport capacity of the grid and to decrease energy losses and voltage drops**. Moreover, increasing the transport capacity of each line permits - with the same load - a remarkable reduction in the total length of the grid and ensures satisfactory residual power for new connections. A total of 25 implementations of the MV Regulation Plan were initiated in 2013 in central-north, east-southeast, south-west areas of Roma Capitale.

QUALITY IN THE ENERGY SECTOR

Acea Distribuzione, in its capacity as holder of the ministerial concession for the **electricity distribution service in Rome and Formello**, plans and carries out measures aimed at **modernizing and extending infrastructure**, comprising high, medium and low-voltage lines, primary and secondary substations, systems for the metering and remote control of drawn energy and energy input.

Acea Distribuzione is the **third dealer in Italy** in terms of volume of distributed energy. The Company is certified in accordance with the UNI EN ISO 9001:2008 (**Quality**), UNI EN ISO 14001:2004 (**Environment**), BS OHSAS18001:2007 (**Safety**) and, **since 2013**, UNI EN ISO 50001:2011 (**Energy**) standards, in view of its high regard to operating procedures. Moreover, Acea Distribuzione applies the **system for controlling and monitoring quality, respect for the environment and safety parameters** of subcontracted work, through checks carried out by the Construction Site Inspection Unit - see box **Vendor Rating**, in chapter *Suppliers*.

Actions on infrastructures, aimed at steadily **improving the service** - in compliance with the challenging objectives set by AEEGSI - and **increasing the energy efficiency of the grids**, are performed in accordance to the concession, to sector regulations - rules and Resolutions by AEEGSI - and to service requirements, in particular for new customers, related to urban expansion and new uses of electricity. In 2013 Acea Distribuzione started drafting the 2014-2018 strategic plan, which provides for **energy infrastructures renovation and technology innovation projects**. The former include **modernisation and ordinary and extraordinary maintenance on primary substation equipment and HV overhead lines**, implementation of **measures of the MV Regulation Plan** (see the specific box), **reconstruction and maintenance of secondary substations** and various **measures on the LV grid** aimed at improving the continuity of the service (see box about the Main measures for the management and development of electric grids and substations).

35 The Autorità per l'energia elettrica ed il gas ("Italian Authority for Gas and Electricity"), renamed in 2013 Autorità per l'energia elettrica, il gas ed il sistema idrico - AEEGSI ("Italian Regulatory Authority for Electricity Gas and Water") has also been responsible for regulating the water sector since 2012. Regulatory acts in this field are progressively being issued.

36 Acea is UNI EN ISO 9001:2008 standard certified for: "designing, building, maintaining and renovating the networks and plants for the management of the integrated water service" - this service is managed by Acea Ato 2 in Rome and its Province - and for "designing, installing, maintaining and renovating the networks and plants for the global integrated management of public lighting installations" - which are managed by Acea Illuminazione Pubblica in Rome.

MAIN MEASURES FOR THE MANAGEMENT AND DEVELOPMENT OF ELECTRICITY GRIDS AND STATIONS (2013)

HV LINES AND PRIMARY SUBSTATIONS

An underground-cable power line on an 8.5 km cable duct was completed. It supplies 150 kV to the Casal Palocco primary substation - rebuilt for the occasion. This measure provides for a better operating reliability of the net. It supplies all the primary substations of the coast (primary substations of Casal Palocco, Lido and Lido Nuovo) and will also permit to dismantle about 32 km of 60 kV overhead lines.

The "Tor Cervara-San Basilio" and "San Basilio-Smistamento Est" 150 kV overhead lines were completely laid underground for about 2.4 km in the area of Casal Monastero and a 2-km section of the 150 kV overhead line Cassia-Ottavia was laid underground as well. The underground-cable connections which will provide 150 kV supply to the Castro Pretorio primary substation - being rebuilt for the occasion - were completed.

The Malagrotta primary substation was activated and the new Torrenova primary substation was completed and connected to the HV grid. This substation will supply new urban development planned for the area - including the C underground line.

In addition to that, during 2013, 9 primary substations were adapted, extended and rebuilt.

The installation project of Petersen systems, which allow to reduce grid faults, continued: 6 more primary substations were provided with such systems, in addition to the Cesano primary substation, supplying mostly the Acea distribution grid. Therefore, as of 31.12.2013, the system was installed in 51 out of a total of 70 substations.

Finally, ordinary and extraordinary maintenance on primary substation equipment was performed and testing was carried out before the new plants, those renovated and the Petersen systems entered into service.

PROTECTION AND MEASURES FOR HV AND MV LINES

Measures were carried out to arrange, calibrate and bring into service power protection systems for 28 new MV line bays; ordinary and extraordinary maintenance was carried out on power protections (functionality checking/testing) of primary stations, (341 HV and MV transmission towers, 38 HV/MV transformers).

The instalment of 8 grid analysers had the purpose of checking the medium voltage quality.

The Voltage Quality Monitoring System was implemented, thanks to the activation of the central system - server and data transmission network - and the installation of measurement infrastructure.

Ground resistance was measured near 2,779 secondary substations; step and contact voltage and total ground resistance were measured near 15 primary substations and 162 secondary substations. Electrical protection and automated elements were arranged, in view of the activation of the Petersen systems near 5 primary stations. The electrical protection systems of 33 Recloser devices were tested, calibrated and put into service.

MV AND LV LINES

For the renovation and enhancement of the network, gradually being transformed from 8.4 kV to 20kV, around 272 km of 20kV MV underground cables were laid for (244 km for renovations and 28 km for extensions).

LV cables were laid, involving extensions and renovations aimed at replacing old parts or making up for insufficient parts, for a total of 179 km (111 km for renovations and the remaining 68 km for extensions); 242 grid improvement measures were carried out as part of the activities aimed at improving service quality; voltage change measures were carried out on the LV grid, from 220 V to 380 V, involving 13,540 customers.

As far as extraordinary maintenance of MV overhead lines is concerned:

71 operations were carried out in order to replace equipment, posts, conductors, etc.;

Around 550 km of MV overhead lines were inspected so as to check the state of maintenance and functionality.

SECONDARY AND REMOTE-CONTROL SUBSTATIONS (MV AND LV)

To satisfy new customers' demand of the grid and the increases in voltage of existing customers, 150 secondary substations were built or extended.

1,116 operative substations were rebuilt - totally or partially - in order to adjust them to 20 kV voltage, prepare them to remote control or renew their equipment; furthermore, 725 extraordinary maintenance measures, 70 ordinary maintenance measures and 3,934 inspections were carried out to check the state of maintenance and functionality of the equipment and the rooms/constructions.

Remote control extended to a further 200 secondary substations and 13 recloser devices, for a total of telecontrol MV nodes of about 5,500 units - of which 153 motorized-switches on poles - as of 31/12/2013. The number of maintenance actions performed was 3,400.

With respect to the relevant technological innovation plans already initiated during the previous years - Smart grid and Smart-network Management System - their implementation stages continued during 2013 and further development was planned (see paragraph about Environmental Issues, Energy sector), as well as the installation of Petersen systems, which allow to reduce grid fault - as of 31.12.2013 those systems were installed on 51 substations out of the 70 currently operative. Besides, within the same framework of "smart" technical solutions for grid control, Acea Distribuzione started new experiments during the year: the Smart Grid Intelligence system, that will allow monitoring

through accurate analyses of the grid in order to prevent service interruptions; the Storage Distributed system on a medium-voltage dorsal line, providing for the realisation of other storage systems - experimental and smaller-scale at present - including a "local intelligence" for the smart management of energy production from renewable sources and of low voltage interruptions and for the management of peak loads.

The technological innovation projects are divided into sub-projects, each one concerning a specific research field. In particular, in 2013 the ORBT Project (Ottimizzazione della Rete di Bassa Tensione - "Low-Voltage

Grid Optimisation”) continued: this application, previously developed, allows the detection of critical operating conditions for each grid portion and the identification of those variations that could optimize its activity, by balancing its load; **during the year the experimentation of the application functionality finished and integration with other information system that will allow monthly updates was started.** A further project, called **“ORBT-Continuità” (“ORBT-Continuity”)**, which makes it possible to identify all the customers affected by each outage - as envisaged by legislative developments - was initiated.

As far as the development of **electric mobility in Rome is concerned, as a result of agreements reached and improved between Acea Distribuzione, Enel and Roma Capitale** in the previous half of the year, the project

of installing **200 charging stations for electric vehicles** - of which 100 charged to Acea, 100 to Enel - was carried on. The objective is to experiment the creation of the charging system, to test its operation in real conditions and to implement the interoperability with parallel Enel infrastructure. Acea Distribuzione **started** the authorisation procedures provided for by law and in 2013 **it already installed and activated the first 12 pillars.**

Among the initiatives undertaken in 2013, it is important to remark the **memorandum of understanding** signed by Acea, Telecom and Fastweb for the **extension of the ultra-wideband network** in Rome (see the dedicated box).

SUPERFAST INTERNET IN ROME: ACEA-TELECOM-FASTWEB AGREEMENT REACHED

At the end of March 2013 a memorandum of understanding was signed by Acea, Fastweb and Telecom, with the objective to extend the ultra-wideband network with 100-Megabit-per-second Internet connection to the Roma Capitale territory. The agreement - that provides for the construction of about 4,600 new electricity supply points - minimises the inconvenience to citizens due to opening roadwork, in addition to granting the coordination of the three companies. Acea will invest about 6 million euros to build the power supply grid of the state-of-the-art electronic equipment.

The Company has planned measures aimed at minimizing the environmental impact when laying infrastructure, adopting systems such as the *no-dig* - laying cables without digging trenches - and mini trenches for laying optical fibre. Switchboards will be housed partly in underground rooms. As of 31st December, 2013 Acea Distribuzione activated 757 new electricity supply points, for a total of 8.5 km of excavation and, thanks to the signed agreement, multiple simultaneous actions were avoided in the municipal territory.

Finally, **work to install remotely-controlled digital meters** for LV active customers continued: during 2013, **5,556 meters** were installed and **as of 31.12.2013 a total of over 1.5 million digital meters were installed**, equating about 98% of customers.

THE QUALITY LEVELS REGULATED BY AEEGSI

The quality standards for the electricity service, as far as **commercial aspects** (quotes, work, supply activation/deactivation, replies to complaints) and **technical aspects** (continuity of the supply) **are established** at the national level by the **Italian Regulatory Authority for Electricity Gas and Water** (AEEGSI), which periodically reviews them, gradually introducing more stringent standards. The Authority issued the Resolutions³⁷, currently in force, aimed at **regulating the quality** of the electricity and gas distribution, metering, transmission and sales services for **the IV regulation period, 2012-2015.**

The regulatory system envisages compensation to be paid to customers in the event certain quality standards are not observed, along with a fine/bonus system for the service operator, so as to spur the operators to continually improve performance.

The **commercial quality** aspects of the service are structured in **“specific” levels** and **“general” levels**³⁸, both for activities which the electricity **distributor** is responsible for (differentiated in terms of low and medium voltage supply) and for those the **seller** is responsible for, in compliance with the Testo integrato della regolazione della qualità dei servizi di vendita di energia (TIQV) - i.e., the compendium of rules about the quality of sales services (see tables n. 17, 20-24).

Each year, Acea forwards to AEEGSI the results achieved, which are then checked, and communicates them, as laid down, to its customers, enclosing them to the bill.

A quality parameter is linked to the progressive extension of the free market sector, and aims to regulate the promptness of technical data communication between the energy distributor and seller (see table n. 19).

Electricity distribution and metering activities are carried out by **Acea Distribuzione**; the **2013 performances** relating to the **“specific” levels of commercial quality**, both for low voltage supplies to household and other customers and for medium voltage supplies, **were undergoing final processing**³⁹ **at the time of publication of this report**; however - by way of indication and where possible - the **average estimated execution time for services** and the related percentages of observance of the deadline, are reported (see table n. 17).

The figures, although not yet final, indicate that every performance basically **complied with the deadlines** indicated by the standards, with the sole exception of “communication of the outcome of the meter check”.

³⁷ In detail, Resolution ARG/elt 198/11 (and subsequent amendments and integrations) for the quality of the electricity distribution and metering services, managed by the distributor, and Resolution ARG/elt 164/08 (and subsequent amendments and integrations) for the quality of electricity and natural gas sales services.

³⁸ The “specific quality standards” are the deadlines by which service providers must carry out a specific activity and envisage - in the event of non-compliance - the payment of automatic compensation to customers; the “general quality standards” are the minimum percentage of services carried out by a deadline.

³⁹ The Regulatory Authority for Electricity Gas and Water requested the distribution and metering services operator to communicate the 2013 commercial quality performances on 31/03/2014

Likewise, an overview of the performance of the “general” levels of commercial quality for the distribution and metering activities (see table n. 22) and the two specific quality levels which regulate the communication of technical data by the Distributor to the Seller (see table n. 19) is provided. With respect to the “general” levels, with the exception of the replies to written complaints about metering activities, every parameter reached the percentage of observance established by the standard. The estimates also disclose a slight deterioration in the promptness of communication of “technical data that can be acquired by reading a metering system. The next edition of the Sustainability Report will include the final data for 2013. With respect to the “general” and “specific” commercial quality levels relating to sales activities, carried out by Acea Energia, it

is appropriate to mention that the actions and investments undertaken in 2012 and aimed at improving the performance of response to commercial services, contributed to significantly improve, in 2013, the performance of the level of achievement of specific and general standards on both the served markets (see tables n. 20, 21, 23 and 24). In particular, with reference to the level of respect to the general standard, in 2013 Acea Energia was far over the minimal standard provided for by TICV (95%). In 2011, instead, not abiding by such levels had caused sanctioning procedures to be started by AEEGSI against Acea Energia. Also with respect to the compliance level to specific standards, an overall steady improvement has been reported, with particular regard to the performance of response to complaints.

TABLE N. 17 - SPECIFIC LEVELS OF COMMERCIAL QUALITY AND PERFORMANCE ACHIEVED BY ACEA DISTRIBUZIONE (2012-2013)
(2012: figures provided by AEEGSI; 2013: estimated figures which may differ from those which will be communicated to the Authority)

SERVICE	AEEGSI parameters	2012				2013			
		average effective time for running services	percentage of services carried out within time limit	average effective time for running services	percentage of services carried out within time limit	average effective time for running services	percentage of services carried out within time limit	average effective time for running services	percentage of services carried out within time limit
Low-voltage supply		household customers		non-household customers		household customers		non-household customers	
estimate for work on LV networks (ordinary connections)	20 WD	6.56	99.66%	6.46	99.19%	8.10	98.70%	7.98	98.98%
simple work (ordinary connections)	15 WD	4.92	99.74%	5.04	99.69%	5.70	99.60%	5.87	99.51%
activation of supply	5 WD	1.37	99.58%	1.37	99.35%	1.37	99.71%	1.30	99.59%
deactivation of supply on customer's request	5 WD	0.96	99.62%	1.31	98.28%	1.11	99.62%	1.37	99.13%
re-activation following disconnection due to payment arrears	1 WD	0.24	99.26%	0.29	98.63%	0.23	99.11%	0.25	99.09%
resumption of the supply following faults of the metering system (requests between 8.00 a.m. and 6.00 p.m., working days)	3 hours	1.88	89.82%	1.89	90.27%	2.19	86.45%	2.20	83.93%
resumption of the supply following faults of the metering system (requests between 8.00 a.m. and 6.00 p.m., non-working days)	4 hours	1.87	93.67%	1.80	95.85%	1.99	93.26%	1.89	93.63%
communication of outcome of metering system check, on customer's request	15 WD	7.88	93.30%	7.34	95.85%	15.62	72.64%	14.48	75.54%
communication of outcome of supply voltage check, on customer's request	20 WD	56.00	0%	19.00	100%	/	/	104.00	0%
maximum punctuality band for appointments with customers	2 hours	(.)	99.74%	(.)	99.74%	(.)	99.81%	(.)	99.73%
substitution of the faulty metering system (*)	15 WD					6.97	98.50%	5.98	98.33%
resumption of the correct supply voltage (*)	50 WD					/	/	1.00	100%
estimate for work on LV networks (temporary connections) (*)	10 WD					/	/	3.53	97.04%
simple work (temporary connections not exceeding 40 kW) (*)	5 WD					/	/	2.20	98.81%
simple work (temporary connections exceeding 40 kW) (*)	10 WD					/	/	2.74	99.46%

(*) specific indicator, introduced as of 01/01/2013.

(.) not applicable

The “/” symbol is used for those cases in which service was not required during the year.

SERVICE	AEEGSI parameters max. time for running services	2012		2013	
		average effective time for running services	percentage of services carried out within time limit	average effective time for running services	percentage of services carried out within time limit
medium-voltage supply		final customers		final customers	
estimate for work on MV networks (*)	40 WD	7.50	97.22%	17.86	81.63%
execution of public works	30 WD	4.17	100%	12.05	94.74%
activation of supply	5 WD	3.21	100%	2.82	100%
deactivation of supply on request	7 WD	2.64	97.96%	2.16	100%
re-activation following disconnection due to payment arrears	1 WD	0.54	96.72%	0.72	96.92%
communication of outcome of metering system check, on customer's request	15 WD	6.65	100%	12.83	82.35%
communication of outcome of supply voltage check, on customer's request	20 WD	57.00	50%	/	/
maximum punctuality band for appointments with customers	2 hours	(.)	100%	(.)	99,44%
substitution of the faulty metering system (**)	15 WD			0.29	100%
resumption of the correct supply voltage (**)	50 WD			/	/

(*) parameter included among the specific quality levels since 2012, while until 2011 it was considered a general level..

(**) specific indicator, introduced as of 01/01/2013.

(.) not applicable

The "/" symbol is used for those cases in which service wasn't required during the year.

In general terms, the system of automatic compensation for customers, to be paid for failed compliance with the "specific" quality levels, starts off from a basic amount (see table n. 18), which can double (in the event of execution of activities in a period of time which is between double and triple the standard) or triple (for execution in a period of time which is triple the standard).

TABLE N. 18 - AUTOMATIC COMPENSATION FOR CUSTOMERS IN THE EVENT OF FAILED OBSERVANCE OF THE "SPECIFIC" QUALITY LEVELS (2013)

BASIC AMOUNT IN FORCE (EUROS)	TYPE OF CUSTOMERS
35	low-voltage household customers
70	low-voltage non-household customers
140	medium-voltage customers

NB: compensation is paid to customers by deducting the amount from the bill or by issuing a cheque within **30 days** of the date of the required service or, at the latest, of a period equivalent to three times the standard time established for such service, excluding automatic compensation for failure to comply with the punctuality range for appointments, for which the term starts on the appointment date.

TABLE N. 19 - SPECIFIC LEVELS OF COMMERCIAL QUALITY : PROMPTNESS OF THE DISTRIBUTOR IN COMMUNICATING TECHNICAL DATA TO THE SELLER (2012-2013)
(2012: figures provided by AEEGSI; 2013: estimated figures which may differ from those which will be communicated to the Authority)

SERVICE	AEEGSI parameters max. time for running services	2012		2013	
		average effective time for running services (d)	percentage of services carried out within time limit	average effective time for running services (d)	percentage of services carried out within time limit
technical data (that can be acquired by reading a metering system)	10 WD of the request being received.	9.38	79.93%	11.86	60.61%
technical data (that cannot be acquired by reading a metering system)	15 WD of the request being received.	14.07	81.77%	10.11	92.51%

NB: In the event of failure to observe the reference standards, the customer-seller is granted minimum automatic compensation of 20 euros.

TABLE N. 20 - SPECIFIC LEVELS OF COMMERCIAL QUALITY AND PERFORMANCE ACHIEVED BY ACEA ENERGIA – PROTECTED MARKET (2012-2013) (data communicated to AEEGSI)

SERVICE	AEEGSI parameters max. time for running services	2012		2013	
		percentage of services carried out within time limit	percentage of services carried out within time limit	percentage of services carried out within time limit	percentage of services carried out within time limit
billing adjustments	90 calendar days	/		100%	
double billing adjustments	20 calendar days	/		0%	
justified reply to written complaints	40 calendar days	58%		78.1%	

NB: The protected market customers - mainly household customers and small businesses - in the event of failure to observe the standards receive automatic compensation of 20 euros. In 2012, no requests were received for billing or double billing adjustments.

TABLE N. 21 - "SPECIFIC" LEVELS OF COMMERCIAL QUALITY AND PERFORMANCE ACHIEVED BY ACEA ENERGIA – FREE MARKET (2012-2013) (data communicated to AEEGSI)

SERVICE	AEEGSI parameters max. time for running services	2012		2013	
		percentage of services carried out within time limit	percentage of services carried out within time limit	percentage of services carried out within time limit	percentage of services carried out within time limit
billing adjustments	90 calendar days	25.6%		37.5%	
double billing adjustments	20 calendar days	33%		100%	
justified reply to written complaints	40 calendar days	73.7%		80%	

TABLE N. 22 - "GENERAL" LEVELS OF COMMERCIAL QUALITY AND PERFORMANCE ACHIEVED BY ACEA DISTRIBUZIONE (2012-2013) (2012: data communicated to AEEGSI; 2013: estimated figures which may differ from those which will be communicated to the Authority)

SERVICE	AEEGSI parameters minimum percentage of services to be carried out within time limit	2012				2013			
		average effective time for running services	percentage of services carried out within time limit	average effective time for running services	percentage of services carried out within time limit	average effective time for running services	percentage of services carried out within time limit	average effective time for running services	percentage of services carried out within time limit
low-voltage supply		household customers		non-household customers		household customers		non-household customers	
demanding work performed	85% within 60 WD	17.45	99.25%	20.15	97.52%	12.78.	99.26%	14.71	99.42%
response to written complaints/ written requests for information about distribution activities	90% within 30 calendar days	19.72	99.81%	19.28	99.36%	19.76	95.00%	18.96	97.43%
response to written complaints/ written requests for information about metering activities	90% within 30 calendar days	42.34	73.28%	28.42	87.84%	41.79	50.36%	32.29	69.44%

(*) From 2012 the reference indicated by the Authority is for 30 days

SERVICE	AEEG standards minimum percentage of services to be carried out within time limit	2012		2013	
		average effective time for running services	percentage of services carried out within time limit	average effective time for running services	percentage of services carried out within time limit
medium-voltage supply		final customers		final customers	
demanding work performed	90% within 60 WD	13.30	100%	7.67	100%
response to written complaints/written requests for information about distribution activities	95% within 30 calendar days	16.26	100%	9.82	100%
response to written complaints/written requests for information about metering activities	95% within 30 calendar days	19.00	100%	53.00	50%

TABLE N. 23 - "GENERAL" LEVELS OF COMMERCIAL QUALITY AND PERFORMANCE ACHIEVED BY ACEA ENERGIA - PROTECTED MARKET (2012-2013) (data communicated to AEEGSI)

SERVICE	AEEGSI parameters minimum percentage of services to be carried out within time limit	2012	2013
		percentage of services carried out within time limit	percentage of services carried out within time limit
reply to written requests for information	95% within 30 calendar days	85.9%	98%
reply to written requests for billing adjustments	95% within 40 calendar days	82.8%	97.9%

TABLE N. 24 - "GENERAL" LEVELS OF COMMERCIAL QUALITY AND PERFORMANCE ACHIEVED BY ACEA ENERGIA - FREE MARKET (2012-2013) (data communicated to AEEGSI)

SERVICE	AEEGSI parameters minimum percentage of services to be carried out within time limit	2012	2013
		percentage of services carried out within time limit	percentage of services carried out within time limit
reply to written requests for information	95% within 30 calendar days	75.6%	99.2%
reply to written requests for billing adjustments	95% within 40 calendar days	64.5%	98.1%

The Authority defines and updates the reference parameters of the "technical" quality of the service⁴⁰, connected to the electricity supply continuity, envisaging an incentive system for the operator - bonuses and fines - and compensation for customers. At the time this document was printed, the continuity indicators relating to 2013 had not yet been completely defined, however,

the provisional figures currently available (see tables n. 25 and 26) suggest that the performance results achieved by Acea Distribuzione with regard to the duration and the number of power blackouts are positive again, consistently with the official data of the last few years⁴¹.

40 Resolution n. 198/11 and subsequent integrations.

41 Once the data have been verified, the Authority will publish it and make it available on its website (www.autorità.energia.it)

TABLE N. 25 - ELECTRICITY SERVICE CONTINUITY INDICATORS FOR LV CUSTOMERS: BLACKOUT DURATION AND IMPROVEMENT PERCENTAGES
(2011-2012: figures certified by AEEG; 2013: estimated figures which may differ from those which will be communicated to AEEG)

	AVERAGE CUMULATIVE DURATION OF LONG BLACKOUTS WITHOUT WARNING ATTRIBUTABLE TO THE OPERATOR FOR LV CUSTOMERS PER YEAR (MINUTES)			IMPROVEMENT IN PERCENTAGE	
	2011	2012	2013	2013 VS. 2011	2013 VS. 2012
high concentration	34.75	34.76	32.5	-6.5%	-6.5%
average concentration	48.04	61.97	51.3	6.8%	-17.2%
low concentration	78.14	93.56	76.7	-1.8%	-18.0%

NB: the three territorial areas are defined on the basis of the concentration degree of the resident population: over 50,000 inhabitants is "high concentration"; between 5,000 and 50,000 inhabitants is "average concentration"; below 5,000 inhabitants is "low concentration".

The average annual number of blackouts for LV customers takes into account both long blackouts (> 3 minutes) and short blackouts (≤ 3 minutes but more than one second).

TABLE N. 26 - ELECTRICITY SERVICE CONTINUITY INDICATORS FOR LV CUSTOMERS: AVERAGE NUMBER OF BLACKOUTS AND IMPROVEMENT PERCENTAGES
(2011-2012: figures certified by AEEG; 2013: estimated figures which may differ from those which will be communicated to AEEG)

	AVERAGE NUMBER OF BLACKOUTS WITHOUT WARNING ATTRIBUTABLE TO THE OPERATOR PER LV CUSTOMER PER YEAR			IMPROVEMENT IN PERCENTAGE	
	2011	2012	2013	2013 VS. 2011	2013 VS. 2012
high concentration	1.85	1.76	1.70	-8.1%	-3.4%
average concentration	3.85	4.85	3.40	-11.7%	-29.9%
low concentration	4.57	5.54	4.81	5.3%	-13.2%

NB: the three territorial areas are defined on the basis of the concentration degree of the resident population: over 50,000 inhabitants is "high concentration"; between 5,000 and 50,000 inhabitants is "average concentration"; below 5,000 inhabitants is "low concentration".

Blackouts originated at any voltage level of the electricity system are also regulated for **MV customers**. The regulatory system provides compensation for medium voltage customers holding certification of the adequacy of their plants⁴² in the event of power blackouts exceeding a fixed standard.

Both for **LV** and for **MV customers**, prolonged or extended blackouts - that is, those blackouts exceeding the fixed standard duration - are regulated. In such cases the operator is obliged to pay a penalty - calculated on the basis of the amount of LV customers without a power supply for blackouts due to "other causes" - to the Fund of exceptional events, established within the Equalisation Fund for the Electric Sector. Furthermore, the supplier pays automatic compensation to customers who have suffered a blackout. At the time this document was printed, the final figures were not yet available.

QUALITY IN THE PUBLIC LIGHTING AREA

Acea manages the public, functional, artistic and monumental lighting service in the Municipality of Rome, covering approximately 1,300 km²

(equivalent to about 7 times the area of Milan), as per the *Service Agreement*⁴³ between the Company and Roma Capitale.

In May 2013, complying with the decision made in the same year by the Board of Directors of the holding, the transfer of Acea Distribuzione - the branch dealing with designing and managing public lighting infrastructures - was completed⁴⁴ to Acea Illuminazione Pubblica SpA⁴⁵.

Acea Illuminazione Pubblica, therefore, carries out activities for the **design, construction, operation and management of the plants**, according to procedures compliant with the Acea SpA Quality Management System⁴⁶ and is also independently certified to UNI EN ISO 9001:2008 (Quality), UNI EN ISO 14001:2004 (Environment) and OHSAS 18001:2007 (Safety) and UNI EN ISO 50001:2011 (Energy) standards. Lighting measures are planned and supervised in various stages by coordinating in-house management and technical skills with the indications of local Public Administration Departments and authorities responsible for supervising new urban developments and improvement projects for the area and the cultural heritage.

42 In order to be entitled to compensation, medium voltage customers must demonstrate that they have installed protection devices on their plants which are capable of avoiding interruptions caused by faults to have repercussions on the grid, damaging other customers connected nearby. Furthermore, in order to be granted compensation, customers will have to provide the distribution Company with a declaration of adequacy of their plants issued by parties complying with specific technical-professional qualifications. If the customer does not comply with the requirements regarding entitlement to compensation, the same amount becomes a fine which the Distributor is obliged to transfer to the the Cassa Conguaglio per il settore elettrico ("Equalisation Fund for the Electric Sector").

43 By means of Resolution of the Municipal Council n. 130 of 22nd December 2010, regarding the Adaptation of the Service Agreement between Roma Capitale and Acea SpA, effective as of 15th March 2011 the contract is renewed to 31.12.2027.

44 During 2012, Acea SpA's Board of Directors approved the reorganisation of the activities relating to the management of public lighting, envisaging the transfer of the branch Acea Distribuzione to Acea Illuminazione Pubblica SpA.

45 Acea Illuminazione Pubblica SpA, established in 2010, was operative in 2011 and 2012, having performed some measures - plants and requalification through public lighting installations - in Todi and San Vittore del Lazio and having started the "Alta Produttività" ("High Productivity") plan in Rome. In May 2013 after the company branch Acea Distribuzione had been transferred, the Stakeholders' Meeting modified the Company management model by creating a Board of Directors composed of three members in office from 2013 to 2015, which elected the Chief Executive Officer.

46 Acea SpA's UNI EN ISO 9001:2008 Certification - this Company being the holder of the service agreement for public lighting management - covers the processes relating to global and integrated management of functional and artistic public lighting systems managed by the Operational Company.

TABLE N. 27 – PUBLIC LIGHTING IN ROME: FIGURES (2013)

lighting sources (n.)	189,361(+1.7% compared to 2012)
- artistic-monumental lighting sources (n.)	- about 11,000
lamps (n.)	214,359 (+1.5% compared with 2012)
MV and LV electrical grid (km)	7,695 (+1% compared to 2012)

Although in 2013, as mentioned before, the Company underwent transition and reorganisation, works were not interrupted. Among the **main projects and public lighting measures** performed during the year, the following are remarkable:

1. **measures on 2,284 lighting sources**, including **1,147 new ones** (of which **443 LED** - Light-Emitting Diode - sources)⁴⁷ produced mainly for **functional lighting** on transit routes; in addition, **requalification measures** in some areas of the historic centre and other featured elements of archaeological interest, on which functional and

- artistic lighting measures were performed (see in-depth box);
2. the continuation of the **multi-annual divestment plan of the medium voltage (MV) grid** serving part of the public lighting systems: **at the same time, the plants are directly supplied** by local low-voltage (LV) grids;
3. the implementation, as part of the scheduled maintenance and repair measures, of a **new multi-annual plan for verifying functional lampposts**, with the consequent **replacement** of those in critical conditions.

LIGHTING OF VIALE GIOTTO AND VIA GUERRIERI IN THE AREA OF PARCO DELLE MURA AURELIANE

In the project "Parco Lineare delle Mura Aureliane" ("Linear Park of the Aurelian Walls"), started by the Dipartimento Città Storica ("Historic City Department") of Roma Capitale, which provides for requalifying the Walls, in 2013, the **functional and artistic lighting** measures of viale Giotto and via Guerrieri were planned and performed.

This urban requalification plan was aimed at creating some **linear pedestrian zones along the Walls**, with street furniture, benches and fine-quality surfacing. The area was provided with **25 refinedly-designed lampposts**, 6 metres high and with a metal iodide source (3,000 K white light) At the same time, in the restored **part of the Walls**, **accent lighting** was installed: the artistic system included **7 ground-recessed devices**, with golden light and asymmetric optics (1,800 K). The difference in colours allows for the appreciation of the various materials used and visually marks transit and parking areas.

NEW LIGHT IN THE HISTORIC CENTRE: RESTYLING OF TOR DI NONA AND THE MURALS

The lighting plan was ordered by the Dipartimento Città Storica ("Historic City Department") of Roma Capitale, within the requalification measures of Tor di Nona, in the historic centre - pavement reconstruction, street furniture, underground services.

The works, in addition to Via di Tor di Nona, extended to Piazza Lancellotti and Piazza San Salvatore in Lauro. The project and the works by Acea Illuminazione Pubblica SpA provided the increase in artistic lighting sources (wall brackets) and requalifying some parts of the already operative plant in order to make the system more homogeneous. **11 new "Trastevere" wall brackets** were installed, with "Trastevere Nuovo Tipo" luminaires and cut-off optics and **20** of the same model were **requalified**. In piazza San Salvatore in Lauro 2 new "Pincio" wall candelabra were installed in the vicinity of the Church entry staircase and another in the central flower-bed of Piazza Lancelotti. All the reinforcements of the wall brackets and candelabra feature 150 W metal iodide lamps (3000 K white light).

The project also envisaged the artistic lighting of the murals dating back to the 70s. In order to highlight the painted surface, **10 160-cm LED tubes** - in continuous rows - were placed about 370 cm over the walking surface. Thanks to the microoptics calibrated so as to emit a blade of light with a colour temperature of 3,100 K (hot light), **the painting and the strong chromatism are clearly perceivable** without the risk of glare effect or coloured pigment alteration. The initial project involved MACRO (Museum of Contemporary Art of Rome), whose participation is emphasized by the writing on the new access staircase leading from the adjacent Tiber embankment to Tor di Nona. The writing was lit with **4 more LED tubes**, which are identical to those used for the murals.

PARCO DI MONTE CIOCCI

The urban area of Monte Ciocci was recently included in the **protected area of "Parco di Monte Mario"** and converted into a park. In view of the broad extent and the special characteristics of the project, Acea Illuminazione Pubblica was committed to plan and build a complex system, due to the types and features of the lighting devices to be used for various urban arrangements proposed by Roma Capitale. **A total of 161 devices were installed**, including the streetlamps for pedestrian zones - which are composed of 5.5 m design lampposts and 70 and 100W metal iodide source lamps (3,000 K white light), stepkeepers for staircases, side lighting for the Belvedere in order to avoid interference by vertical elements and spoil the view of St. Peter's dome, with 35W metal iodide lamps and accent lighting for rest areas, seats and umbrellas which are part of them, obtained through linear LED luminaires and 70W floodlights. Close attention was given to the installation of light sources, in order to ensure correct and easy maintenance and to reduce the risk of vandalism.

The number of modernization and safety measures for plants and, at the same time, of ordinary and extraordinary repairs carried out every year is indicated in tables n. 28 and 29.

47 This new lighting technique, which Acea has been adopting for some years, is particularly advanced in terms of energy efficiency, thanks to its longer duration - if compared to traditional lighting sources - and high lighting efficiency.

TABLE N. 28 – MAIN PUBLIC LIGHTING MEASURES ON LIGHTING SOURCES (2013)

TYPE OF MEASURE	(N. OF LIGHTING SOURCES)
creation of new lighting sources (artistic lighting included)	1,147 lighting points (of which 443 LED), equivalent to the lighting of approximately 29 km of road
transformation of the 8.4 kV MV circuits into LV standard circuits	50 transformer stations
safety measures	1,137 lighting points

TABLE N. 29 – SCHEDULED AND EXTRAORDINARY PUBLIC LIGHTING REPAIRS AND MAINTENANCE (2013)

TYPE OF MEASURE	(N.)
checking of corroded lampposts	5,190 lampposts checked
replacement of bulbs before light flux decline	52,032 lamps replaced
reinstallation of corroded lampposts or those knocked down due to accidents	1,182 lampposts reinstalled

The **quality standards of the public lighting service** concerning the **faulty repair timescales are monitored** and calculated from the moment the report is delivered⁴⁸.

The **service standards are expressed by a permitted average repair time** (Tempo medio di ripristino ammesso - TMRA) within which the repair measures should be carried out, and a **maximum timescale**

(Tempo massimo - TMAX): if this is exceeded, a fine system is applied⁴⁹.

The **average repair times** (Tempi medi di ripristino - TMR) before the plants used by Acea were operating again, in **2013**, for various types of fault, were **clearly shorter than the TMRA**, although slightly increased if compared to the performance in 2012 (see table n. 30 and chart n. 16).

TABLE N. 30 – PUBLIC LIGHTING FAULTY REPAIR: FINES, STANDARDS AND ACEA SERVICES (2012-2013)

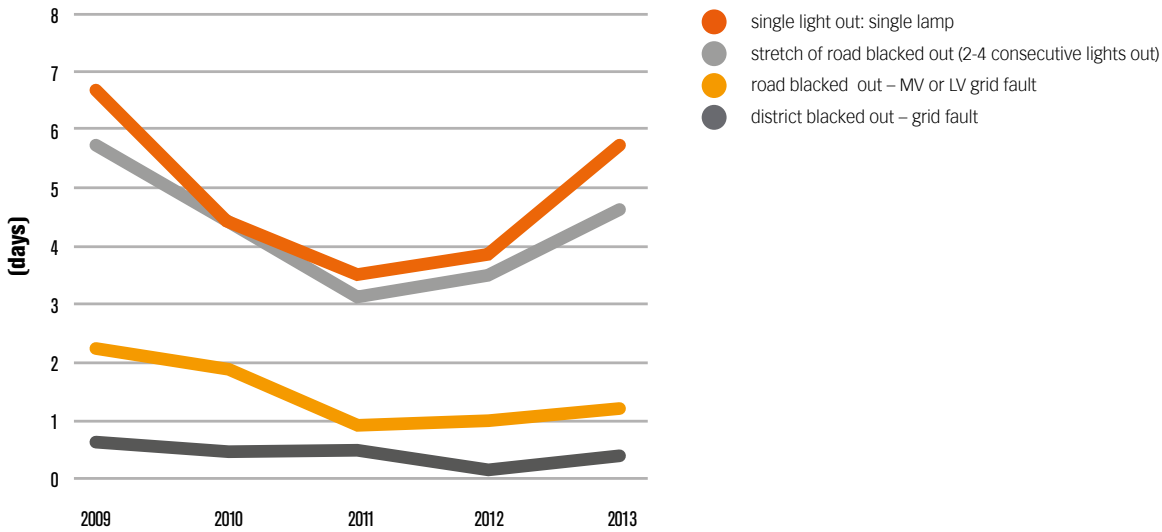
TYPE OF FAULT	FINE PER DAY OF DELAY (EUROS)	SERVICE STANDARDS AS PER AGREEMENT (*)		ACEA SERVICES	
		TMRA (PERMITTED AVERAGE REPAIR TIME) (WD)	TMAX (MAXIMUM TIMESCALE FOR REPAIRS) (WD)	TMR (AVERAGE TIMESCALE FOR REPAIRS) (WD)	
				2012	2013
district blacked out – MV grid fault	70	1 d	1 d	< 1 d	< 1 d
road blacked out – MV or LV grid fault	50	5 d	8 d	0.99 d	1.23 d
stretch of road blacked out (2-4 consecutive lights out)	50	10 d	15 d	3.50 d	4.64 d
single light out: single lamp, post, support	25	15 d	20 d	3.79 d	5.75 d

(*) In continuity with the previous years, the figures are monitored with reference to Annex D/2 in the *2005-2015 Service Agreement* Municipality of Rome – Acea SpA.

48 The reports considered for the calculation of the service levels do not include those attributable to damage caused by third parties and the reports, subsequent to the first, relating to faults on the same stretch of grid.

49 Fines are calculated in accordance with a complex mechanism: each repair carried out beyond the TMAX is penalized. Those carried out within timescales shorter than the TMAX but longer than the TMRA are penalized only if TMR>TMRA. In 2013, total reports subject to fine calculation amounted to 14,057 (about +6% if compared to the 13,243 reports in 2012), of which 147 (equating to 1%) were dealt with after the deadline; the total of fines for 2013 came to around euro 29,500 (also see the chapter *Institutions and the Company*, box about Preliminary investigations, bonuses and penalties).

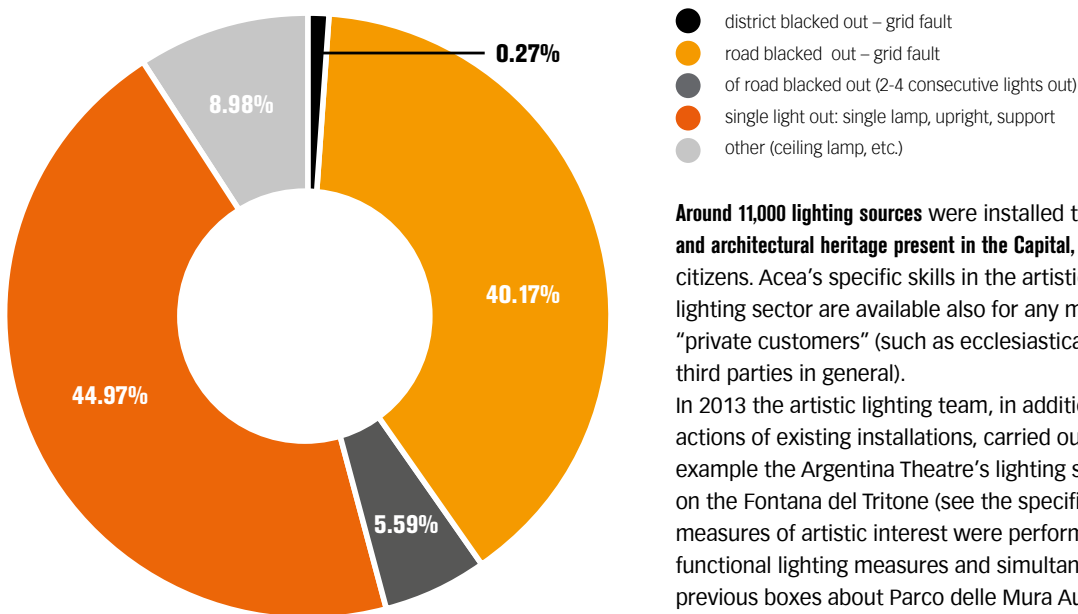
CHART N. 16 - TREND IN ACEA'S PERFORMANCE IN REPAIRING PUBLIC LIGHTING FAULTS (2009-2013)



Faults are detected by internal control systems - remote management, monitoring teams - and reported by citizens and the Municipality of Rome through various channels of contact - call centre, web, fax or ordinary mail⁵⁰. **Fault reports** registered in 2013 amounted to 21,608⁵¹, up by approximately 9.6% if compared to the 19,708 reported in the previous year. **Acea took action in 96% of the cases**, with 20,773 “performed actions” as of 31.12.2013, while the remainder will be completed in the first few months of 2014. The increase in fault reporting should partly be related to the **increase in the phenomenon known as “copper theft”** - about 65 km of

cables stolen during the year - which caused more serious and widespread faults. The **percent distribution** of the reports **by type of fault**, illustrated in chart n. 17, discloses - consistent with previous years - the greater incidence of the cases of individual lighting source out, that is the **fault with the lowest impact on the quality** of the service; a slight increase in comparison to 2012- from 38.9% to 40.2% - in the percentage of cases of “blacked out street” connected to a network fault is revealed, while the percentage of cases of blacked out district due to network fault is almost irrelevant again (0.23%).

CHART N. 17 - TYPES OF PUBLIC LIGHTING FAULT OUT OF TOTAL REPORTS RECEIVED (2013)



Around 11,000 lighting sources were installed to enhance the **artistic and architectural heritage present in the Capital**, benefiting visitors and citizens. Acea’s specific skills in the artistic and monumental lighting sector are available also for any measures requested by “private customers” (such as ecclesiastical institutions, hoteliers or third parties in general). In 2013 the artistic lighting team, in addition to the maintenance actions of existing installations, carried out specific projects, for example the Argentina Theatre’s lighting system and the measures on the Fontana del Tritone (see the specific boxes), while other measures of artistic interest were performed as parts of other functional lighting measures and simultaneously with these (see the previous boxes about Parco delle Mura Aureliane and the area of Tor di Nona).

50 See the paragraph *Customer Care* for details concerning the performances of call centres and for written complaints.
 51 The figure excludes the reminders and the repeated reports on the same fault.

TABLE N. 31 - THE MAIN ARTISTIC MONUMENTAL LIGHTING MEASURES (2013)

INSTALLATIONS MODERNISATION	system modernisation concerned, with moderate local measures, a total of 30 lighting sources . Actions were carried out for: the Congress Hall, the Church of S. Croce in Flaminio, the Tomb of Cecilia Metella, the Obelisk of Piazza Mignanelli, the Basilica of St. John and Paul, the Church of S. Maria in Traspontina, the Etruscan Museum of Villa Giulia, the National Gallery of Modern Art, a number of marble tablets in the Imperial Fora. Moreover, the public lighting installation of the park in Largo Beltramelli was modernized.
CREATION OF NEW LIGHTING SOURCES	5 floodlights were installed for the front view of the Argentina Theatre and 6 LED underwater floodlights for the Fontana del Tritone, 7 ground-recessed devices for the section of the Aurelian Walls and 14 LED tubes for the Tor di Nona murals.
MANUTENZIONE ORDINARIA E STRAORDINARIA	The maintenance of the artistic and monumental systems included a usual check on a total of approximately 7,760 lighting sources (1,280 lighting sources for all the illuminated monuments which the Sovrintendenza Comunale e Nazionale - "Municipal and National supervising Authority" - is responsible for - the Coliseum and the Baths of Diocletian and Caracalla - 2,580 lighting sources in historic Villas and parks; 1,460 lighting sources for monumental fountains, 770 lighting sources for Basilicas and Churches and 1,670 lighting sources for the Bridges and Quays on the River Tiber). A particularly remarkable measure was the reactivation of the installations damaged by the River Tiber flood : several out of order floodlights and all the lamps on bridges and quays were replaced.

LIGHTENING OF THE ARGENTINA THEATRE

On completion of the Argentina Theatre's restoration, which implied renewing all three of the visible views overlooking Largo di Torre Argentina - the statuary group on the top, the stuccos on the frieze, the plasters, the wooden windows and shutters, the slate on the cornice, the travertine of the skirting - the **lighting project for the facade** was shared with the Sovrintendenza's officials; it was drafted by Acea Illuminazione Pubblica with the purpose of creating a floodlight system enhancing the architectural features of the Theatre.

By means of lighting checks, 5 metal iodide projectors of different power and with 2,800 K colour temperature were chosen. Moreover, the installations have been equipped with particular refractors allowing to obtain a luminous imprint (blade of light, ellipsoidal light, etc.) that, in addition to ensuring a better illumination control, permit to **significantly reduce the stray light flux** and, consequently, light pollution. The device installations were planned and carried out on the already existing props of the Area Sacra boundaries in Largo Argentina, therefore avoiding the introduction of new technological devices, fully respecting the archaeological and architectural context.

RESTORATION OF THE FONTANA DEL TRITONE AND NEW LIGHTING SYSTEM

As is widely known, the Fontana del Tritone, in Piazza Barberini, is one of the masterpieces by Gian Lorenzo Bernini that Rome boasts about. Built for Pope Urban VIII Barberini between 1642 and 1643, this fountain, after the latest restoration dating back to 1998, was in a poor state of conservation, with evident calcareous sedimentation and bio-deterioration phenomena, both due to atmospheric pollution and to the water constantly flowing on the stone surface. The new restoration, which in view of the complex and delicate measures, lasted twelve months, ended in November 2013, when the monument was returned to citizens and visitors. The long operation also provided for **rearranging the technological - water and lighting - installations**. Acea Ato 2 SpA completely overhauled the recirculation system, placing a new wastewater pipe and creating a particular water treatment system, while Acea Illuminazione Pubblica SpA renovated and improved the artistic lighting system through LED technology, that offers advantages in terms of both consumption and maintenance. The measures provided for installing 6 LED underwater floodlights, increasing the installed power from 550W to 120W.

QUALITY IN THE WATER AREA

Acea is operative in the water area by means of investee companies, in various Optimal Territorial Areas (ATOs), in the regions of Latium, Tuscany, Campania and Umbria.

What follows is a description of the management activities for the integrated water service (SII - "Servizio Idrico Integrato") carried out by **Acea Ato 2** in the **Optimal Territorial Area 2 - Lazio Centrale** (Rome and 111 other Municipalities in Latium, serving approximately 3.9 million inhabitants), the **"traditional" area of Group operations**⁵².

The main information⁵³ – economic, social and environmental - about the **other Group companies** operating in Italy in the water area is completed, with regard to economic data, as per the consolidation criteria, in the chapter *Personnel*, in the section which illustrates the *Environmental Issues* and in the *Environmental Report*, while activities concerning the water area carried out by the Group in Latin America are described in the chapter *Activities Abroad*. The integrated water service (SII) management follows the entire drinking and wastewater cycle: from catchment of the natural

52 Acea was appointed to manage the aqueduct service in Rome back in 1937, the purification system in 1985 and the entire sewerage in 2002, as of 1st January 2003. The Rome and Fiumicino grid is therefore referred to as the "traditional grid" and the service level is nearly optimal in this area.

53 Remember that certain investee companies of Acea's operations in the water area, and in particular those operating in Tuscany, issue their own sustainability reports, to which reference is made.

resource of the springs to its return to the environment; it is regulated by a **Management agreement** between Acea Ato 2 and the ATO Authority, which, in the *Carta del servizio idrico integrato* ("Integrated Water Service Charter")⁵⁴, also envisages the definition of general and specific **quality standards**. Relations with customers are also disciplined by the *Users' Regulations*, an annex to the Agreement, which establishes the technical, contractual and economic conditions under which the operator must provide services and procedures for settling disputes. The Italian Regulatory Authority for Electricity Gas and Water (AEEGSI) started in 2012 to regulate the water area and, at the end of the first half of 2013, in compliance with a Resolution, Acea Ato 2 made available, for customers to consult, on its website the information about quality of water for human use according to the areas of origin ("isoquality areas").

The **network and plant planning, construction, maintenance and restructuring activities** for the management of the integrated water service carried out by Acea Ato 2 fall within the certification of the Acea SpA Quality Management System. Furthermore, Acea Ato 2 has been awarded an autonomous certification of the **Quality Management System (UNI EN ISO 9001:2008)** for the management of integrated water service in the area of ATO 2 - Lazio Centrale, for which in 2013 a check was carried out, with positive outcomes; during the year, the Company also **started procedures** aimed at obtaining the certification of the Occupational safety management system according to **OHSAS 18001:2007** standard and, at the same time, the certification of the Environment management system according to **UNI EN ISO 14001:2011** standard.

The quality parameters concerning various aspects of the service provided are kept under constant control and periodically communicated to the Technical Operational Office of the ATO Authority. During 2013, the technical-operating data was also communicated to AEEGSI.

The Municipalities falling within their reference Optimal Territorial Zone (ATO) are progressively taken over; Acea Ato 2, before acquiring such control, carries out, in agreement with the local authorities, an accurate **check of the infrastructure** (networks and plants) and if any situations of non-compliance are detected, it must wait for the Municipalities concerned to perform the actions required to make the infrastructure compliant.

No new Municipalities were acquired in 2013, therefore, as of **31st December 2013**, out of 112 Municipalities part of Ato 2 - Lazio

Centrale, the **integrated water service** - aqueduct, sewerage and purification - was operated in **73 Municipalities** and in **21 more** the SII was **partially** managed. The **population served was approximately 3.7 million individuals** (including resident, floating population and production activities), equal to roughly 95% of the total. These are joined by the **aqueduct systems** of the Consortia Simbrivio, former Cassa per il Mezzogiorno, Doganella, Nemi-Genzano, C.E.P. (Consorzio Ecologico Prenestino) and Peschiera, while for the acquisition of the sewerage and the water lifting systems still managed by the Co.R.Ec.Alt Consortium, it will be necessary to wait for it to complete the works of plant adaptation and integration of the networks indispensable for bringing it up to standards. In 2013 preparatory work before acquiring a part of the service (drinking water) was performed in 6 more Municipalities and, at the end of the year, the Latium Region sent 9 more Municipalities a note asking them to join the SII and to reply within 30 days.

In 2013, Acea Ato 2 managed a total of **1,341 km of drinking water piping grid, 9,618 km of drinking water distribution grid** - to which the Rome and Fiumicino user branches must be added - and **roughly 6,062 km of sewerage**, not considering the connections, linked up to an extremely complex system of construction and plants which make the aqueduct, treatment and sewerage service operative.

The Company, in addition to following the growth of new urban developments and carrying out complex measures in the event of specific critical situations each year performs - in collaboration with the Civil Protection agency - modernisation or enhancement work on the plants, along with completion, extension or improvement of pipes and grids.

Moreover, a **satellite monitoring project on water infrastructure**, aimed at improving its management, is being developed (see the specific box).

Analysis continued in 2013 - as every year - on the structures of the water networks, along with **leakage detection and recovery** activities carried out thanks to the collaboration of LaboratoRI, especially in the Municipalities in the province of Rome; during 2013, the main measures were carried out in the municipal areas of Fiano Romano and Velletri, in view of the existence of crumbling infrastructure and shortages of water.

The digitalisation of the sanitary water networks in ATO 2 also steadily continued, with the input of data in the **GIS - Geographic Information System**⁵⁵: as of 31.12.2013, **10,815 km of water grid and 5,593 km of sewerage** were digitalised.

54 The *Acea Ato 2 Integrated Water Service Charter*, in force since 2003, applies to the Municipality of Rome and progressively to those included in the management of ATO 2 - Lazio Centrale. The full version of the *Service Charter* is available at www.aceaato2.it.

55 A GIS is an IT system used to acquire, register, analyse, view and return information resulting from geographical data, relating various data according to their common geographical reference.

ACEA ATO 2: THE SATELLITE-MONITORING OF WATER INFRASTRUCTURE HAS BEGUN

Acea Ato 2, as operator of the integrated water service in the Optimal Territorial Area 2 - Lazio Centrale (112 Municipalities, including Rome) also supervises the aquifers, comprising the springs under "absolute protection" that cover a surface of over 6 million m² and controls grids and all water plants.

This protection is therefore supposed to ensure the control over a complex infrastructure system in a vast territory and requires intervention on it as well as particular attention to those human activities that can modify it. Therefore, in addition to the traditional *in situ* monitoring activity, carried out by the personnel, Acea Ato 2 decided to develop a semi-automatic system able to recognise and classify changes via satellite observation.

The project is aimed at granting the utmost rapidity and efficacy to safeguard actions. Research and experimentation in this framework were carried out - between 2010 and 2011 - by Acea Ato 2 in collaboration with the University of Cassino and, at present, involves some areas of particular interest which are periodically monitored, pursuant to the first three-year contract with the University (2012-2014). Via satellite it is indeed possible to collect images of the territory in different moments and then compare them highlighting all the possible variations which occurred, their entity and type, during that time lapse.

The satellite observation system, thanks to the Information Technology and through complex calculations and spectrometric analysis, can compare images in detail in an extremely detailed way, recording every variation among them and producing a *change map* that highlights both the elements that have been altered and those which have not.

The software, moreover, can produce a specific report which permits the classification of the detected changes by significance according to the criticality level connected to the type of recorded event.

The analyses performed until now - during the first operation stage, currently undergoing - have remarked the extent to which satellite monitoring can provide an important contribution to "ground" control, permitting the achievement of expected improvement objectives, including a more accurate and fast detection of the criticality and, thus, a more adequate scheduling of the actions to be performed.

THE AQUEDUCT SERVICE

From a quality-quantity point of view, all main aqueducts (208 km) and piping grid (1,341 km) are remote-controlled - telemetering, alarms and possible operations via remote control; moreover, as far as the Rome and Fiumicino distribution grid is concerned - 6,333.6 km, including the user branches - it is possible to observe about 100 pressure points from the Environmental Operations Centre. All in all, the partially or totally remote-control water centres are approximately 500 in number. Therefore, the approximate 1,500 km of totally remote-control water grid allow to fully manage the water supply of Rome and Fiumicino from a distance, and for the other areas an implementation scheme of the remote control system is being run.

Like in previous years, maintenance and improvement continued in 2013 on hydraulic equipment installed in some plants of the Rome supply system - water centres, feeding water pipes, grids, etc. Moreover, among the activities aimed at **dealing in the most effective way with water emergency situations which occur in summer** in a number

of Municipalities south of Rome, after the considerable measures performed in 2012 - the Arcinazzo drinking water tank and the new Pertuso water lifting system, granting higher flow in the aqueduct - **in 2013** the summer increase in consumption was dealt with **through a sound management of water resources**. Specifically, **in Velletri and Genzano**, rotations in water supply were performed and announced also on the Company's websites so as to control the shortage. Acea Ato 2 organized a water supply service through tankers, which limited the inconvenience to the population.

Finally, the **installation of new meters or the replacement of those not properly working** continued in **2013**, comprising more than **21,244 measures**.

Table n. 32 shows the main **ordinary and extraordinary maintenance measures** carried out during the year on piping grids, plants and equipment functional for the drinking water supply service, in Rome and in the other Municipalities under management, and the **checks carried out on the quality of the supplied drinking water**.

TABLE N. 32 – MAIN MEASURES ON THE ACQUEDUCT SYSTEM AND DRINKING WATER CHECKS IN ATO 2 – LAZIO CENTRALE (ROME AND OTHER MUNICIPALITIES UNDER MANAGEMENT) (2013)

TYPE OF MEASURE	(N.)
ordinary and extraordinary hydraulic maintenance on the transportation and piping grid (constructions, water centres, tunnels)	787 measures (repairs and maintenance, 237 of which with recovery of the water resource).
ordinary maintenance of water network (measures with excavation work on pipes, intakes, carriers, etc.)	28,888 measures (7,842 of which on Rome grid)
“customer” maintenance (measures without excavation for users)	44,962 measures (20,509 of which in Rome)
meter installation (new and replaced devices)	21,244 measures (10,717 new meters and 10,527 replaced ones), of which 9,661 in Rome (5,801 new meters and 3,860 replaced ones)
grid expansion	8.9 km of water network expansion (of which around 2.8 km in Rome)
grid improvement	617 grid improvement actions, for a total of 10.1 km of grid were improved
drinking water quality checks	about 8,822 samples taken and 339,229 analytical checks carried out on drinking water

As far as continuity of the water supply is concerned, in 2013, 1,145 stoppages were necessary, 950 of which were urgent (for pipe faults) and 195 scheduled; around 4% of the stoppages had a duration of more than 24 hours, a consistent figure with the previous two-year period (see table n. 33).

TABLE N. 33 – NUMBER, TYPE AND DURATION OF WATER SUPPLY STOPPAGES IN ATO 2 (2011-2013)

	2011	2012	2013
urgent stoppages (n.)	837	920	950
scheduled stoppages (n.)	173	174	195
total stoppages (n.)	1,010	1,094	1,145
stoppages lasting > 24h (n.)	54	56	45

Acea Ato 2 preserves the quality of the water distributed for drinking use, as well as the water reintroduced into the environment. The checks on distributed drinking water, carried out with the support of LaboratoRI as well (see also *Environmental Issues, Water Area*, and the *Environmental Report*) are carried out on samples taken from springs and wells, feeding plants, tanks and along the distribution grids. The frequency of the checks and the withdrawal points, both exceeding the number established by the current legislation (Legislative Decree n. 31/2001), are established taking into consideration a number of variables, such as the volume of water distributed, the population served, the grid and infrastructure conditions, the specific characteristics of the local sources. For example, in the Municipalities supplied with water which presents intrinsic quality problems, many more checks are carried out and if specific problems are detected, extraordinary analysis campaigns are carried out. During 2013, a total of 8,822 samples were taken in the Municipalities controlled by ATO2 – Lazio Centrale, and 339,229 analytical checks were carried out on drinking water, by both LaboratoRI and the same Acea Ato 2.

The spring water withdrawn for supplying the area of Rome and Fiumicino (Acea’s “traditional network”) already reveals excellent quality levels, while in the Castelli Romani area the volcanic nature of the terrain, causing the presence of mineral elements in the aquifers, such as fluorine, arsenic, vanadium in amounts higher than the maximum fixed by the laws, has therefore made it indispensable to supply certain Municipalities on an exceptional basis until the operations undertaken by Acea Ato 2 to overcome these problems are completed. Accordingly, in the last few years a number of local supply sources critical in terms of quality have been discarded, mainly wells, for a total flow of 270 l/s, and replaced by better-quality

sources. Furthermore, more than 30 drinking water plants have been constructed or are being completed for a total flood of over 450 l/s. The verification, implementation and testing of the remote control of the potabilisation plants continued throughout 2013 and, at the end of 2013, the first 26 plants were already operating.

The measures carried out so far have made it possible to comply with the limits envisaged by Legislative Decree n. 31/01 for the supply of the majority of the population initially affected by the derogations, which passed from just over 150,000 inhabitants to roughly 3,000 inhabitants at the end of December 2013 - a limited portion of the population of the Municipality of Velletri - for whom an alternative supply was set up using mobile tanks and drinking fountains equipped with in situ treatment. In the meanwhile, an informational campaign addressing the population was launched, with the collaboration of municipal administrations, local Health Authorities (ASL, Aziende Sanitarie Locali) and STOs - that is “Segreteria Tecnico Operative”, the Technical and Operative Offices of ATOS.

To-date, the measures envisaged by the recovery plans have been concluded, with the exception of one still underway due to the protraction of the timescales for acquiring the authorisations for the areas in which the work will be performed.

Furthermore, within this perspective, Acea Ato 2, in compliance with a resolution by the Italian Regulatory Authority for Electricity Gas and Water, published on its website – www.aceaato2.it - in July 2013 the information about drinking water “isoquality areas” (that is areas with equivalent average water quality), therefore all those interested can have access to the data about the main water quality standards of his/her residence area.

The good quality of the drinking water distributed is guaranteed by both the constant analysis and monitoring activities carried out by Acea

and the independent surveys carried out by third parties⁵⁶, however, **customers do not always show they are aware of such quality**, therefore Acea continues to monitor the habits and undertake actions to raise awareness (see also the paragraph *Communication, events and solidarity*). The **customer satisfaction** surveys, carried out each year with two six-month sessions, provide for specific questions on the **perception of the water quality** (both in Rome and other Municipalities of ATO 2). With regard to the smell, taste and clarity of the water distributed in Rome and Fiumicino, the overall opinion was positive (7.2 out of 10), 85.5% of the interviewees considered that - as far as water quality is concerned - the service met their expectations; the same overall satisfaction figure decreases to 6.3 out of 10 in the province, with 69.5% of the interviewees considering the service in line with their expectations. Moreover, in 2013, as the average of the two six-month surveys, it emerged that 52.5% of those interviewed in the Capital regularly drank tap water, while 26.5% of them never do; in the province, these percentages reach 29.5% and 53.5% respectively; among the reasons given for not drinking tap water, the habit to drink mineral water prevails in the city (45%), while the lack of confidence in hygiene in the province (57%).

Rome features around 2,300 drinking water fountains – in cast iron (the so-called “nasoni”, that is “big noses”) and in travertine (the “fontanelle della lupa”, that is “she-wolf drinking fountains”) – **which provide drinking water** thanks to the management and maintenance carried out by Acea Ato 2. The Company also looks after **176 of the artistic and monumental fountains** which enrich the Capital, and is responsible for the **additional water services** - around **2,000 fire hydrants and the hose network**; this is mainly located in the city centre and the “Trieste” and “Prati” neighbourhoods, and supplies the most important artistic fountains in the city. Among the measures carried out in 2013, the **renovation of**

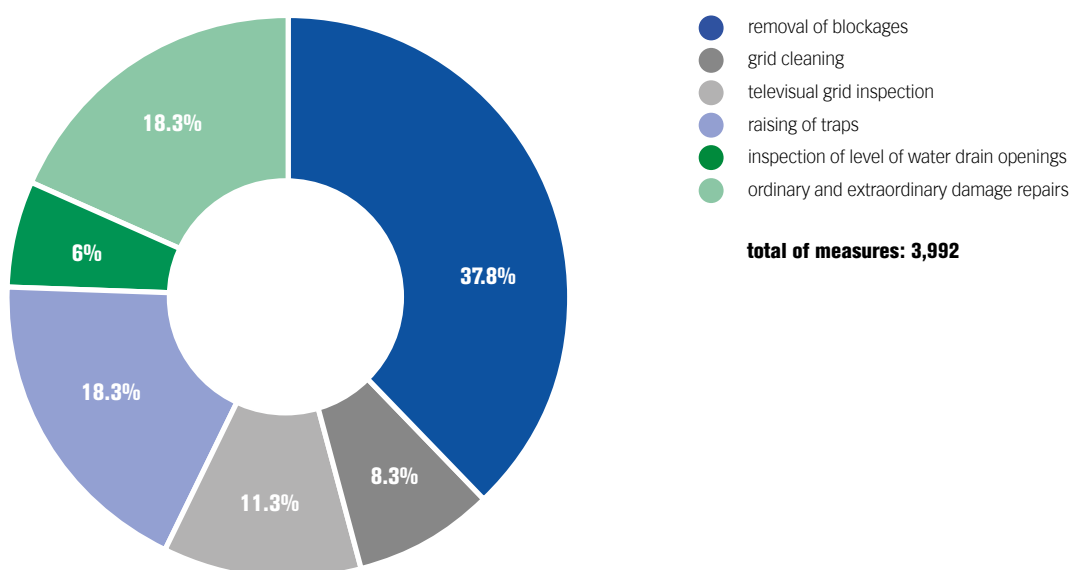
the water plant of the Fontana del Tritone by Bernini - **within the framework of its restoration** - is worth mentioning (see the specific box in the paragraph *Quality In The Public Lighting Area*).

THE PURIFICATION AND SEWERAGE SERVICE

The integrated water service includes the wastewater collection and its treatment before it is reintroduced into the environment. The treatment system in **ATO 2 – Lazio Centrale** is **organised in “catchment basins”**, territorial units on a hydrographical basis, which comprise the **wastewater treatment plants**, the **sewerage** pertaining to the same and the associated **water lifting plants**. The infrastructures managed as of 31.12.2013 included **524 sewerage lifting plants** (177 of which in the Rome municipal area), **171 treatment plants** (34 of which in the Rome municipal area) and **6,062 km of sewerage** (about **4,072 km** managed for Rome), without taking into account the number of sewerage connections.

The number of **measures** carried out during 2013 in Rome and the other Municipalities managed by ATO 2 **on the networks** serving the purification and sewerage system, comprising **investigations, inspections, blockage removals and repairs** amounts to **6,020**, with an average of **approximately 502 measures per month** (see chart n. 18 for the type of measures carried out on the sewerage and table n. 34 for the main maintenance measures on the treatment and sewerage system). Measures on the grid are often not limited to repair the damage identified but extend to accurate reconnaissance work on a larger section, so as to **plan any improvement activities** aimed at optimising the operating conditions. Besides the management and maintenance activities, operations to **expand, integrate and enhance the sewerage network** were continued, in particular in those Municipalities most recently acquired by ATO 2.

CHART N. 18 – TYPE OF MEASURES CARRIED OUT ON THE SEWERAGE NETWORKS IN ATO 2 – LAZIO CENTRALE (ROME AND MUNICIPALITIES MANAGED) (2013)



NB: the figures do not take into account the so-called “void” measures, linked to reports relating to the rainwater drainage system via “drain traps” or “hoppers”, or attributable to parts of privately-owned plants for which Acea Ato 2 is not responsible.

56 In general, such analysis is carried out by Consumers’ associations such as Altroconsumo and Cittadinanzattiva and the results can be found on their websites.

TABLE N. 34 – MAIN MEASURES ON THE PURIFICATION AND SEWERAGE SYSTEM AND WASTEWATER CHECKS IN ATO 2 – LAZIO CENTRALE (ROME AND MANAGED MUNICIPALITIES) (2013)

TYPE OF MEASURE

investigations, removal of blockages, cleaning, inspections, raising of traps, inspection of level of water drain openings and damage repairs	6,020 measures on the sewerage
inspections of the Rome trunk sewers and measures on associated constructions (spillways, openings, etc.)	30 km of trunk sewers inspected, 2,021 measures on trunk sewers and constructions (Rome, right and left bank of the Tiber)
ordinary electromechanical maintenance on the water lifting systems	6,844 measures on the water lifting systems
electromechanical maintenance (improvement, ordinary, preventive, etc.) on purification plants	7,192 measures on the treatment plants
drinking water quality check	about 6,170 samples withdrawn and a total of around 178,262 analytical checks carried out on the wastewater

The **waste water disposal system** is subject to **constant control** and the parameters which indicate the quality of the water coming into and flowing out of the purifiers and the impact on the receiving water bodies - the rivers Tiber and Aniene - are monitored (see also *Environmental Issues, Water Area*). Thanks to the adoption of cutting-edge technology, **Acea Ato 2's Environmental Operations Centre, constantly monitors the data detected by remote control, on the transit of the wastewater in the networks**, as well as the **hydrometric and pluviometric figures**, shared with the Rome Hydrographical and Marigraphic Office; and the **data on the quality of the water in the rivers Tiber and Aniene, producing a daily report**. The **analytical checks carried out on the wastewater**, performed both by Acea Ato 2 and LaboratoRI, resulted in **more than 178,000 in 2013**.

THE TARIFFS

THE ELECTRICITY SERVICE TARIFF

The Italian electricity sales market is divided into three separate segments: the **"free market"**, in which the consumer directly handles the supply relationship with the chosen operator, the **"protected market"**, where the customer receives the service **under the contractual and tariff conditions⁵⁷ established by the Italian Regulatory Authority for Electricity Gas and Water (AEEGSI)**, the national regulation body for the sector, and the **"safeguard service"**, through which the customer is not entitled to the "protected market" and without suppliers is supplied under contract and economic conditions fixed by the operator, on the basis of calculation methods established by the Ministero dello Sviluppo Economico (Ministry of Economic Development) (see

the reference box in the subparagraph *Electricity and Gas Service Customers*).

The **costs** shown on the energy bill **cover three expense items**: the **sales service**, that of the **network** and the **taxes** due.

The **sales service**, which is the most relevant economic item, equating about half of the total cost and being subject to free competition⁵⁸, includes the prices which the supplier incurs for the purchase, marketing and dispatch of energy for the customer. The **grid service**, whose tariff is uniformly established by the AEEGSI for the entire Italian territory, considering inflation, investments and efficiency objectives regarding energy **distribution** and meter management activities. Under this item fall the **general charges of the electricity system**, including: incentives to renewable energies, promotion of the energy efficiency, system research, electric bonus).

Finally, the indirect **taxes**, applied on the amount of energy consumed and on the total final cost of the bill.

The **protected service** - despite a downward trend - is still the reference segment for **Italian domestic customers** (individuals and households), with a **participation rate of 75%⁵⁹** when compared to the total reference population (78% as of 31/12/2012). In this segment, for **"standard" consumption** - equal to **2,700 kWh/year, with a power supply of 3 kW** - during 2013 the **annual price of electricity was about 515 euros** (19.1 cent /kWh), slightly increasing if compared to the previous year - 505 euros (18,7 cent/kWh)⁶⁰.

In the breakdown of the cost components (see chart n. 19) the steady decrease of the supplying component and the increase of the general system charges stand out.

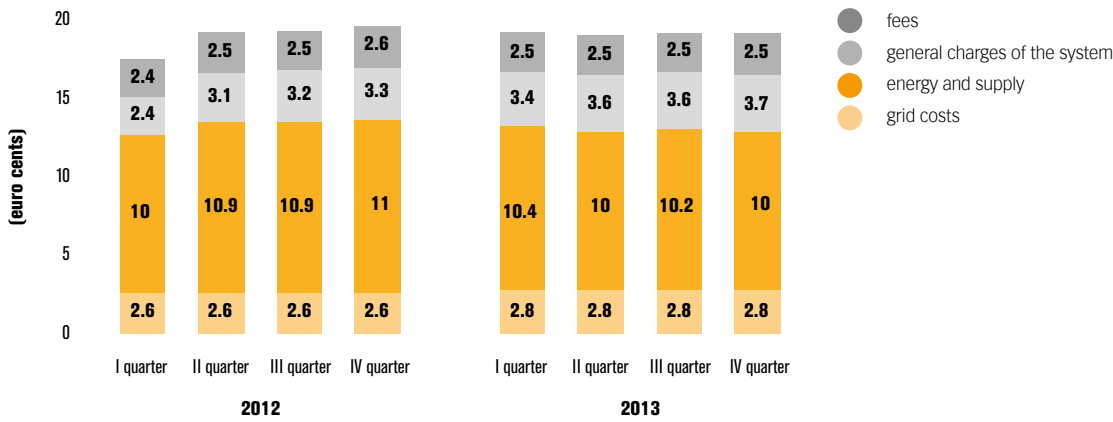
57 The tariffs are established by AEEGSI and updated every three months on the basis of the costs which the *Sole Buyer* (AU, "Acquirente Unico") incurs for supplying the needs of protected customers on electricity wholesale markets.

58 The commitments which the free market operators must comply with in order to carry out their activities in compliance with the principles of fair competition, include providing their potential customers a **comparability chart** of the costs. This contains the cost which the average consumer would incur by accepting an offer, compared to the cost calculated as per the conditions established by AEEGSI for the protected market.

59 On the basis of the number of withdrawal points used by protected market customers (AEEGSI figures and statistics - evolution of the protected market).

60 Average values in the four quarters of 2012 and 2013 (AEEGSI figures).

CHART N. 19 – ELECTRICITY PRICE TREND FOR A TYPICAL HOUSEHOLD CONSUMER (CENT €/KWH) (2012-2013)



Source: website of the Italian Regulatory Authority for Electricity Gas and Water - statistic data

As far as the **protected service** is concerned, **all the customers who have a digital meter**, able to detect the consumption in different times **are served** - as provided for by AEEGSI - **according to a dual phase tariff**, allowing to save more if electricity is consumed at night, on weekends and on holidays. On the **free market**, the percentage of customers served by means of a contract which envisages the **dual phase electricity supply** keeps basically consistent with 2012, coming to **7%**.

For users experiencing economic difficulties or with large families⁶¹, the Authority, upon Government recommendation, has activated

what is known as “bonus elettrico” (“**electricity bonus**”), namely a saving on the electricity cost; the same **reductions are granted to customers suffering from a condition** that forces them to use energy-consuming electromedical devices, indispensable for their survival.

Sales activities of **Acea Energia on the free market** are aimed at **satisfying various needs** in relation to the types of customers: from households to large industrial customers; on this basis, Acea Energia arranged the **commercial proposals for 2013** (see specific box).

THE COMMERCIAL PROPOSALS FOR ELECTRICITY FOR 2013

Acea Energia’s commercial proposals to the **mass market segment** - residential customers, freelancers, commercial activities and Small and Medium-sized Enterprises - in 2013 were arranged so as to **enhance the types of offer already existing in 2012**, by means of **specific promotions** for selected customer targets and **comprising the integration of services in addition to energy supply**.

During the entire year, in particular, the product **Acea Unica** for **household customers**, in the **single and dual phase** versions, was renewed with the integration of a **free annual insurance policy which envisages assistance and repairs for domestic plants** (power, hydraulic, thermal-hydraulic), completely free for 12 months. The service package, including an unlimited number of measures during the year and a limit of 1,000 euros, represented important sales and, at the same time, loyalty-retention assets.

The brand “**Acea Energia Shop**”, **contact point in the territory** (at the help desk of Piazzale Ostiense, shopping centres, exhibitions, etc.) was launched: it **promotes commercial offers, supports the launch of new special initiatives and provides information** in places where customers follow their daily routine or spend their spare time.

With reference to the **Small Businesses** segment, created with the aim of more efficiently handling those customers with consumption not similar to that of Business customers, but with specific needs different from those of household customers, Acea Energia aimed at ensuring a presence as widespread as possible in sector events and exhibitions.

With regard to **Business and Industrial** customers, negotiation takes place on a **one-to-one basis**, so that customers can benefit from the support of a dedicated account for the identification of the most suitable formula for their energy profile. Acea Energia is also willing to meet the needs for **respecting and safeguarding the environment**, supplying **CO-FER certified energy**, which grants that energy originates from plants fuelled by renewable sources.

61 For an analysis of the conditions which entitle customers to request and receive the electricity bonus, please refer to the specific section on AEEGSI website: http://www.autorita.energia.it/it/bonus_sociale.htm.

THE WATER SERVICE TARIFF

The Regulatory Authority for Electricity Gas and Water, after being entrusted in October 2012 to the regulation and control of water service at a national level, in 2013 issued acts aimed at establishing a **fair, definite, transparent and non-discriminatory tariff system**, suitable for ensuring the management of water service under conditions of efficiency and economic-financial balance, in light of the EU of full cost recovery principles (full coverage of the industrial and environmental costs of the services) and the polluter-pays principle. As a result, AEEGSI adopted the guidelines for checking the updating of the economic and financial plan of the Piano d'Ambito ("Area Plan" - Resolution 73/2013/R/Idr) and started the preliminary activities aimed at approving the tariffs for the provisional stage (2012-2013).

Finally, the Authority imposed the rules of the Metodo Tariffario Idrico (MTI - "Water Tariff Method"), in force for the period 2014-2015 (Resolution 643/2013/R/Idr), on completion of the first regulation stage. The new method confirms, on the one hand, some cornerstones of the developed methodology, like for example the connection to the operator's revenue and the environmental costs

and introduces tariff mechanisms protecting the proper use of the resource and avoiding wastes; on the other hand, it regulated the main aspect of the relations between customer and operator: balances, caution deposits and overdue payments, with the consequent costs for the operator.

Within the same framework, two measures by AEEGSI are particularly relevant to customers, as far as the consequences on the economic sustainability of bills are concerned:

- the consultation (DCO 85/2013/R/Idr) on the **social water bonus**, aimed at identifying: possible needy recipients and those expected to be sympathetically responsible for them; the determination of the precise amount of the profit and the provision process.
- the approval of the criteria for refunding customers the part of the tariff corresponding to the return on invested capital, abrogated through a referendum in 2011 (Resolutions 38/2013/R/Idr; 273/2013/R/Idr; 561/2013/R/Idr).

The **effective average tariffs applied during 2013 by the leading Acea Group water companies** are shown in table n. 35.

TABLE N. 35 – AVERAGE WATER TARIFFS APPLIED BY THE ACEA GROUP COMPANIES (2013)

COMPANY	€/m ³
Latium/Campania	
Acea Ato 2 SpA – Lazio centrale	1.22
Acea Ato 5 SpA – Lazio meridionale	1.36
Tuscany/Umbria	
Acque SpA – Basso Valdarno	2.21
Publiacqua SpA – Medio Valdarno	2.34
Acquedotto del Fiora SpA- Ombrone	2.21
Umbra Acque SpA – Umbria	2.02

The effective average tariff of Gori SpA is currently not available.

TARIFF DISPUTES

In February 2013 **Acea Ato 2, Publiacqua, Acquedotto del Fiora, Gori and Umbra Acque** appealed to the TAR Lombardy (Regional Administrative Court) against AEEGSI's resolution concerning the Temporary Tariff Method (Resolution 585/2012/R/Idr) in order to obtain its cancellation.

The measure subject to appeal is considered to be detrimental for the economic and financial equilibrium, one of the main parameters on the basis of which the bankability of investments is evaluated. So it would reduce the possibility of the operators to obtain funds and disavow the objective of facilitating new investments. Some of the main reasons are the violation of the general principles such as the **legal certainty, the protection of private economic initiatives, the principles of reasonableness and proportionality and the communitarian principle of full cost recovery**. The final court hearing at the TAR will take place in the first months of 2014.

As far as **Acea Ato 5 Spa** (ATO – Lazio Meridionale-Frosinone) is concerned, on the 30th May 2013 the Commissioner of declarations (the *Italian Commissario ad acta*) presented the final report concerning the determination of balances for the management period 2006-2011. In this report he proposed different kinds of compensation with fees due to the Autorità d'Ambito (Authority managing the integrated service) or the hypothesis of deferred reimbursement. ATO accepted the proposal but contested the amount. However, this issue has not been discussed at the Union Assembly. The tariff currently applied to Acea Ato 5 does not follow the new Temporary Tariff Method and the tariffs established by the competent ATO have not been approved by the Union Assembly, which had no participants, twice. On two occasions the company has formally required that AEEGSI uses its powers towards ATO.

As far as **Gori SpA** is concerned (Ambito campano ATO 3 – Sarnese-Vesuviano), although the Extraordinary Commissioner of the Ente di Ambito ("Local regulatory authority"), in fulfilment of AEEGSI's resolution, established the Vincolo riconosciuto ai ricavi del gestore ("VRG" – "Granted Revenue Bond") and the tariff multiplier for 2012 and 2013, AEEGSI postponed the approval of the 2013 tariff, which will come after the conclusion of the audit activities of the Piano d'Ambito, in order to evaluate the adequacy of the compensations to be recognised for prior years and to be invoiced in the next few years. Currently, the Plan is being developed, waiting for the definition of further economic and financial data concerning the transfer of the Regional Works to Gori, as provided for by the Municipal Resolution. However, Gori contested the act, considered to be partially wrongful. Consequently, with the decree of the President of TAR Campania – Naples, **the effects of the transfer resolution have been suspended until 20th November 2013**, when the preliminary hearing in Jury Room will take place.

CUSTOMER CARE

CUSTOMER CARE POLICY

Customer care activity is carried out by the operating companies managing the services. The Parent Company, with its Customer Care Unit, ensures homogeneous, integrated customer management, in compliance with the specific rules.

Once again in 2013, the activities of the **work group** coordinated by the Customer Care Unit continued at centralised levels and were **devoted to mapping the situations which may generate complaints** and supporting the operational companies in identifying appropriate corrective measures with the aim of **more effectively responding to customers' expectations**.

During the year one must recall the **Group** project for the introduction of the new **Customer Relationship Management (CRM Enterprise)** system which was launched, with the aim of facilitating the corporate strategy targeted at **optimising the relationship with customers**. The plan envisages not only the introduction of a **unique technology for the CRM**, but also the adoption, at Group level, of a **Document Management System (DMS Enterprise)** for the **computerised handling of all the documentation**

which passes through the company by means of the various channels (post, fax, e-mail, telephone, help desk, website) and a **new Telephone Platform**. The project continued in 2013 with the activation of a number of functionalities, related both to the DMS - management of incoming and outgoing documents - both to the telephone platform and will continue with the system integration and the functionality completion.

Following the project "**Clienti Acea Energia**" ("Acea Energia Customers") - carried out in 2012 and involving the employees of Acea Energia - in order to optimise the management of processes activated following customers' requests and reduce the stream of people at the help desk - **the need to better understand the reasons leading the customer to the help desk emerged**, with the objective of individuating actions for promoting the use of distance channels; at the same time, Acea Energia started the project "**Sei un cliente da sportello?**" ("Are you a help-desk customer?") (see the box related to both initiatives).

A PROFILE OF THE "HELP-DESK CUSTOMER": TWO INITIATIVES IN THE "SALONE DEL PUBBLICO"

During 2013 Acea decided to **carry out two surveys** in the "salone del pubblico" ("customers' hall") in the headquarters of Piazzale Ostiense, where the help desks for energy and water services are located. The surveys were aimed at **developing a profile of the "help-desk customer"**, trying to understand the reasons leading them to the "material" help desk, possible contact made in the past and their readiness to use various contact channels. The results produced measurement proposals that the operational companies are assessing.

At the same time, Acea Energia launched the project "**Sei un cliente da sportello?**", aimed at performing **direct communication and customer care operations**: informing customers about the existence of **distance contact channels and inviting them to use these**, making them aware of the real advantages they could obtain from them, first of all that of saving time. Dedicated personnel prepared an area of reception service for customers and, according to the problem to be dealt with, they assisted them, showing them the efficiency of the web and call centres for satisfying the needs connected to electricity supply management. The use of the web was made even simpler thanks to the presence of **information tutorials on the website regarding how to use the services available**, which illustrate how-to functions.

Nearing the end of the year a **Customer complaint management unit was created** in Customer Operations of Acea Energia: it will monitor the trend of complaints so as to identify its main causes and propose solutions aimed at continuous improvement.

Acea cultivated the **relationship** created, over the years, **with several Consumers' associations**, by organizing periodical meetings in order to deal with the main problems affecting customers, in particular those of the electricity market. In 2013 Acea Energia, thanks to agreements with Consumers' associations, started **the project *Al centro il cliente*** ("Focus on Customers" - see the specific box).

AL CENTRO IL CLIENTE: ACEA ENERGIA HAS LAUNCHED THE PROJECT DEDICATED TO CONSUMERS' ASSOCIATIONS

The project *Al centro il cliente* is the result of the collaboration between Acea Energia and Consumers' associations, originates from a careful **evaluation of the requests** and suggestions submitted by these Associations and provides for the creation of a **team dealing with the most complex complaints** and the activation of **two contact channels** exclusively dedicated to Associations.

The two channels, operating since the beginning of July 2013, are:

- a **telephone line** providing direct and immediate support so as to solve the most critical situations;
- a **fax line** configured in order to optimise the flow between sending complaints and notices, and granting priority according to the order of reception.

Acea Energia continued applying, in 2013, the procedures implemented during the previous year with the aim of **preventing the phenomenon of unrequested contracts**, in order to ensure the utmost **protection** of free market **customers**. In addition to the regulation imposed by the specific authority, imposing to send a confirmation letter to every customer who has subscribed to a commercial offer, Acea's procedures comply with the following rules:

- the customers who have subscribed to an offer on the free market via door-to-door sales networks are also contacted by telephone, for the purpose of **checking that the content of the contract signed has been stated clearly** and **that the conduct of the sales person was correct**; in the event of a negative answer from the customer, the possibility of proceeding with the activation process for the new offer is prevented in the computerised information systems;
- the customers who have subscribed to an offer on the free market via the telephone sales network (teleselling) are further protected, in that Acea Energia carries out the **playback of all telephone call registrations produced by sales agents**; in the event of a negative outcome from the playback, the possibility of proceeding with the activation process for the new offer is prevented in the computerised information systems.

The Company, moreover, has established **internal verification procedures** for the cases of eventual incorrect commercial practices (mis-selling) which envisages - after the due verification has been performed - **the application of financial and disciplinary penalties vis-à-vis the sales network**. In order to prevent such conduct, **activities** have been enhanced for the **training of those involved** in sales, with the aim of clearly and accurately transmitting the principal notions relating to free market dynamics and the sales proposals of Acea Energia (also see the specific box in the chapter *Suppliers*, paragraph *Evaluation of suppliers*).

In the event of **sales disputes** with the company, the customer has the **possibility of resorting to the joint conciliation procedure**, an instrument for the out-of-court settlement of disputes **operative in Acea both for water service** - managed by Acea Ato 2 and Acea Ato 5 - and for **electricity service** - managed by Acea Energia and Acea Distribuzione (see the chapter *Institutions and the Company*). **Legal litigation during the year** between Acea and customers is detailed in the specific box.

LITIGATION WITH CUSTOMERS

Legal litigations which **customers initiate** vis-à-vis Acea Group Companies mainly concern: **disputes relating to tariff problems, refunds and delays in activation of the service**. In 2013 the problem of estimated billing of energy consumption remained critical, not corresponding to the effective consumption recorded by the meters.

Disputes as of 31/12/2013 came to **455** cases, significantly increasing in comparison to 2012 (330). Litigations with customers, albeit higher, also have a shorter duration and a lower economic average value: about 2,900 euros (2,650 euros in 2012).

CONTACT CHANNELS AND PERFORMANCE

Acea provides customers with various contact channels: a **switchboard** which puts them through to corporate offices and sites; **commercial toll-free phone numbers**, those for **fault reporting**, **help desks** (physical and online). Customers can also contact the Company via **letter, fax and websites** (www.acea.it, www.aceaenergia.it, www.aceaato2.it). The "large customers", such as companies and institutions, have dedicated structures.

TELEPHONE CONTACT CHANNELS

Acea **switchboard**: (+39) 06/57991

Commercial electricity toll-free number for the **protected service**: 800.199.900

Commercial electricity toll-free number for the **free market**: 800.130.334

Commercial gas toll-free number for the **free market**: 800.130.338

Toll-free number for **free market offers**: 800.130.333

Water commercial toll-free number: 800.130.331

Toll-free number for **reporting water faults**: 800.130.335

Toll-free number for **reporting electric and public lighting faults in Rome**: 800.130.336

Toll-free number for **cemetery lighting**: 800.130.330

Toll-free number for **district heating**: 800.130.337

NB: Acea guarantees the respect for privacy in managing personal information in all relations with customers (in accordance with Legislative Decree n. 196/2003 and subsequent amendments and additions).

The main operating companies avail themselves of **Acea8cento Spa** for handling one or more **remote channels** - telephones, faxes, webform, e-mail - for mainly commercial use⁶². The service performed by the contact centre is marked by the maximum level of operations, guaranteeing - in as far as it is possible - quality, promptness and uniformity in the solution of the customer's requests.

Furthermore, Acea8cento **identifies possible areas for improvement** in the "remote" handling of customers and implements **specific projects**: between April and June 2013 the **service was transferred to a new telephone platform**, with Cisco technology. The technology made available on the new platform **has allowed the introduction of the operator's automatic presentation (greeting) service** and the **brief call evaluation service (emoticons)**, operating as of October, which contribute to transparency in the interactions with customers. Moreover, during the year, in collaboration with Acea8cento, an **SMS service** to protected market customers **for managing estimates** was **experimentally** implemented within Acea Energia. Through this tool, customers are notified of the date of technical inspection or the lack of documents/items necessary to complete their application.

Toll-free numbers for energy and gas sales - for protected and free market customers - grant a **24-hour-coverage service** and the **help desk** was enhanced in 2012. Moreover, as of January 2013, **even users with electronic meters** - both in the protected and in the free market - **can self-read and communicate** the data simply by dialling the toll-free number and following the indications given by the **automatic responder**; in this way it will be possible, if problems in

data transmission from the electronic meter to the billing system arise, to obtain a better alignment between billed and effective consumption.

Also, as far as water service is concerned, **during 2013 Acea Ato 2 activated two working groups**, respectively charged with **optimising the operative procedures connected to help-desk activities and to managing complaints**: the former has the objective of creating a polifunctional structure for front end and back office operations, enabling every operator to serve customers and to manage paperwork; the latter aims at optimising complaint processing, in order to improve the quality of the service and be prepared regarding the regulation in the announced sector.

Finally, the project of installing 2 "virtual" help desks, started in 2012, which provided for installing two devices and taking a first pilot step from 2013, was slowed down because of technical issues.

The **Acea toll-free phone numbers** received, during 2013, a total of **over 4.6 million calls, up by 4.8%** with respect to the roughly 4.4 million calls received in 2012; this change depends on the increase in calls to the commercial toll-free numbers of Acea Energia; a positive reduction is also detected in the percentage attributable to toll-free numbers for reporting water faults - from 8.6% in 2012 to 5.7%, which is also matched by a reduction in absolute value (see charts n. 20 and 21 and table n. 36).

⁶² In addition to commercial channels, Acea8cento also handles a number of faults reported for water services carried out by Acea Ato 5 and for the cemetery lighting service, performed by Acea Distribuzione.

CHART N. 20 – TOTAL TELEPHONE TRAFFIC OF ACEA TOLL-FREE NUMBERS (2012-2013)

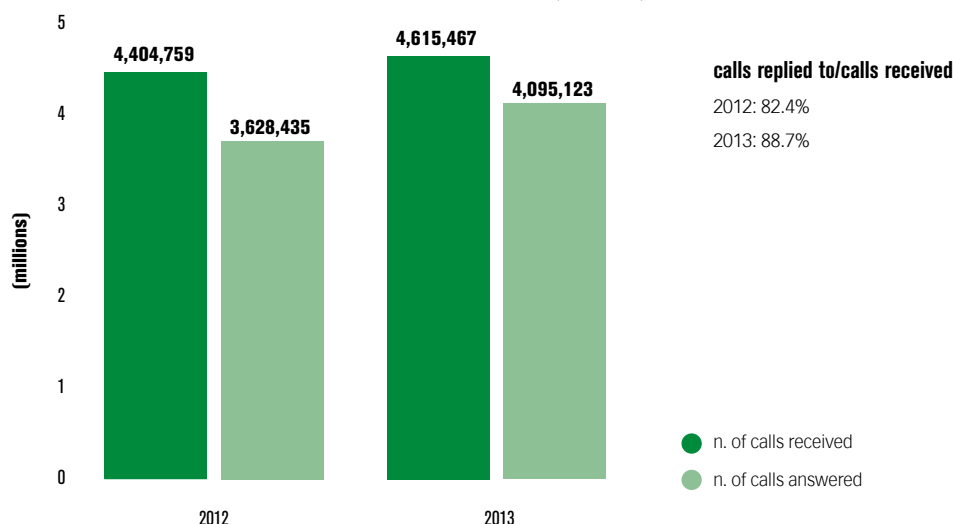
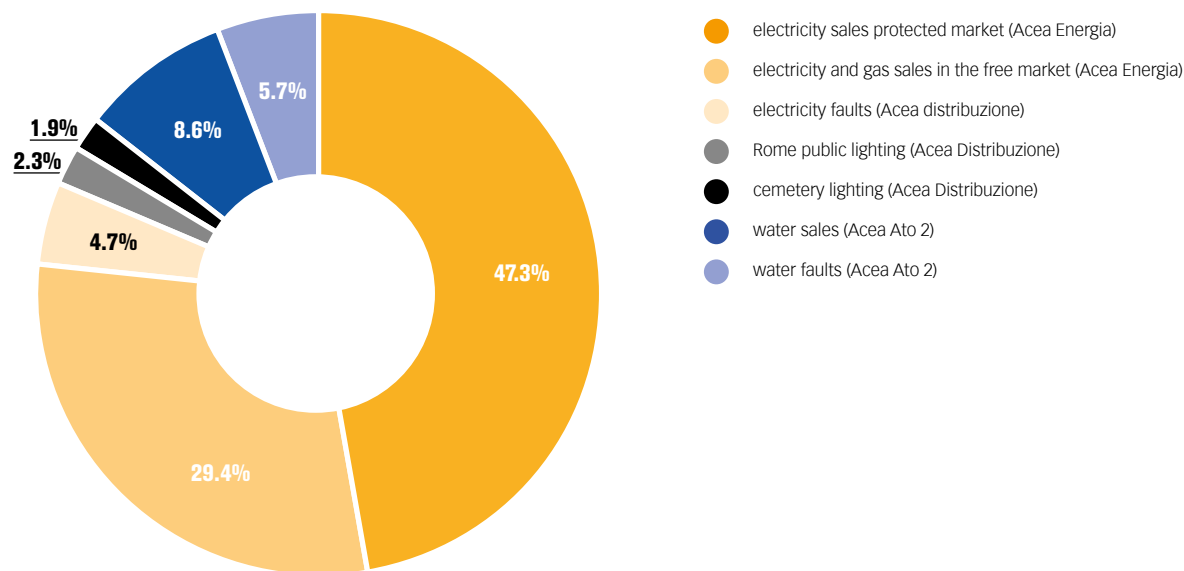


CHART N. 21 – PERCENTAGE-RELATED DISTRIBUTION OF TELEPHONE TRAFFIC RECEIVED BY ACEA TOLL-FREE NUMBERS (2013)



The Italian Regulatory Authority for Electricity, Gas and Water evaluates the call centres of the electricity and gas sellers, and on the basis of global scores⁶³ (TQI) assigned to each operator using six-month surveys, draws up a public ranking list⁶⁴. The rankings drawn up by The Authority are now available, and they stress, between the first-half of 2012 and the first-half of 2013, a gain of 11 positions (from the 25th to the 14th) for the Acea Energia call centre service: since the second-half’s results of 2012, the service evaluation benefited from the “accessibility” parameter (AP) improvement, thanks to the opening of the 24h service active 7 days per week during the second-half of the last year; furthermore, if on the one hand the “perceived quality” parameter (CSP) worsened, on the other hand an improvement of the “service quality” parameter has been registered (QP).

With regard to the other Acea toll-free numbers – water commercial, fault reporting for the electricity, water, public and cemetery lighting

services – the main performance indicators for the last two years are shown in table n. 36.

The service levels, represented by the percentage between the answered calls and the total amount of the received calls, even though they remain excellent for the electricity services, show a small decrease compared with 2012 performances: the performances of the toll-free number for fault reporting on the private as well as on the public network could have registered higher average values than those of the previous year if, in November, given the adverse weather conditions, an extraordinary number of calls had not been received in such a reduced number of days. Furthermore, an incredible improvement of the service level delivered by the Acea Ato 2 toll-free numbers for the commercial performances and for fault reporting was registered as well. Finally, the call flow to the water commercial number normalizes after the 2012 surge caused by the changes introduced both in the billing calendars and in the pricing structure.

63 The global score is made up of three partial scores: two are referred to delivered quality data – access to the service (AP) and service quality (QP) – and the third refers to the results of the surveys on the customers’ perceived quality – satisfaction degree of those customers using the call centre service (CSP) – carried out by The Authority itself.

64 The quality ranking on the call centres of the electricity and gas vendors, drawn up considering the data of the first-half of 2013, is available on the Authority for Electricity, Gas and Water website (www.autorità.energia.it).

TABLE N. 36 – MAIN PERFORMANCE INDICATORS OF THE ACEA TOLL-FREE NUMBERS (2012-2013)

PERFORMANCE INDICATORS	ELECTRICITY FAULTS (ACEA DISTRIBUZIONE) (*)		PUBLIC LIGHTING (ACEA DISTRIBUZIONE) (*)		CEMETERY LIGHTING (ACEA DISTRIBUZIONE)		WATER COMMERCIAL (ACEA ATO 2)		WATER FAULTS (ACEA ATO 2) (*)	
	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013
total amount of received calls (n.)	211,440	215,281	95,547	107,161	89,436	88,097	476,290	398,595	380,092	265,195
total amount of answers (n.)	203,496	206,037	92,678	100,952	82,131	79,636	314,047	341,130	305,798	234,327
service level (answered out of received %)	96%	95.7%	97%	94.2%	92%	90.4%	66%	85.6%	81%	88.4%
average waiting time before answer (min. sec.)	39s	44s	35s	53s	1m08s	1m16s	2m28s	1m46s	3m38s	2m07s
average conversation time (min. sec.)	1m46s	1m57s	1m34s	1m38s	3m57s	4m04s	3m47s	3m54s	2m47s	2m53s

NB: the table does not show the performances of the commercial toll-free numbers of the electricity service subject to AEEGSI regulation and commented on in the text.

(*) answered calls are considered to be those calls managed by the automatic system or terminated by the customer during navigation within the interactive voice responder (IVR).

Customers can access the different service companies' websites such as the Acea Energia website (www.aceaenergia.it) which registered 1,731,876 visits in 2013 (equal to 41.5% more than 1,223,595 visits registered in 2012) and the Acea Ato 2 website (www.aceaato2.it) which registered 494,625 visits (+13,4% than the number registered last year). Customers can access these websites directly or through the holding website (www.acea.it). All the websites have online wickets which allow the customer to carry out some contractual and commercial transactions, asking for information, and check their bills and payments online.

In particular, during the year, the Acea Energia web channel has been further improved expanding the functionalities and the stand-alone management services of the energy supply. Moreover, some informative tutorials explaining how to use available services on the website have been realized. The Acea Energia online wicket, up to 31.12.2013, had around 100,000 registered customers (+230% than 2012 data). The main services offered during the year are:

- **display of previous bills and payments;**
- **online payment** (allows credit card payment of bills related to any kind of supply);
- **e-billing** (available for any customer – allows to receive a link via e-mail to display the bill, eliminating delivery times, related costs and respecting the environment);
- **e-mail notification services** (for customers of free market – the customer is informed in real time about the issue of bills and related deadline for payment);
- **transfer and take-over of contracts** (at present available only for customers of protected market);
- **electricity and gas self-reading** (also for customers owing electronic meters).

Furthermore, an APP which allows the performance of many operations by using a smartphone is available for all registered customers in the Customer Area of the website www.aceaenergia.it. Confirming the growing trend of the previous years, the Acea Ato 2 online wicket counted 17,830 new registrations during the year, for a total of 60,724 registered customers (+41,6% in comparison with the 42,894 registered users at the end of 2012). A virtual assistant is

active on the online wicket guiding the customer in the use of the different functionalities available, and at the end of 2013 they are:

- **display of previous bill and meter readings**, already communicated and calculated;
- **account management** (allows the upgrade of customer's profile, and through the function "add consumption", further home and company consumption can be added and managed through the function "associated consumption list");
- **sending of meter self-reading;**
- **display of contractual information;**
- **new operation** (allows sending transfers, take overs, cancellations and personal data and address changing requests).

In order to help customers understand the new functionalities of the online wicket, Acea Ato 2 sent an informative leaflet with the bill of the first 2013 billing cycle.

On the Acea Ato 2 website available some useful information is also available. For instance, during the exceptional cold wave in November, information on how to protect water meters from the cold has been included, in order to preserve their functioning. During the year on the website the main parameters about the quality of the delivered water in Rome and in its province have been published, based on one's area of residence. Finally, for 2014, improvements are expected in the history billing area regarding the possibility of consulting and printing all bills issued from 2011 to today. It will be possible to print the payment receipt, and in the wicket section, and a "help-desk" online function will be active.

"Physical" help desks for electricity, gas and water service customers are located in the public hall at the Acea central headquarters in Piazzale Ostiense in Rome; other help desks are located at sub-offices in Ostia Lido and the company Acea Ato 2 manages another 11 help desks dedicated to the water service in the Rome province territory, and a mobile office which, since 2014, will be replaced with permanent offices in those 12 Municipalities in which the travelling service is active. Last year, Acea Energia also opened at the headquarters of the III Municipal Area⁶⁵ in Rome a help desk which is active once a week and with reduced management capacity, as an experimental service.

⁶⁵ The Municipality, indicated as IV last year, has changed into III this year since the reclassification which was carried out by Roma Capitale. The location has been chosen because of its logistical location, at the opposite end of the Piazzale Ostiense offices, and more appropriate for providing service to those customers located in the north-east area of the city.

During 2013 the public hall in the central headquarters received 307,816 customers, a growing number of 9.5% with respect to the 280,987 customers registered in 2012. The turnout figures at the various help desks show a general increasing trend during the last three years (see table n. 37): regarding the water service – which proportionally registers the major increase – the data refers to the period following the introduction of new queues which allowed a more complete monitoring of performance (previously the easiest operations were solved by the central headquarters without the issuing of tickets) with no additional costs for the customers, as shown by the average waiting time decrease; the water service help desks turnout data in the territory of the Province of Rome (except for the offices of Roma Ostiense and Ostia) shows that the visits had a small decrease from about 134,000 in 2012 to 121,000 in 2013, a number which is consistent with the trend of the last three years. The service levels, expressed by the percentage between the served clients and the total number of tickets issued, were confirmed very high in 2013 for the help desks at the headquarters. Regarding the energy sector,

it is pointed out that during the spring a new queue has been introduced, and some procedures have been modified facilitating the use of telephones installed for customers at the central help desks.

The number of customers served at the help desks, shown in the table, include those visitors who have been rerouted by reception staff to use the telephone service and those who have been managed in the previously quoted project “Are you a help desk customer?”: staff working on this project would guide the customer to satisfy his/her needs online, with the support of PCs and palmtops or via telephone.

Each desk, as quoted above, registered a higher customer turnout in comparison with 2012: waiting times for the energy service customers, both protected and free market, have been on average 43 - 49 minutes, showing a slight increase; for water service customers, waiting times registered a further decrease, with an average time of approximately 15 minutes, which is a considerable improvement with respect to 2012.

TABLE N. 37- HELP DESK PERFORMANCE AT HEADQUARTERS (2011-2013)

	ELECTRICITY SERVICE ACEA ENERGIA (PROTECTED MARKET)			ELECTRICITY SERVICE ACEA ENERGIA (FREE MARKET)			WATER SERVICE ACEA ATO 2		
	2011	2012	2013	2011	2012	2013	2011	2012	2013
tickets issued (n.)	129,592	175,505	183,341	37,994	66,906	72,469	31,397	38,576	52,006
customers served (n.)	125,672	174,315	177,721	36,732	66,612	70,080	30,734	37,475	50,863
level of service (customers served /tickets issued)	97%	99%	97%	97%	100%	97%	98%	97%	98%
average waiting time (minutes)	34	44	43m25s	58	45	49m14s	35	31	15m24s
average service time (minutes)	10	10	11m07s	10	10	11m52s	14	12	9m31s

Written complaints are managed by the operating companies according to internal procedures via computer and the documentation process can be followed from the first communication to its resolution.

Regarding the electricity service, times and percentages of replying to written complaints/requests for information represent specific and general levels of commercial quality for the sales company, imposed by the National Authority. In those cases the seller, in order to reply to the customer, needs to obtain technical data from the distributor, the latter – in accordance with the specific level – must provide them within 10 or 15 working days, depending on the kind of data requested. Replying to written complaints is also included in general quality levels which depend on the distributor (for performance data see paragraph Supplied quality in the energy area, tables n. 20-24). Replying to written complaints/requests concerning the public lighting service depends directly on the company responsible for the service. In May 2013, the Public lighting dedicated Unit, previously in Acea Distribuzione, passed to Acea Illuminazione Pubblica SpA, and since then, the latter is responsible for written replies to complaints. In 2013 1,174 written complaints have been received in total⁶⁶ a figure consistent with last year's data. The company handled 1,089 complaints, equal to

92% of the total, within 31st December, and about 90% of replies have been given within 30 days. The remaining complaints will be dealt with in the first months of 2014.

For what concerns the water service, Acea Ato 2 received from the different running municipalities (Rome and Province) 10,531 complaints/requests in total (8,431 commercial complaints and 2,100 requests), a decrease of 17% with respect to 2012. Within 31st December 7,380 complaints have been handled, a figure equal to 95% of the total⁶⁷ of the received complaints. 78% of received complaints have been handled within 30 days.

Billing invoice sent to the customer not only include the costs for consumption and the terms of payment, but also other useful information; on the Acea Energia website there is a billing guide both for protected and free market customers. In particular, at the end of 2013 a new bill for free market customers has been released, where the entirely renewed layout with respect to its contents is clearer and more transparent and with respect to its graphics as well, facilitating the customer in discovering important information (see the dedicated box).

66 2013 data refers to the total amount of the received complaints managed, till the end of April, by the Public Lighting Unit of Acea Distribuzione and from May by Acea Illuminazione Pubblica SpA

67 The total number of complaints, in percentage terms, compared to the total number of handled complaints, corresponds to 7,754, less than the 8,431 total complaints received. No duplicate has been purged.

THE NEW BILL FOR ELECTRICITY SUPPLY

In December 2013 the new bill for electricity supply has been released. The goal of its renewed layout is to help the end consumer **discover information easily and quickly**.

- in the box **Billing Summary** there is essential information for the customer: issue date, two-month period and reference period and/or balance, amount to be paid, deadline and payment situation;
- the box **Payment due** has been simplified and includes the three main entries that constitute the amount (selling, network, taxes and VAT);
- the table devoted to **Meter Reading Summary** shows the customer an overview of the last registered readings and of the last reading taken into account for the billing issue, with a reading prospectus divided in time slots;
- the prospectus **Reading and consumption** shows, all the invoiced readings organized by type and date with a particular stress on time slots;
- the prospectus **Annual and daily consumption** provides information to the customer about annual consumption and daily consumption average, with a precise distribution in each time slot, and it represents an essential monitoring tool for consumption trends over time;
- in the section **Communications to customers**, all the information is divided into chapters ("Bill", "Supply / Meter", "Other information", "Communications by the Authority"), in which the customer will be able to easily find all the required information .

With the imminence of the new bill release, a notice has been launched and a dedicated tutorial is now available online.



COMMUNICATION, EVENTS AND SOLIDARITY

COMMUNICATION

The **External Relations and Communication Function** of the group leader is to **control the various forms of communication** used by Acea to interact with stakeholders and the social context where the activity of the firm takes place.

Acea, which has been working for more than one century, is actively rooted in the territory, contributing to the **organisation of events** focused on culture, sport or the environment, supporting **solidarity initiatives** and participating in events and **conferences focused on core business activities**.

Moreover, the firm carries out **advertising and awareness raising campaigns** aimed at citizens, **takes care of relations with the press** and promotes outward communication through its **website**.

Acea's website – www.acea.it – both in Italian and English, is at the basis of **the institutional and financial communication of the Group**, **updating and sharing contents** aimed at informing stakeholders. The site is divided into thematic sections, with information on **corporate governance** and **value codes, sustainability, quality and security**; moreover, it is possible to check **economic/financial documents**, the trend of the stock, price-sensitive presentations and statements, in accordance with Consob recommendations on listed companies. The **home page** has **sections on news** – daily updates on the activities of the firm and

energy, water and the environment – **and the main events promoted by the companies belonging to the Group**; here the **water and energy macroareas** can be accessed, with **information on companies working** in either sector and links to the websites of companies; more precisely, **the websites of companies managing services** have, in addition to useful information, **"online points"** which enable clients to remotely carry out many commercial operations (for further information, go to the *Customer care* paragraph). Finally, specific sections have been set up for suppliers and those who are interested in working with the firm. Great importance is attached to **sustainability matters**; the news section is updated weekly with information on **events and articles** on topics such as smart grids, renewable cities, the energy network, climate change, nature preservation and so forth. In accordance with such importance, the A.R.I.A. (Acea Risorse e Impianti per l'Ambiente) company uses the website's section on energy to show **real time emissions of the RDF propelled Waste-to-Energy plant of San Vittore del Latium**; the company Acea Ato 2 has also been sharing the **main water parameters** online (www.aceaato2.it) since July 2013 (see specific box). During the year, right after the publication of the *Sustainability Report* of the Group, the **contents of the website's section on Sustainability was updated**, in addition to being enhanced with "sustainable news", in either English or Italian.

The **website's** section on **communication** activities shows the main initiatives of the company, the daily **press review**, the catalogue of the firm's magazine, **advertising campaigns**, a "**front page**" section and an **audio/video** section.

Finally, 2013 also saw the setting up of websites hosting interactive, **accessible versions** of the *Consolidated Financial Statement* and the *Sustainability Report* of the Group (as far as the 2012 financial period is concerned), in English and Italian.

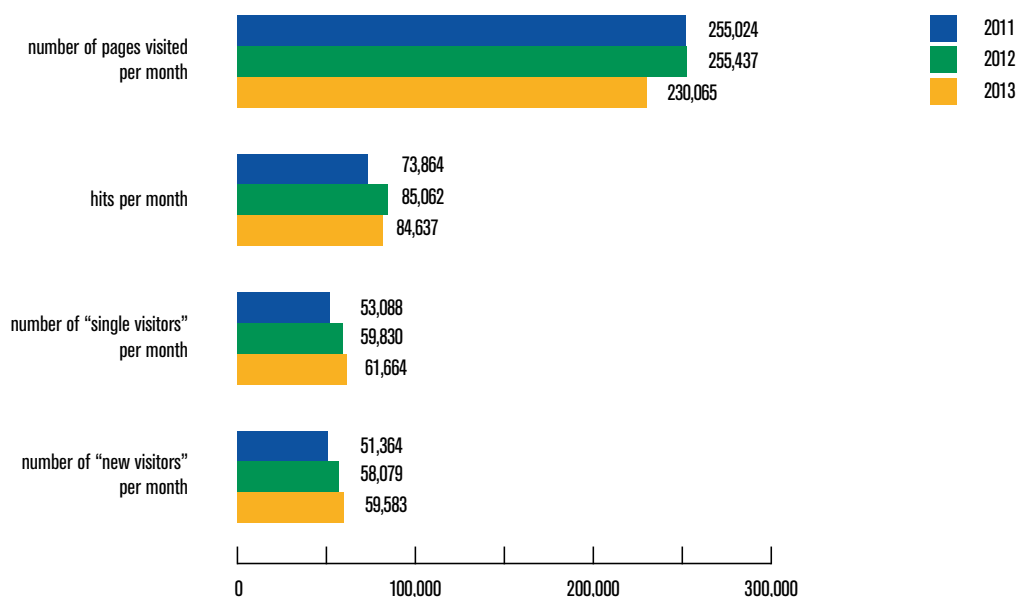
2013 saw the **firm's website** collect **1,015,647 total hits**, in line with 2012

data (1,020,749 hits), with a **monthly average** of **84,637 hits**, roughly 70% of which is composed of "new visitors" (see chart n. 22).

Among **the most visited pages**, apart from the home page (26,34%), there is a page with toll-free numbers and the timetables of the energy sector points (5,55%), the energy section (5,45%), the Acea SpA and water sections (4,06% each), the communication section (2,98%) and the supplier's area (2,95%).

Also **the websites of the companies' managing services** recorded a diverse increase in hits compared to 2012 (see *Customer care* paragraph).

CHART N. 22 - ACEA WEBSITE: MAIN INDICATORS (MONTHLY AVERAGES 2011-2013)



The **Press Agency** Unit, within the External Relations and Communication Function, controls relations with the press, organizing a daily **press review of the main national newspapers** and a few local ones, shared with colleagues on the firm's **intranet**. **External users** are also offered **up-to-date information**: Acea's website has a section where a specific press review on the water industry and a **selected portion of the main press review** are shown; when possible, the website also contains radio and television reports on the firm.

Remarks on the various services managed by the Group, **facilitated by newspapers**, are timely **dealt with by the Press Agency**, in close cooperation with the competent operational companies and the editorial staff of newspapers willing to publish the firm's replies. Other remarks are made by email, fax and direct phone calls and are promptly dealt with. Great importance was attached in 2013 to the electricity and gas sales service, and thanks to the Press Agency, representatives of Acea Energia appeared on national television and radio programmes to address problems concerning invoices. Interventions were often aimed at explaining the different ways to transmit the customer reading of meters, while solving complex problems of specific clients. The Press Agency issued several statements to explain the gradual solution to such problems, such as the new Acea Energia initiatives for clients. The

Al centro il cliente (Clients first) project, developed thanks to an agreement between the company in charge of electricity sales and customers' associations (see *Customer care* paragraph), was put under the spotlight.

Press releases highlight the **company's most important events**, and as far as the **economic-financial communication** is concerned, the Press Agency works **together with the Investor Relations Function** after the meetings of Boards of Directors or during the publication of Balance sheets and Reports. Data sheets, spread by the media or published on the institutional website, highlight specific activities of the Group and advertise the main conferences and cultural, sport, social, environmental events where Acea participates in as a sponsor, by organising exhibition spaces or supporting its own speakers. 2013 saw the Press Agency giving space to events focused on **water**, such as the ***Sense of Water*** initiative, a sensorial journey on water for children (see specific box), and spread information on investments in the water supply network, highlighting **service value**, in addition to raising awareness on the work made to emerge from the "arsenic" crisis, which takes place in a few municipalities in the volcanic areas of Latium, in accordance with community directives (see the *Quality in the water sector* paragraph). Precise information was also spread on **actions to enhance the service** in the neighborhoods of

the capital and supplied municipalities, including works, warning citizens on possible inefficiency. The **Isoqualità** project, which involved Acea Ato 2 and led to the online availability of the main parameters of supplied drinking water quality to all supplied municipalities (see box), was among the initiatives highlighted by the Press Agency. The signing of a memorandum of understanding between Acea Spa and Mekorot WC Ltd, aiming at enhancing cooperation and the agreed international exchange of knowledge and expertise in the field of water between the Italian and Israeli governments, was also highlighted by the end of the year. As far as the energy sector is concerned, the Acea Press Agency

wanted to highlight projects such as the **memorandum of understanding** between Acea Distribuzione, Fastweb and Telecom, signed to extend the **ultra broadband network** to the area of Roma Capitale (see specific box in paragraph *Quality in the energy area*) and **project RoMA**, which Acea **won in 2013** in the framework of the MIUR competition on *Smart cities, communities, social innovation*, aiming at supporting research in the field of urban, territorial, traffic, infrastructural safety, involving other companies and institutions (see chapter *Institutions and business*). Electric mobility and smart grids kept on being important topics for the firm, thanks to existing projects, and therefore received great attention during the year.

ACEA ATO 2: ISOQUALITÀ PROJECT, WATER QUALITY PARAMETERS ARE ONLINE

Thanks to the **Isoqualità project**, carried out with the transposition of Resolution 586/2012 of the Authority for electricity, gas and the water system (AEEGSI), Acea Ato 2 complies with the principle of transparency of invoice documents involving integrated water services, and shares information on water quality on its institutional website. Indeed, the **18 main drinking water parameters**, divided in geographic areas and updated at least every six months, have been online, in compliance with the rules set by the Authority, since July 2013, for everyone to read.

The project led to the identification of **192 “isoquality” areas** – areas with uniform water quality – which include the main aqueducts, local wells and water supply centres, and is closely correlated with constant monitoring activities, namely Acea Ato 2’s and Laboratorio’s analyses of samples collected from the numerous sampling sites in the infrastructure of the drinking water system.

ACEA AS TITLE SPONSOR OF SENSE OF WATER, A SENSORIAL JOURNEY ON WATER IN TECHNOTOWN

Acea’s **Sense of Water** was a free initiative for children aiming at developing their knowledge of water through their senses.

Thanks to a sophisticated **technological interaction system**, along with a video with sounds, water was touched, looked at and even listened to in Technotown, the technological-scientific game room of Villa Torlonia, in Rome, aimed at young people between the age of 8 and 17, from 17th December 2013 to 6th January 2014.

The young visitors of Sense of Water could make the walls of the Museum come to life by touching water, creating ripples, changing its surface, and producing sounds by immersing their hands in it.

Indeed, the technological interaction mechanism of the installation linked hand movements with the video and sounds, using water as a painter’s palette and a musical instrument, thus creating an audio/video concert.

In 2013, Acea confirmed its support to the city of Rome and the civil society, by working in the **fields of culture and sport**, against the trends set by the economic crisis, which actually led to a considerable reduction of investments in these two fields. Among the main initiatives, following last year’s work, one witnesses the sponsoring of the **Museum System of Roma Capitale** (with a more focused communication activity in the field, with folders, postcards and videos) and **Acea Virtus Roma** basketball team, which reached the finals of the national championship.

LA VITA È UN'EMOZIONE CHE HA BISOGNO DI CERTEZZA

Acea è il primo operatore nazionale nel settore idrico, il terzo per distribuzione di energia, il quinto nel settore ambientale.

Crediamo in uno sviluppo che sia anche progresso, per tutti. Anche per questa la cultura, l'arte, lo sport, possono contare su Acea.

Perché la vita è un'emozione che ha bisogno di certezze.

È il nostro lavoro, riempire ogni giorno di futuro.

Scopri il mondo Acea su www.acea.it e su www.aceenergia.it

ROMA CAPITALE
RCC ROMA
Zijena

A ROMA LA BELLEZZA HA UNA CERTEZZA IN PIÙ

During the year Acea participated as a partner in the **Movi&Co** initiative, a contest created for young aspiring filmmakers to make a video on topics chosen by the firms. Both videos made in 2013 for Acea received an award: the one entitled "**Troppe energie da sfogare**", based on Acea's sponsoring of the Rome Marathon, received the

miglior Videomaker emergente (best emerging Videomaker) award, while the one entitled "**Giochi di ombre**", focused on the public and artistic lighting of Rome, received the **Premio Speciale Commissione Nazionale Italiana per l'UNESCO** (Special Award of the Italian National Commission of UNESCO) award (see specific box).

MOVI&CO 2013: PREMIO SPECIALE COMMISSIONE NAZIONALE ITALIANA PER L'UNESCO AWARD TO THE "GIOCHI DI OMBRE" VIDEO, MADE FOR ACEA

Movi&co is a contest for young aspiring filmmakers aged between 18 and 35, in which Acea has been participating as a partner for a few years. The videomakers who participate in the contest are to follow the businesses belonging to the initiative (two for each firm), and have to work on topics chosen by them. Movi&co's latest editions focused on raising the public's and partner firms' awareness on sustainability matters. The value of this initiative was also acknowledged by the **Italian National Commission of UNESCO**, which decided to sponsor the contest by awarding every year, until the 2015 Expo, a **special prize to the best video on business social responsibility**. Indeed, the "**Giochi di ombre**" video, made for Acea, received this important prize at the **10th edition of Movi&Co**. A poetic, classy video, with refined photography harking back to the public and artistic lighting of Rome, inspired by a quote by Tolstoj: "*All the variety, all the charm, all the beauty of life is made up of light and shadow*".

The **prize for "best emerging videomaker"**, awarded to the "**Troppe energie da sfogare**" commercial spot, focused on the Rome Marathon, in which Acea has been participating as Title Sponsor for a few years, is just as important. This animation video sees energy giving a boost to a peculiar roadrunner. Both **videos are available** in the Communication section - Audio/Video area - Movi&Co of the www.acea.it website.

The **Editorial Contents Unit**, of External Relations and Communication, continued updating news on www.ambientandoci.it, the portal on the environment for **schools** in 2013. In addition to **updating news** at a local, national and international level, the initiatives promoted by Acea on the matters of clean energy sources, the safeguarding of water resources, environmental sustainability and **the various events aiming at**

promoting young talents and sustainability in schools were highlighted. The "**Ottobre al mare**" initiative, in which Acea participated as a partner, and which saw the participation of thousands of people in Ostia (see in depth box) was among the most important initiatives.

OTTOBRE AL MARE IN OSTIA

About two kilometres of Ostia's seafront, closed to the traffic from 7 a.m. to 9 p.m. of October's four Sundays, were given back to pedestrians and cyclists thanks to the **Ottobre al mare** event, organized by the 10th Municipality of Roma Capitale. The initiative, in which Acea participated as a partner, saw the organisation of numerous events, sport activities and shows which livened up open beaches and beach resorts. **Acea set up its own exhibition area, where interactive games for children focusing on energy and water saving** were organised. The presence of Acea underlines the importance of the project for the citizens of Ostia, in view of raising the public's awareness on the ecosustainable use of resources. Tailor-made guided tours to the Lipu (Lega italiana protezione uccelli, Italian League for Bird Protection) centre and the Cea (Centre for environmental education of the national natural reserve of the Roman coast) were organised.

The 6th edition of the international contest organised by Federculture, focused on *Creatività che cambia il mondo, un viaggio nei nostri territori* (Creativity changing the world, a journey through the territory) was among the events highlighted by the website; the initiative aimed at supporting young talents under the age of 35 in the field of contemporary art, both in Italy and abroad. The 20th edition of the **Volley Scuola – Trofeo Acea** tournament also took place, with the participation of thousands of students from the schools of Rome and its province. The photography exhibit

La mia Città, una palestra di responsabilizzazione (My City, a path to empowerment), which took place in the Cultural Centre Elsa Morante, was a homage to Monsignor Carrol-Abbing, founder of the **Città dei Ragazzi** (City of Children) of Rome: a journey through the 60 years of history of the Città dei Ragazzi, from the laying of the first brick to the present day, with photos, videos and workshops. Finally, the Centro Habitat Mediterraneo Lipu Ostia (Mediterranean Habitat Centre Lipu Ostia): a path through nature set up with Acea's help (see specific box).

CENTRO HABITAT MEDITERRANEO LIPU OSTIA: A PATH THROUGH NATURE SET UP WITH ACEA'S HELP

The Centro Habitat Mediterraneo Lipu, located at the Tiber's mouth and close to Ostia's seaplane base, is a 20 hectare nature centre which replaced an open-air dump, the same where Pier Paolo Pasolini was killed. The Centre, born in the mid-90s, was integrated with the Touristic Port of Rome by the public administration, playing an important role in environmental mitigation.

The Centro Habitat Mediterraneo, which is being further expanded, includes today the environmental restoring of a verdant coastal pond where 200 species of birds have already been censused, among which some rare species such as the red heron, present with the largest colony of Latium. Three large wooden cabins enable the watching of birds, while an open-air classroom and the Mario Pastore visit centre host cultural, awareness-raising and research initiatives, in addition to voluntary work initiatives by Lipu Ostia, such as the first aid of hundreds of wild animals every year. Finally, Acea's support led to the creation of an "equipped nature path", with explanatory boards and related structures, such as notice boards, bookstands and small roofings on natural and cultural emergencies scattered along the path. An interesting spot is the Tower of San Michele, designed by Michelangelo. Moreover, interactive installations aimed at children, such as models of animal and plant structures, insect houses, small walls and piles of dry stones for reptiles and large insects have been set up.

Finally, Acea allows a diverse public – from classes to workers in the sector – to **visit the plants** every year, relying on the availability and expertise of its workers: **569 people were received** in 2013, coming either from Italy or abroad.

EVENTS AND SOLIDARITY

The **economic value shared with the community** in 2013 amounted to 5.1 million euros⁶⁸ (4.7 million in 2012), most of which (3.9 million) was used to sponsor cultural, social and sports events. Allocations in the form of donations to social associations and non-profit organisations were doubled compared to the previous year, reaching 740 thousand euros.

Acea offers its services through "technical sponsoring", such as the supply of water and electricity or interventions in public lighting, **at highly attended** cultural and sports events, which liven up the city for the citizens' and visitors' sake. **2013's "technical sponsoring"** led to an **economic counter-value** of about **121,000 euros**.

2013 saw the **Acea Group sponsoring or supporting a lot of initiatives**, some of which have already been mentioned in the previous paragraph. A lot of events correlated to the Group's activities were focused on the **environment**, such as the **Festival dell'Energia (Energy Festival)** and the **Festival dell'Acqua (Water Festival)**, aimed at an audience of experts, or **Acqua spreco zero, Sense of water and Differenzio anche io**, aimed at a larger, younger audience. As far as **culture** is concerned, in 2013 Acea renewed the sponsorship of the **Museum System of Roma Capitale** and other events, concerts, conferences and initiatives involving citizens; **sport** was supported through events aimed at young people, the traditional Marathons of the Capital – with a lot of foreign participants – and the sponsorship of national sport teams (see specific boxes).

Every year the firm offers **the hall of its headquarters** in Rome to enable socially involved associations to organise **charity and fund raising initiatives**. 2013 saw the participation of:

- UNITALSI – the national association assisting the ill for free, by also taking them to international sanctuaries when needed – to sell olive plants so as to collect funds to support the Association's activities, on 6-7/03//2013;
- ROMAIL Onlus – the Italian association against leukaemia, lymphomas and myelomas which supports scientific research and home help – to sell Easter eggs, on 13.03.2013, and poinsettia plants, on 4.12.2013, so as to collect funds to support the Association's activities.

Moreover, Acea wanted to offer its help, during Christmas, to the **Fondazione Pangea Onlus** (non-profit Pangea Foundation), committed against **violence on women**. Therefore Acea bought 11.000 Christmas cards, using the entire amount of the previous years to buy a gift for its workers. This gesture of solidarity enabled Acea to contribute to two projects: **Piccoli Ospiti**, aimed at psychologically assisting abused women and children who witnessed violence at the anti-violence centres which participate in the initiative, and **Sportello Antiviolenza On Line**, aimed at creating an online service to help inform and assist abused women.

The following boxes show the **main events supported by Acea in 2013**, through sponsorship or donations, according to their aim and explaining the firm's involvement.

⁶⁸ This entry includes expenses for "fairs and conferences", but not "technical" sponsorships.

2013: ACEA FOR THE ENVIRONMENT AND YOUNG PEOPLE

- sponsor of the 2013 edition of the **Festival dell'Energia**, the main national event reuniting representatives of the fields of science, academic, institutions and economics, aimed at **developing a debate on energy matters**. The event took place in Rome on 24th and 25th May 2013 at the LUISS University (ALLEA Srl)
- sponsor of the 2nd edition of the **Festival dell'Acqua**, an event on the water sector, organised by Federutility, which included conferences, workshops, book launches, educational laboratories; the Festival dell'Acqua took place in l'Aquila from 6th to 11th October 2013 (Federutility)
- main sponsor of the **World Food Day 2013**, organised in Rome on 16th October 2013 (Promotion & Partner Srl)
- contribution to the creation of an equipped nature path at the **Centro Habitat Mediterraneo LIPU** of Ostia (*Associazione Centro Habitat Mediterraneo*, Mediterranean Habitat Centre Association)
- contribution to scientific research and the **production of sustainable biotechnologies**, in accordance with the main objectives of Europe 2020 (*Fondazione Diritti Genetico*, Genetic Rights Foundation)
- contribution to the **Gli acquedotti – le vie dell'acqua per la città di Roma** (Aqueducts – waterways in Rome) contest for the students of Roman schools for the 2013-2014 academic year (FAI school – delegation of Rome)
- sponsor of the **Acqua spreco zero** (No wasted water) initiative, an **environmental education project aimed at promoting water saving and the awareness in the use of natural resources** which took place in February and March 2013 in several Roman schools. The initiative belongs to the **Chiare, fresche e dolci acque** (Fresh, clear waters) project, promoted by the Educational and School Policies Department of the Municipality of Rome (Next Generation Act)
- title sponsor of the **Sense of water** exhibit, an educational initiative on water for children based on the senses. The exhibit took place in the technological-scientific game room of Villa Torlonia, in Rome, from 17th December 2013 to 6th January 2014 (Lyra Consulting Srl)
- contribution for the 65th anniversary of the foundation of the **Borgo ragazzi Don Bosco**, which took place on 6th December 2013. The *Borgo ragazzi Don Bosco* works in Rome and its province, attaching great importance to suburbs, to promote the educational and professional growth of young people (Borgo ragazzi Don Bosco)
- sponsor of the **I giovani e le nuove forme di comunicazione** (Young people and new forms of communication) conference, which took place on 18th April 2013 (Euro Media Graphic Service Srl)
- sponsor of the **Alice nella città** (Alice in the city) event, a festival which took place in the Auditorium Parco della Musica of Rome, between 8th and 17th November 2013, to promote cinema and film culture among the new generations (A.C. Playtown Roma)
- sponsor of **Movi&Co. 2013**, a contest with two goals, to fill the gap between the creativity of young participants aged between 18 and 35 and the labour market, and to enable firms to offer their image to the imagination of young video makers, who are to create commercials or videos. (Expo & Media Communication Srl)
- sponsor of the 2013 edition **Concorso internazionale Centro/Periferia** (Centre/Periphery international contest) for young artists, promoted by Federculture, the topic of which is the juxtaposition of the emerging realities of large centres and suburban realities, between marginalisation and involvement. (Federculture)
- sponsor of the 2013 edition of the **Torneo Volley Scuola-Trofeo Acea** (School Volleyball Tournament – Acea Trophy), for the **secondary schools of Rome and its province**, organised by Fipav Latium, with the participation of more than 150 teams of boys and girls, representing about 100 schools (Fipav Latium)
- sponsor of the **2013-2014 sport season of the Luiss amateur sports association**, with teams for different sports and about 1,500 university students, at the PalaLuiss (A.S. Luiss)

2013: ACEA FOR CULTURE AND SPORT

- Sponsor of the **Museum System of Roma Capitale**, composed of a group of museums and archaeological sites of the Capital, such as the Capitoline Museums, the Museum of Roman Civilization, Trajan's Market and the Museum of the Imperial Fora, the Museum of the Ara Pacis, the Galleria Comunale di Arte Moderna and so forth. Acea supported the initiatives brought forward in 2013 in the various sites for citizens and visitors (Zètema Progetto Cultura Srl)
- sponsor for the **2013-2014 theatrical season of the Ambra Jovinelli** of Rome (Officine culturali Srl)
- contribution to the organisation of the **Lezioni di Musica** (Music Lessons) **2013-2014** cycle, organized by the National Academy of Santa Cecilia and the **Fondazione Musica per Roma** (Music Foundation for Rome), in the Auditorium Parco della Musica of Rome (Fondazione Musica per Roma)
- sponsor of the 15th edition of **Uto Ughi per Roma** (Uto Ughi for Rome), a classic music festival open to the public, which Maestro Ughi has been dedicating to the city for 15 years. The concerts took place in different places, between 23rd September and 16th October 2013 (Meet Eventi Srl)
- sponsor of the **2013-2014 season of the Auditorium Conciliazione** of Rome (I Borghi Srl)
- sponsor of the 13th edition of the **International Film Festival of Rome**, which took place from 8th to 17th November in the Auditorium Parco della Musica of Rome (Fondazione Cinema per Roma)
- sponsor of the **2013-2014 Lezioni di Storia** (History Lessons) cycle, organized in the Auditorium Parco della Musica of Rome (Laterza Agorà Srl)
- contribution to the planting of the **Albero della Luce** (Tree of Light), an initiative promoted by the Embassy of Belize in Italy, in the framework of the "Light to Freedom" project. A technological Christmas tree was planted in the Foro Italico, with images, solidarity messages and wishes. (Embassy of Belize in Italy)
- sponsor of the **Acqua e Miti, suoni e luci delle Fontane di Roma** (Water and Myths, sounds and lights of Rome's fountains) initiative, aimed at enhancing the artistic, monumental fountains of the Capital with music, artistic lighting and cultural interventions, which took place on 5th October 2013 at the Fontana della Barcaccia, in Piazza di Spagna, and on 6th October at the Fontana dell'Acqua Paola, at the Gianicolo (GEI-Grandi Eventi Internazionali Srl)
- sponsor of the **Centrale Live - Roma - Foro Italico**, for summer events - theatre, music, comedy – which took place between June and September 2013 at the Foro Italico in Rome (Amedea Srl)
- sponsor of the 2013 events of the **Roman Carnival**, for citizens and tourists (Zètema Progetto Cultura Srl)
- sponsor of **Roma si mette in luce** (Rome under the spotlight) **2013**, which involved the city with peculiar lighting installations, sounds, shows and artistic performances between December 2013 and January 2014 (Laura Rossi International Srl)
- sponsor of **Gay Village 2013**; the event took place in Rome, at the Parco del Ninfeo in EUR, between June and September, with numerous initiatives, such as cinema, theatre, sport, concerts (Artmediamix Srl)
- sponsor of the **All'Ombra del Colosseo** (Under the shadow of the Coliseum) **2013** event, with comedy shows that took place in the Parco del Celio, between June and September 2013, in the framework of the Estate Romana (Roman Summer) (ACSD Castellum)
- title sponsor, for the 2013-2014 season, of the **Acea Roma basketball team** (Pallacanestro Virtus Srl)
- title sponsor of the 2013 edition of the traditional sport event **Maratona della città di Roma - Trofeo Acea** (Rome Marathon – Acea Trophy), the most attended Italian sport event, which took place on 23rd March starting from via dei Fori Imperiali (Atielle Roma Srl), and major sponsor of **Maratonina Roma-Ostia** (Ostia-Roma Marathon) which took place on 3rd March 2013 (Roma Ostia Srl)
- sponsor of the **RBS 6 Nations - Italy vs Ireland game**, of the Italian Rugby Federation, which took place in the Stadio Olimpico of Rome on 16th March 2013 (Federazione Italiana Rugby)
- title sponsor of the 2013-2014 sports season of the **Circolo Canottieri Aniene** (Aniene Rowers' Association) and communication initiatives (Circolo Canottieri Aniene)
- sponsor of the 2013-2014 sports season of the **Larus Nuoto Association**, which has 8 sports facilities on the Roman territory (ASD Larus Nuoto)
- sponsor of the **Concorso Ippico Internazionale - Piazza di Siena** (International Horse Show Competition – Piazza di Siena), in Rome, which took place between 23rd and 26th May 2013 (Infront Italy Srl)
- title sponsor of the 2013-2014 sport season of the **female hockey team** of the Libertas San Saba sports association (H. F. Libertas San Saba)
- sponsor of the 2013-2014 sport season of the **male hockey team** Hockey Roma (Hockey Club Roma)
- sponsor of the **Granfondo campagnolo 2013 of Rome**, a biking event for professionals and amateurs. The competition took place on 13th February 2013, with about 5,000 cyclists and a lot of foreign participants, on two different technical routes, from 53 to 105 km, starting from the historical centre to the Castelli Romani (Bicitaly Srl)
- sponsor of initiatives of the sports association for **Wheelchair Basketball**, for the 2013-2014 sport season (A.S.D. S.S. Latium Basket in carrozzina)
- sponsor of the 36th edition of the **cooperation marathon**, which took place in Rome on 21st April 2013 (Polisportiva Colli Aniene)

2013: ACEA FOR SOLIDARITY

- contribution to the restoring works of the **Centro Nazionale per i Bambini Scomparsi dell'Ospedale Forlanini** (National Centre for Disappeared Children of the Forlanini Hospital) of Rome (Telefono Azzurro)
- contribution to the 2013 information, prevention social campaign entitled **Deve vincere la vita** (Life is to Win) in the framework of the **Insieme in pista per vincere i disturbi del comportamento alimentare** (Together to beat eating disorders) project and for the publication of the **Accendi la luce che è in te. Il capolavoro sei tu** (Turn your inner light on, you are the masterpiece) photographic book (Donna Donna Onlus)
- contribution to the building of an aqueduct (two storage tanks and more than 5,000 metres of underground pipes) **to take water to all the houses of the SOS Tibetan Children's Village of Choglamsar**, in Ladakh, Northern India, which gives shelter to 1,500 children of Tibetan refugees. The project will last two years. (Italian Amala Onlus)
- sponsor of **Canto di Natale. 50° Gemelli Insieme** (Christmas Carol. 50th anniversary of the Gemelli Polyclinic), which took place at the Auditorium Parco della Musica of Rome on 18th December 2013 and broadcast on national television. The proceeds of the night, where several Italian musicians and show business personalities participated, were used to support the social activities of the **University Polyclinic Agostino Gemelli of Rome** (Associazione Azimut)
- sponsor of the **Gran Galà di Natale per l'Unicef** (Christmas Gran Gala for Unicef); A concert of the Quartet of modern sopranos and a gala dinner organised in the monumental complex of Santo Spirito in Sassia, on 17th December 2013, the proceeds of which were used for the humanitarian emergency in the Philippines (Meet Eventi Srl)
- contribution to the **Natale di Solidarietà** (Solidarity Christmas) initiative, an entertainment, music show which took place on 16th December 2013 in the Gran Teatro of Rome, aiming at raising funds for several associations (Alma Aurea Onlus)
- sponsor of the initiatives organised by the Jewish Community to recall the 70th anniversary of the capturing of Jews in Italy, among which an exhibit entitled **16 ottobre 1943. La razzia degli ebrei romani** (16th October 1943. The seizure of Roman Jews), which took place at the monumental complex of the Vittoriano, in Rome (Comunicare Organizzando Srl)
- sponsor of the **Festa dei popoli 2013** (Peoples' Day 2013) event, in cooperation with Rome's Caritas and several bodies and institutions, dedicated to the migrant communities of Italy (Congregazione dei Missionari di S. Carlo - Scalabriniani)
- contribution to the **organisation of the 11th Day for the elimination of architectural barriers 2013** with the sponsorship of the Presidency of the Republic, the aim of which is to promote the idea of a Total Quality aimed at reaching usage feasibility for all (Fiaba Onlus)
- contribution to the **Oggi offro io** (Today it's on me) campaign, aimed at supporting families in need (Amici della Caritas di Roma- Onlus)
- contribution to **medical research for multiple sclerosis** (AVASM Onlus)
- contribution to the organisation of a charity and **fund raising event for orphaned, HIV-positive and abandoned children** (The Children for Peace Onlus)

Even **outside the Capital**, in those areas where some of the operational companies belonging to the Group carried on working, Acea contributed in 2013 to the organisation of events and initiatives, especially in the municipalities of Allumiere, Mompeo and Salisano. Thanks to Acea, the project **Differenzio anche io – 2013** (I too recycle – 2013) continued, aiming at children in the primary schools of municipality Aprilia, but also families, teachers and citizens, to inform and raise awareness on environmental education and the correct disposal and recovery of waste. The 2013 edition of the **National University Championship** of the *Università degli Studi di Cassino e del Latium meridionale* was sponsored. The event took place in

Cassino between 16th and 25th May 2013, with the involvement of 52 universities, 25 sport disciplines and more than 6,000 athletes. Acea gave its contribution to the **under 20 track and field European Championship**, which took place in Rieti, from 17th to 21st July: a week of competitions, with more than 2,000 people. Finally, Acea sponsored Max Pezzali's **New Year's Eve Concert** in the municipality of Florence, the **Umbria Jazz Festival 2013**, one of the most important international jazz events which took place between 4th and 5th July in Perugia, and **Umbria Jazz Winter**, which took place in Orvieto between 20th December 2013 and 1st January 2014 with more than 100 concerts.

SUPPLIERS

CONSOLIDATED EXTERNAL CHARGES

2013 saw the **consolidated external charges** of the Group amounting to about **2.52 billion euros**, which shows an overall decrease compared to the 2.63 billion euros of 2012 (-4.2%). The main charges, amounting to about 2.04 billion euros (2.08 billion in 2012), involve the purchasing of **energy, gas and fuels**, followed by the costs of **services**, amounting to 311.8 million euros, which decreased by 21.4 million euros compared to the previous year.

Expenses for raw materials decreased too, from 2012's 62.4 million euros to **36.4 million euros** (-41.6%). The remaining entries (**concession fees, use of third-party assets** and other **management costs**) amount to a total of 140.6 million euros, showing a decrease compared to the 155.6 million euros of the previous cycle (-9.6%).

The rest of the chapter shows the **supplies of goods, services and works** managed by the Purchases and Logistics Corporate Function for several companies of the Group. 2013 saw such supplies reaching an overall value of **539 million euros**.

PURCHASING POLICIES

The **Purchases and Logistics Function of Acea SpA** aims at «defining **policies and goals**, as well as **managing the supply of goods, services and works** for the Group». The main goals are **rationalising the supply process** and **increasing its efficiency**, which are to be achieved through the enhancement of the technical competences of buyers, an approach based on the management of product categories, a close cooperation with the Companies/Functions of the Group which request supplies ("internal clients") and transparent relations with suppliers.

The **management of systems for the qualification** of supplies depends on the **Safety and Protection Function**, which ensures the total independence of the two activities.

The monitoring of the supply process is ensured by the **Planning, Control and Purchasing Marketing Units**, which proposes **purchasing strategies** for the Group to achieve its goals, ensures the **analysis of the needs** of the Companies/Functions and sets up the **Group's supplies plan**, monitors changes in the suppliers' market, trends in prices and technological innovations.

Materials are managed by the **Logistics Unit**. The **management of the central storage facility of the Group** was once again internalised starting from 1/1/2013; the change in the organisational structure, together with the new contract for the transportation of materials (with a carrier selected after a call for tenders) enabled, during the year, **a reduction by 30% of logistic costs** compared to 2012, (transportation costs decreased by 58%). The logistic activities of operational companies have been increasingly entrusted to the group leader, for them to be progressively managed.

RELATIONS WITH SUPPLIERS AND SUPPLIES MANAGEMENT

Paragraphs 1-7 of article 16 of the Code of Ethics of the Group⁶⁹ are focused on the relations between Acea and its suppliers, guiding the approach of the contracting authority, as well as contractors and subcontractors according to the principles of **honesty, transparency** and the **protection of competition**.

Moreover, the *Code of Ethics* is to be signed and acknowledged as a **fundamental prerequisite to the participation in the assignment procedures of works, goods and services**; in case of violation of the principles contained in the *Code*, upon investigation, **the exclusion from the procedures or the cancellation of the award** (art. 16, paragraphs 6 and 7).



Quality, environmental protection and safety in the supplying of goods, services and works are of paramount importance

CODE OF ETHICS OF THE GROUP (2012 ED.): PROTECTION OF ETHICAL ASPECTS IN SUPPLIES

Code of Ethics of the Acea Group, article 16, paragraph 2:

«Acea undertakes to promote, as part of its supply activities, respect for the protection and safety conditions of its employees, a focus on the quality of goods, services and performances, respect for the environment and the pursuit of energy savings, in accordance with the principles outlined in this Code of Ethics and the law. In supply contracts with at-risk countries, defined as such by recognised organisations, contractual clauses have been introduced that involve:

- self-certification by the supplier of the compliance with specific social obligations (i.e., measures that guarantee employees' respect for their fundamental rights, the principles of equal treatment and non-discrimination, protection against child labour);
- the possibility of carrying out monitoring activities at production units or operating sites of the supplier company in order to verify the fulfilment of these requisites».

The management of supplies takes place in **full compliance with the relevant regulatory framework**⁷⁰, resorting to calls for tender as the main way of identifying suppliers, basing assignment procedures on maximum transparency parameters and ensuring a centralised management of tenders.

⁶⁹ The *Code of Ethics of the Group* (2012 ed.) is available online on the company's website (Rules and values section).

⁷⁰ Legislative Decree n. 163 of 12th April 2006 – *Code of public contracts involving works, services and goods in accordance to community directives 2004/17/CE and 2004/18/CE*.

All tenders for the assignment of works, but also a lot of tenders to purchase goods and services, require **UNI EN ISO 9001 certification** as a prerequisite for participation; the **UNI EN ISO 14001 certification** is needed for certain product categories (such as waste management).

Operators who are interested in participating in tenders **can directly access, free of charge**, both the **qualification systems portal** and the one for **online tenders** – in the “Suppliers” section of the www.acea.it company website – and find the required forms and information. The telematic portal enabling the management of online tenders – the **Pleiade** platform – reproduces the operational procedure of traditional tenders: verification of the supporting documentation, acknowledgment of the compliance with prerequisites, opening of the financial bid and displaying of the ranking.

As far as tenders for works, goods and services in the **special fields of water and energy** are concerned, open or restricted/negotiated procedures among companies enrolled in qualification systems are in place, in compliance with the legislation⁷¹; as far as tenders for special fields for **amounts smaller than the community threshold** – set every two years according to the EC Regulation – are concerned, Acea implements **internal regulations** in accordance with the principles contained in the EC Treaty for the protection of competition. With regard to awards in ordinary fields, **public procedures**⁷² are brought about. Moreover, as far as tenders not falling under the *Code of Tenders* (tenders which are private or do not fall under community directives or legislation) are concerned, transparent selection procedures not regulated by Legislative Decree 163/2006 are carried out.

2013 saw the companies of the Acea Group **employing more than 2,000 firms in Italy**, leading to more than 4,000 contracts.

Acea started a program in 2013 aimed at **taking current management IT platforms (SAP-ERP) to a higher technological level**, in order to improve the management of supplies, while defining a **new single, consolidated model** (SAP ARES). The new SAP ARES model has already been implemented, although in an experimental way, in some companies of the Group.

The Purchases Function is also introducing two new IT tools to **enhance the efficiency of the planning of sales, together with the analysis and management of expenses** and the transmission, management and filing of documents. Moreover, the IT and procedural harmonisation between the flow of tenders involving works and those involving goods and services was completed, **thereby enhancing the company's supply chain**.

At the same time, the **Single Purchasing Portal** remains active for the management of contracts shared by all the companies of the Group (writing materials, trips and transfers, printers, toners and other consumables), thereby **leading to economic savings and simplifying purchasing procedures**, optimising time constraints.

71 Part III of the Code of Tenders – Legislative Decree n. 163/2006.

72 In accordance with Part II of the Code of Tenders.

73 The NAP GPP was recommended by the European Commission in 2003 and adopted by Italy with Law n. 296/2006 art. 1 paragraph 1126 and with the Ministerial Decree of 11th April 2008 (MATTM). The Ministry of Environment defines the “Minimum Environmental Criteria” (CAM), which are a national reference point as far as far as Green Public Procurement is concerned, and shall be used by the contracting authorities to enable the Action Plan on the Green Public Procurement to maximize economic and environmental benefits. The “GPP” (Green Public Procurement) is defined by the European Commission as «(...) *the approach by which Public Authorities integrate environmental criteria into all stages of their procurement process, thus encouraging the spread of environmental technologies and the development of environmentally sound products, by seeking and choosing outcomes and solutions that have the least possible impact on the environment throughout their whole life-period*».

74 The new supplier of writing materials has been under contract since February 2013.

THE GREEN PROCUREMENT

Acea set the goal of **enhancing the company's performance as far as the Green Procurement is concerned**. **Tender specifications** were included for certain products, such as binding standards, **norms involving the Minimum Environmental Criteria** (CAM), adopted thanks to a Decree of the Ministry of Environment, for the Safeguard of the Territory and the Sea, in accordance with the **Action Plan for the environmental sustainability of consumption in the Public Administration sector** (namely the National Action Plan on Green Public Procurement - **NAP GPP**)⁷³. 2013 saw the CAMs being introduced for a few **building management services** (cleaning services and materials for hygiene) and tenders for the **replacement of public lighting** of the city of Rome. CAMs also work as reference points in the field of electronic office equipment, such as **multi-function printers**, for which Acea joined the Consip Convention.

As far as the use of **writing materials** is concerned, roughly **30%** of the amount spent on them⁷⁴ (almost 187,000 euros per year) involved **environmentally friendly products**: for instance, **FSC** (Forest Stewardship Council) **certified** printing paper and cardboard folders were largely used. Moreover, **energy saving** is often a **fundamental criterion for tenders** involving works on plants and purchasing related machinery **to be awarded**: as is the case, for instance, with the purchases of electric pumps and transformers (Acea Ato 2) and (Acea Distribuzione). During the current shift to the new SAP-ARES management system, the **possibility of indicating the “sustainability” of products and services purchased** when filling out related requests was experimentally introduced, which will lead to **more careful reports on the Green Procurement** of companies belonging to the Group which centralized supply activities. Meanwhile, **Green Purchasing Guidelines** are being created and will be published on the intranet pages of the companies in order to supply internal clients with the information and criteria required to find “green” products, thereby supporting their purchasing.

THE SUPPLY OF GOODS, SERVICES AND WORKS

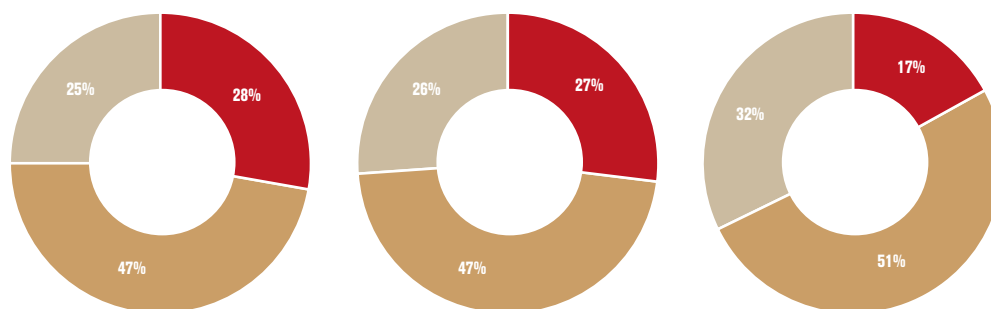
REFERENCE BOUNDARY

The information contained in the paragraph involves the following companies of the Group: Acea SpA, Acea Distribuzione, Acea Reti e Servizi Energetici, Ecogena, Acea Illuminazione Pubblica, Acea Ato 2, LaboratoRI, Acea Ato 5, Acea Gori Servizi, Sarnese Vesuviano, Crea Gestioni, Acea8cento, A.R.I.A. (Acea Risorse e Impianti per l'Ambiente – in which the EALL, Terni En.A, Enercombustibili, Ergo Ena companies have been incorporated), SAO and a portion of the supplies of Acea Energia holding, Acea Energia and Acea Produzione.

Tenders for **goods, services and works** were managed at a centralised level for the companies listed in the *Reference Boundary*. Contracts awarded during the year had an **overall economic countervalue** of about **539 million euros**⁷⁵ showing a **4% increase** compared to 2012's roughly 518 million euros, including an **increase in the cost of works** (roughly +27%) and **services** (roughly +14%) and a decrease in **tenders for goods** (-35%) (see table n. 23).

366 million euros were spent on **goods and services**, with a **4% decrease** compared to 2012's 382.4 million euros and a 68% incidence on the total amount of supplies (less than the previous year); **works expenses**, with a total amount of **172.6 million euros**, increased compared to last year, with incidence on supplies being roughly 32%.

CHART N. 23 – VALUE OF TENDERS AND INCIDENCE OF THE DIFFERENT ENTRIES ON THE TOTAL AMOUNT (2011-2013)



MILLIONS OF EUROS

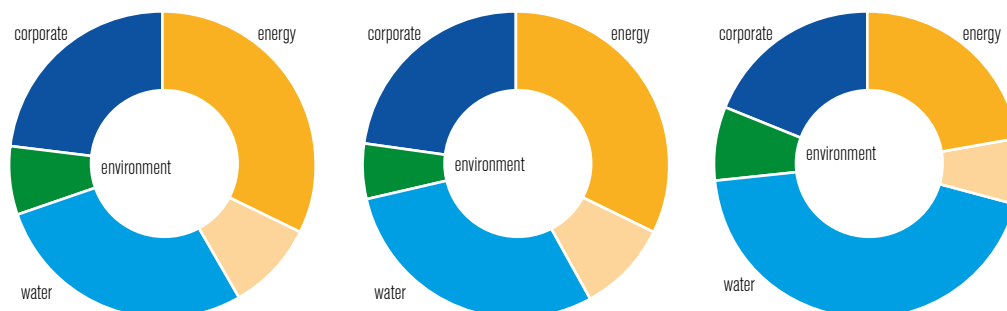
	2011	2012	2013
goods	137	141	92
services	225	241	274
works	120	136	173
total	482	518	539

NB: the values are rounded off to the nearest unit

The value of tenders can be divided into four macro areas: **energy** (networks and market), **water, environment** (Waste-to-Energy and environmental services) and **corporate**, and the **trend in the incidence on the total amount** (see table n. 24) shows a decrease in the incidence of the energy sector between 2013 and 2012, mainly due to the decrease in the area of networks and the increase in the incidence of water.

⁷⁵ The amount refers to tenders awarded during the year, without any distinction between period and investments, annual and multiannual contracts. The purchasing of commodities is mostly not taken into account.

CHART N. 24 – DIVISION OF SUPPLY EXPENSES INTO MACROAREAS (GOODS, SERVICES, WORKS) (2011-2013)



%	2011	2012	2013
energy (*)	41.8	42.0	29.2
of which: - energy networks	32.4	32.3	22.4
- energy generation and selling	9.4	9.7	6.8
water (**)	28.0	29.6	44.3
environment (***)	7.0	5.8	7.8
corporate (****)	23.0	22.6	18.7

(*) within the **energy** section, the **energy network** section includes companies dealing with distribution, public lighting and value added energy service: Acea Distribuzione, Acea Reti e Servizi Energetici, Ecogena and Acea Illuminazione Pubblica. The **energy generation and selling** section includes all the companies of the energy area dealing with the production and selling of energy to the captive and free markets (Acea Energia holding, Acea Energia, Acea Produzione) the supplies of which are partially managed by the Purchases and Logistics Function of Acea SpA.

(**) the **water** section includes the following companies: Acea Ato 2, Acea Ato 5, LaboratoRI; Acea Gori Servizi, Acea Ricerca e Perdite, Sarnese Vesuviano and Crea Gestioni..

(***) the **environment** section includes those companies which deal in the Waste-to-Energy and environmental services field of A.R.I.A. (in which the EALL, Terni En.A, Enercombustibili, Ergo Ena, SAO companies have been incorporated).

(****) the **corporate** section, in the frame work of Group services, includes the Acea SpA and Acea8cento companies.

In **absolute values**, a **decrease in the costs** for the supply of **goods and services** for the **networks section** (from roughly 120 to 71 million euros), **generation and selling** (from 48 to 35 million euros) and the **corporate section** (from 116 to 99 million) was experienced between 2012 and 2013, along with an **increase in the water** (from 69 to roughly 119 million euros) and **environment** (from roughly 28 to about 42 million euros) sectors.

As far as the awarding of **works** is concerned, **the amounts invested in the energy section** (from roughly 48 to 51 million euros in 2013) **remained basically unchanged**, while an **increase was experienced in the water section** (from roughly 84 to 120 million euros).

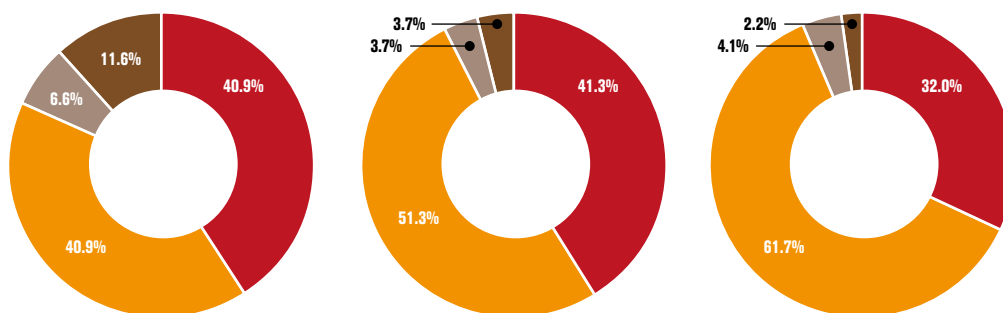
As far as **the purchasing of goods and services** is concerned, 2013 saw the **Purchases and Logistics Function** of the holding **following the applications** of the companies/Units of the Group, **processing 3,710 Purchase Orders** (91.6% of all Purchase Orders), 95.8% of which had entrusting amounts below the community threshold⁷⁶. **The first ten suppliers of goods and services** absorbed together roughly **35%** of the total value of awarded goods and services (about 128 million euros out of 366).

The Function also followed **340 Purchase Orders for the entrusting of works**. **The first ten suppliers of works** absorbed roughly **36%** of the total value of awarded works (roughly 62 million euros of the 173 destined).

Charts n. 25 and 26 show the **geographical distribution of amounts used** for the supply of **goods, services and works** in the last three years. 2013, compared to last year, saw a **decrease in the incidence of the purchasing of goods and services in northern Italy and abroad**, while the **South remained stable** and the **awarded amount in central Italy increased (226 million euros, 197 of which in Latium)**. Roughly **68.6%** of all **1,916 suppliers of goods and services**, namely **1,314 suppliers**, focused on **“central Italy”**, absorbing about **62%** of the overall value of the supply of goods and services. The trend in the **geographical distribution of amounts involving the entrusting of works** shows, between 2013 and 2012, a **decrease** in tenders in **southern Italy**, an **increase in the North** and a constant **value concentration of works entrusted in central Italy**, which amount to **82.6%** of the total (143 million euros out of 173), namely the area where most of the activities of operational companies take place. In **Latium**, tenders for works (137 million euros) absorb **roughly 79%** of the value of the entrusting of works, with 108 undertakers out of 134. Data collected during the Country’s economically complex moment **confirm significant positive effects on the local economy**.

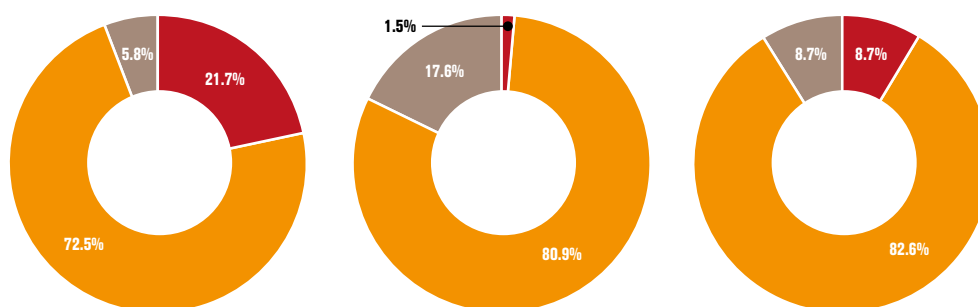
76 400,000 euros in 2013.

CHART N. 25 – GEOGRAPHICAL DISTRIBUTION OF AMOUNTS USED FOR THE SUPPLY OF GOODS AND SERVICES IN ITALY AND ABROAD (2011-2013)



AMOUNTS (MILLIONS OF EUROS)	2011	2012	2013
geographical area			
northern Italy	148	158	117
central Italy	148	196	226
southern Italy and islands	24	14	15
foreign countries	42	14	8
total	362	382	366

CHART N. 26 – GEOGRAPHICAL DISTRIBUTION OF THE AMOUNTS OF WORKS AWARDED IN ITALY (2011-2013)



AMOUNTS (MILLIONS OF EUROS)	2011	2012	2013
geographical area			
northern Italy	26	2	15
central Italy	87	110	143
southern Italy and islands	7	24	15
total	120	136	173

EVALUATION OF SUPPLIERS

Acea has regularly updated **qualification systems for suppliers of works, goods and services**. The **Safety and protection Function** coordinates and manages the **Qualification and Rating of Suppliers** of the Acea Group, regardless of the Purchases Function, which is to manage entrusting procedures when selecting the best offer. Such an organisational choice aims at ensuring **maximum transparency** in the management of relations with suppliers.

The Unit for the **Qualification and Rating of Suppliers**, in accordance with the principles of **competition and equal treatment**, establishes **qualification systems** of European significance⁷⁷ and **Registers of suppliers** for below-threshold tenders, **coordinating interfunctional groups for the setting of qualification prerequisites** and drafting **Qualification norms**.

77 In accordance with Art. 232 of Legislative Decree n. 163/2006 as amended.

The Safety and protection Function is also to guide the activity of the **Qualification commission** and to transmit provisions concerning the **admission to or the rejection/suspension from Registers** to suppliers. Finally, the Function coordinates the activity of the interfunctional group for the **setting up of the rating model**, and manages and **maintains the IT rating system**.

Qualification systems/Registers of suppliers are being progressively activated on **all existing categories of goods**: by 31st December 2013, **296 categories of goods** out of 343 were activated, **101 of which through the publication of Qualification systems of European significance**, and **195 for tenders involving amounts lower than the European average, through the publication of tailor-made Norms for the Register of suppliers below the**

community threshold. The percentage of active categories of goods went from 2012's 72% (which accounted for 228 active categories of goods out of 314) to roughly 86%.

Qualification systems in particular were created for most categories of goods for **works, supplies and services of strategic importance** because of their quantity, volume of expenditure or the **significance of the good/service for safety and/or environmental protection.**

Companies aiming at qualifying must **apply online for the qualification necessary of the chosen goods**, in accordance with the respective Norms, by accessing the **vendor management Portal** directly from Acea's institutional website (www.acea.it, Suppliers section).

Moral⁷⁸ and commodity-related prerequisites are needed to **subscribe to Registers.** **Standard criteria** – such as the moral prerequisites contained in the sector legislation – and **specific criteria**, which are different depending on the good, are to be met in order to subscribe to **Qualification systems of European significance.** The specific criteria are **defined by an interfunctional working group** which includes representatives of the Safety and protection, Purchases and Logistics, Management, Finance and Control Functions and the relevant operational Units, according to the type of good and the features of the tender.

Prerequisites are classified on the basis of the following criteria: **technical, environmental, safety, commercial, financial and contributory reliability; assessment of counterparty risks** (in accordance with the control principles contained in the *Organisation, management and control model, former Legislative Decree n. 231/01*).

Among the **technical, environmental and safety prerequisites** – which matter the most – there are:

- the Certification of the Management system for the company's quality – UNI EN ISO 9001:2008 (binding prerequisite for certain goods) – or, as far as non-certified suppliers are concerned, a QSA qualification checklist;
- the presence of qualifications/accreditations from third parties in the last 5 years;
- the lack of serious reported infringements involving the compliance with safety norms and any other obligation due to employment relationships in the last 5 years;
- the presence of an evaluation, selection and monitoring system for subcontractors/sub-suppliers, especially as far as the verification of their technical-professional suitability is concerned.

The FSC (Forest Stewardship Council) **Certification** was considered one of the **specific prerequisites for "Typography" goods** (supply of printed material and forms).

Moreover, the **availability to accept possible verification activities**, carried out at the administrative offices, of the **suitability and truthfulness of documents** is one of the prerequisites for the admission to Qualification systems of European significance, along with **other prerequisites** involving safety, quality, production processes and so forth, verified at operative offices or warehouses (see below for the

verification activities carried out in 2013). Further prerequisites can be added to the ones contained in the Qualification systems during procurement proceedings, according to the entity and importance of the contract awarded.

2,283 applications to Qualification systems and Registers of Acea were approved by **31st December 2013**, for a total of **1,006 economic operators**, with a **124% increase** compared to 2012's data (448 operators).

More specifically, economic operators are divided as follows:

- **214 operators** enrolled in the **Qualification system for water-related works;**
- **89 operators** enrolled in the **Qualification system for energy-related works;**
- **83 operators** enrolled in the remaining **Qualification systems for civil and water-related works;**
- **269 operators** enrolled in **Qualification systems for goods and services;**
- **110 operators** enrolled in the **Register of professionals;**
- **565 operators** enrolled in the **Norms for the Register of suppliers below the community threshold.**

2013 saw the continuation of a project for the enhancement of a **vendor rating** system, started last year, which will be added to the already existing qualification systems: the **vendor rating model** was defined, and the related **Implementing regulation**, also for electric, water-related, electromechanical works; the **QAS** (*Qualità – Ambiente e Sicurezza*, Quality – Environment and Safety) **inspective activity** followed in the framework of the same project, aimed at rating suppliers: 2013 saw **70 inspections** being carried out, involving economic operators that have been awarded tenders with Acea (see **specific box**).

During the year a database was created to collect the rating elements contained in the model, which will enable, in 2014, the implementation of the entire vendor rating system as far as water-related, electric and electro-mechanic works are concerned.

The Safety and protection Function is already pinpointing additional categories of goods and/or services where to carry out the QAS inspection activity, starting the development of a vendor rating model for suppliers of goods and services.

The Unit for the Qualification and Rating of Suppliers – together with the Unit for corporate and sustainability social responsibility – continued to function in the **Sustainable Supply Chain Working Group**, **in the framework of the Global Compact Network Italia** – which Acea has joined in 2007 – to share and enhance a monitoring instrument for the sustainability performances of companies belonging to the supply chains of the Network's members, enabling suppliers to adopt best practices; in particular, **Acea formally joined the pilot project** and is one of its supporting partners. (see **specific box in Corporate Identity, Strategy and sustainability**, paragraph *The sharing of corporate social responsibility matters*).

78 In accordance with Art. 38 of Legislative Decree n. 163/2006 as amended. Two typical elements of the "moral" prerequisites contained in the norms are particularly important as far as the safeguard of workers is concerned, namely the DURC (*Documento Unico di Regolarità Contributiva, Single Document for the Regular Payment of Contributions*) certified regular payment of taxes and contributions to workers, and the compliance with safety norms and any other obligation due to employment relationships. Any irregularities concerning the above mentioned prerequisites leads to the exclusion from the tender.

79 Note that an operator can be enrolled in more qualification Systems/Registers – therefore the total number of operators in 2013 (1,006) is smaller than the sum of operators enrolled in single Registers (1,330) – and that these data do not take temporary suspension proceedings into account

THE VENDOR RATING SYSTEM TOGETHER WITH QUALIFICATION SYSTEMS AND REGISTERS: THEIR DEVELOPMENT UP TO 2013

2013 saw the Safety and protection Function working to enhance and implement the vendor rating system that was developed last year. The **vendor rating model** and its **Implementation Regulation** for electric, water-related and electro-mechanic works was defined. The Regulation confirms the initial structure of the rating model – based on an “**inward rating**” (*rating di ingresso*, or **R.I.**) and a “**field rating**” (*rating sul campo*, or **R.C.**) – but **further evaluation areas** were added. The **R.I. rating** – **given to all suppliers enrolled in the Register** and composed of the rating of the **QAS inspection visit** and the evaluation of the financial, economic stability of the operator – shall be modified according to the implementation of **penalties** (pinpointed by the Purchases Function and/or the company managing the contract in the pre-contractual stage). The **R.C. rating** – only for suppliers who have been awarded a tender – will be based on data collected during **inspections in construction sites** and the **Project Management’s** ranking, also taking **penalties** into account.

The QAS inspection activity was carried out during the year by teams of the Safety and protection Function, namely representatives of the Unit for the Qualification and Rating of Suppliers and the Unit for the Quality, Safety and protection System of the workplace. **There were 70 QAS inspections in 2013**, which involved 40 suppliers enrolled in the Register for water-related and electro-mechanic works; 21 suppliers enrolled in the Register for electric works; 4 suppliers enrolled in both Registers, 2 suppliers of services and 3 suppliers of goods. The inspection activity consisted of 100 visits from June 2012 to December 2013, focused on economic operators that had been awarded tenders with Acea; **27% of suppliers proved “partially suitable”** as far as the QAS inspective activity was concerned, which led to the need of **taking corrective measures** that will be verified during the following inspection. Moreover, **3 suppliers proved “critical”**: they were asked to take corrective measures, and a monitoring visit was planned for the following 12 months. Finally, **1 supplier proved “unsuitable”**, and was therefore suspended from its Register. Data collected during visits were managed and filed in a previously created database.

During the year activities of the operational companies were continued, with positive effects on the supply chain, namely a better monitoring of quality and safety. In accordance with the **Protocol on water-related tenders**, signed in 2012 by **Acea Ato 2** together with Acea SpA, the Trade Union Confederations and Trade Federations to start a constant enhancement process of water-related works and services, monitoring and control activities were started, and the Joint Committee gathered to analyse a few matters

(see specific box). Moreover, Acea Ato 2 **started inspection activities in construction sites** to implement the vendor rating model outlined by the Safety and protection Function of Acea SpA. **Acea Energia** continued to implement the procedures introduced last year in the Agency agreement regulating the relations between Acea Energia and the network of sales agents as far as the **agents in the quality of sales service** is concerned, to further safeguard clients (see in-depth box).

ACEA ATO 2: QUALITY OF WORK AND SAFETY ON CONSTRUCTION SITES IN THE PROTOCOL ON WATER-RELATED TENDERS

In accordance with the commitments made between Acea SpA, Acea Ato 2, the CGIL, CISL, UIL Trade Union Confederations, and the Filctem, Flaei, Uilcem, Fillea, Filca and Feneal Federations, with the signing in June 2012 of the **Protocol on water-related tenders**, 2013 saw the beginning of **monitoring, control initiatives** and other actions **aimed at verifying the regularity, quality and safety of works and services as far as water-related tenders are concerned**.

The **Joint Committee**, created by the Protocol, **gathered upon union request** to discuss **trends in tenders** – focusing on the prevention and safeguard of safety and the compliance with contractual obligations, also through the analysis and delivery of specific documents on the discussed matters – **and further analyse the vendor rating model**, together with Qualification Systems, outlined by the Protection and Safeguard Function of Acea SpA, and currently implemented by the Group. The model was shown to the Trade Union Confederations, also before Acea’s final approval. Trade Union Confederations appreciated its contents, hoping it would be approved.

ACEA ENERGIA AND SALES AGENTS: TRAINING AND SERVICES MONITORING

Acea Energia, the Group's company which manages **electricity and gas sales**, uses Agencies for door to door and/or tele-selling sales in segments of the "home" and "micro business" free market. In 2013 **procedures** involving the **quality of the agents' sales service** which had been introduced last year in the Agency mandate controlling relations between Acea Energia and the sales agents network continued.

Such procedures aim at safeguarding clients and preventing possible irregular commercial practices. The **Agency mandate** includes the **mandatory training of representatives** who work on behalf of Acea, for them to provide clients with appropriate information and to impose **financial penalties** in the presence of irregular commercial practices.

2013 saw Acea Energia training 464 vendors, for a total amount of 284 hours, on the legislation of the Sector authority, the Code of Commercial Conduct and available products. A written test (questionnaire) will have to be taken at the end of the course which, if passed, will enable representatives to work for Acea Energia and to have an identification card.

The company, which receives the notifications of clients, also activated strict **internal monitoring procedures** aimed at **enhancing the services of representatives** (see *Clients and community* chapter, *Customer care* paragraph). In the presence of irregular commercial practices, the **Mandate contemplates the imposition of financial penalties** in the sum of at least 1,000 euros, plus the non-payment, during the current month, of remunerations linked to the commercial nature of purchases: in 2013, **against 87,000 new acquired supplies** (electricity and gas), roughly **1,065 notifications** received by clients were analysed with an inquiry, and **13 irregular practices** (for a total amount of 17,000 euros) **were sanctioned**, showing a decrease compared to 2012, where 27 irregular practices had been recorded.

As far as the **companies of the Environment area** (Waste-to-Energy and environmental services) are concerned, in 2013 verification activities continued, focusing on the respect for the environmental and safety legislation; **audit activities were carried out in those companies that provided the main technological components** used in the revamping works on the Terni Waste-to-Energy plant (A.R.I.A.) and the Orvieto plant (SAO). Such activities involved the **factory inspection**, the **verification of building standards and project specifications**. As far as the revamping works on line 1 of the Waste-to-Energy plant of San Vittore del Lazio (A.R.I.A.) and on Orvieto, a Qualification system was created, together with the Safety and protection function, to choose the firms that will have to carry out the works.

Acea Distribuzione has been implementing the **vendor rating** in the field of **energy-related works** since 2008 works. The **evaluation system** for the

work of enterprises **focuses on quality, safety, environmental parameters** and includes inspections in construction sites and the creation of **merit rankings based on the contractors' reputation** (see in-depth box). Penalties can be imposed, and the contractor's activity can be suspended: last year 7 construction sites **out of 902** were suspended because of "non-conformity". The implementation of the vendor rating is a **constant incentive for contractors to improve** as far as the involved parameters are involved, in 2013 there was a further **increase in the average reputational index**, which went from an average value of **91.65** in 2012 to **97.44** in 2013 (see in-depth box). **Companies supplying works**, in accordance with Acea Distribuzione's adoption of the Security, Environment, Energy and Quality Integrated Management System, **are to join the Integrated System Policy as far as health and safety in the workplace and the safeguard of the environment are concerned**.

QUALITY AND SAFETY: THE VENDOR RATING SYSTEM FOR ENERGY-RELATED WORKS

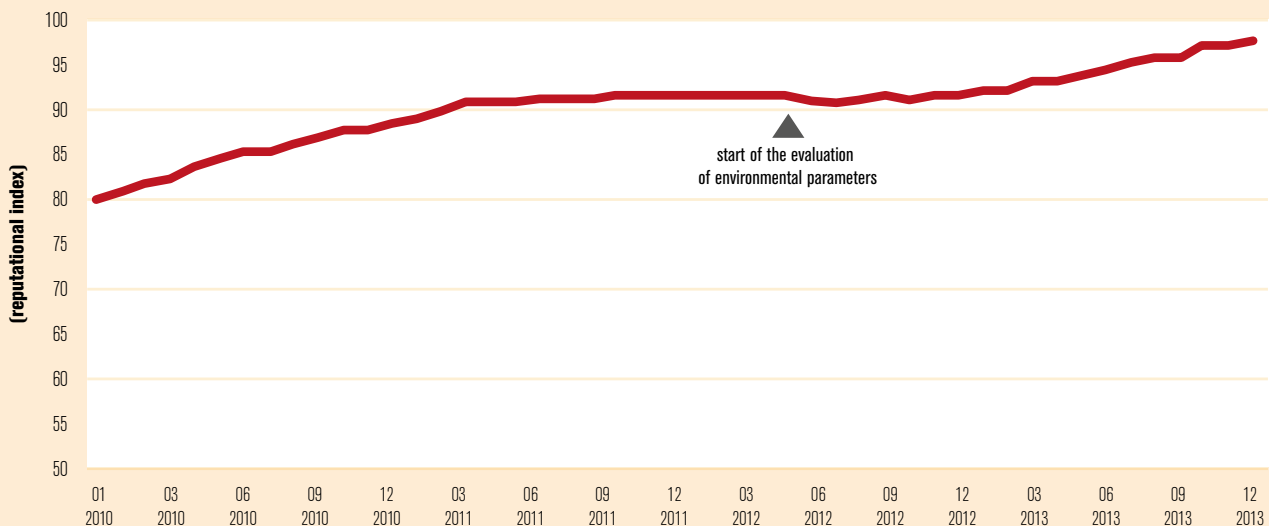
The evaluation method for the performances of contractors of energy-related works, created together with the *Center of Advanced Procurement* of the "Tor Vergata" University of Rome, **processes collected information on the basis of 142 parameters involving quality, safety and the environment**, after inspections in construction sites, and translates them into a "reputation indicator" (IR).

The IR shall be used, together with other parameters referring to the entire cycle of awarding and executing works, **to determine the overall rating of firms enrolled in the qualification system**, with the aim of promoting organisational and operational enhancement initiatives by these same companies.

The 2010-2013 four year period saw the "Inspection and Verification" Unit of Acea Distribuzione carry out roughly 3,630 inspections. The average annual reputation indicator for companies went from 79.9 in January 2010 to 97.44 in December 2013, with a significant improvement in the trend. The system proved capable of increasing the reliability of operators, ensuring very good performance parameters and leading to positive effects on the supply chain.

The reputational index, namely the ranking that the company gives to its supplier over time, can be used together with the proposed reduction to evaluate offers on the basis of parameters other than price.

The chart shows the annual progress of the average evaluation of all companies from January 2010 to December 2013, taking into account that there was an average of 40 in the monthly index at the beginning of the project, in 2008.



LITIGATION WITH SUPPLIERS

The litigation between the company and its suppliers revolves around two aspects: **notifications for the non-payment for the supply of goods, works and services and judgements as far as tenders are concerned.**

As far as the first aspect is concerned, **11 cases** were recorded in 2013, mostly notifications concerning invoices which had not been paid for formal reasons and were later **settled**.

As far as **litigations on tenders** are concerned, **19 cases** were opened in 2013, including those opened in the previous years and net of 27 defined cases in 2013, thereby increasing the number of pending disputes to **91** by 30/12/2013. Of these, 29 appealed to the Regional Administrative Court for the awarding of contracts, while the other 62 judgements were made by ordinary courts and involved the inscription of reserves by contractors, the termination of agreements, and so forth.

PERSONNEL

ACEA'S PERSONNEL

The Group was composed of 6,304 individuals by 31.12.2013. Compared to 2012 (7,257 employees), a decrease of roughly 13% was recorded, mainly caused by the termination of the contract with Aguazul Bogotà in the water area. Slight decreases in the workforce of the energy business and corporate areas were recorded, while the environment area experienced a slight increase.

The focus on professional development and the respect of our employees is the main goal of the company.

The rights and safety of workers will be guaranteed, thereby creating a good working environment.

TABLE N. 38 – EVOLUTION OF THE GROUP'S EMPLOYEES IN ACCORDANCE WITH MACROAREAS (2011-2013) (End of the period quantities for percentage of consolidation)

BUSINESS AREA	2011 (NUMBER OF EMPLOYEES)	2012 (NUMBER OF EMPLOYEES)	2013 (NUMBER OF EMPLOYEES)
Water	4,561 of which	4,442 of which	3,522 of which
Latium - Campania	2,189	2,119	2,081
Tuscany - Umbria	853	869	877
foreign countries and LaboratoRI	1,519	1,454	564
Energy	1,796 of which	1,728 of which	1,711 of which
networks	1,465	1,410	1,385
generation and selling	331	317	326
Environment	202	193	216
Corporate (Acea SpA+Acea8cento)	718	895	855
total	7,277	7,257	6,304

TABLE N. 39 – GEOGRAPHICAL LOCATION OF EMPLOYEES (2012-2013) (*)

LOCATION	2012		2013	
	N.	%	N.	%
centre-north (Tuscany-Umbria)	1,046	14.4	1,066	16.9
centre-south (Latium-Campania-Apulia)	4,913	67.7	4,834	76.7
foreign countries	1,298	17.9	404	6.4

(*) according to the registered office of the firm they are employed by.

COMPOSITION AND TURNOVER

REFERENCE BOUNDARY

Information and data shown in *Composition and turnover* involve: Acea SpA, Acea Distribuzione, Acea Illuminazione Pubblica, Acea Reti e Servizi Energetici, Acea Energia holding, Acea Energia, Acea Produzione, Acea8cento, Acea Ato 2, Acea Ato 5, LaboratoRI, Acea Gori Servizi Scarl, Crea Gestioni Srl, Gesesa, Sogea, Lunigiana, Solemme, A.R.I.A, SAO, Aquaser.

The Personnel and Organisation Function of Acea SpA takes care, both in service and on behalf of the controlled firms, of the administrative management of the employees; investee companies entrust such management to the group leader or other companies on the market, so as to enhance the process and rationalise costs. The examined three-year period saw the overall amount of resources used by the Group's companies progressively decrease, especially after the decrease in the number of employees. However, no professional category remains as important in the overall

structure of the workforce.

Indeed, modifications in the composition of the workforce, apart from being determined by the constant need for staff turnover, result from **modifications in professional categories and carrier advancements of pre-existing personnel in the company.**

The incidence of **female personnel in the overall workforce**, in accordance with the tendency recorded in the previous two-year period, **shows a slight increase**, reaching **23.2%** (22.8% in 2012 and 21.3% in 2011); however, the prevalence of male personnel in the Group can be

explained by the technical-operational nature of the managed businesses, which leads to less flexibility as far as the gender structure is concerned: in Italy today, professional, technical positions are predominantly held by men (see table n. 40).

TABLE N. 40 – ACEA EMPLOYEES: COMPOSITION OF THE PERSONNEL (2011-2013)

(NUMBER)	2011				2012				2013			
	MEN	WOMEN	TOTAL	INCIDENCE %	MEN	WOMEN	TOTAL	INCIDENCE %	MEN	WOMEN	TOTAL	INCIDENCE %
directors	95	20	115	2.2	83	19	102	2.1	81	19	100	2.1
managers	265	100	365	7.1	269	104	373	7.8	272	110	382	8.0
employees	1,918	966	2,884	56.4	1,910	972	2,882	59.9	1,894	972	2,866	60.0
workers	1,746	4	1,750	34.2	1,450	5	1,455	30.2	1,423	5	1,428	29.9
total	4,024	1,090	5,114	100.0	3,712	1,100	4,812	100.0	3,670	1,106	4,776	100

NB: The total workforce shown in the table differs, as far as the reporting boundary is concerned, from the datum of the consolidation boundary (see table n. 38); the workforce has been decreasing since 2012 also because of the exclusion from the reporting boundary of Umbra Acque, due to its abandoning of the administrative management of Acea SpA (341 units).

In 2013 **new employees** decreased compared to 2012; **the 117 entries** are determined by: 49 new workers from companies of the Group (43 within Acea Ato 2 and 6 towards Acea Energia), 35 stabilisations of pre-existing positions in the Group with atypical contracts, 26 hirings from the external labour market, 15 of which with open-ended contracts (2 people belong to protected categories), 9 fixed-term contracts, 2 apprenticeships and 7 hirings because of litigations.

The Companies that were affected the most by inward personnel flows are Acea Ato 2 SpA with 51 entries, Acea Energia with 21 entries, Acea8cento with 12 entries, Acea SpA and Acea Ato 5 both with 8 entries.

In 2013 54 people with open-ended contracts were hired, 27 of which were stabilised, while 16 individuals were hired with fixed-term contracts.

During the year the **company's outward flow of personnel** slightly grew compared to 2012, **reaching 153 people** (see table n. 41); **91 employees** (26 from Acea Ato 5, 24 from Acea Distribuzione, 23 from Acea Ato 2, 10 from Acea SpA, 7 from Acea Energia and 1 from Acea Produzione) **were redundant**, and **plans for the facilitated voluntary resignation** of workers involved **14 workers** who decided to willingly terminate their working contract with the firm.

TABLE N. 41 – ACEA EMPLOYEES: ENTERING AND LEAVING PERSONNEL (2011-2013)

(NUMBER)	2011			2012			2013		
	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL
ENTRIES									
with open-ended contracts	57	17	74	28	45	73	33	21	54
with fixed-term contracts	9	6	15	9	18	27	11	5	16
with reintegration contracts	0	1	1	0	0	0	0	0	0
with professional apprenticeship contracts	1	1	2	0	2	2	1	3	4
acquiring of a firm's branch	0	0	0	66	19	85	32	11	43
total	67	25	92	103	84	187	77	40	117
(of which) acquiring of personnel by Public Bodies	2	0	2	0	0	0	5	1	6
EXITS (*)									
redundancy	102	6	108	53	11	64	76	15	91
income-deprived voluntary early retirements	45	2	47	26	6	32	12	2	14
retirements	4	0	4	2	0	2	0	0	0
layoffs	3	1	4	0	1	1	1	0	1
joint-venture demerger between Acea and GdF Suez Energia Italia SpA	103	37	140	0	0	0	0	0	0
other reasons	52	18	70	43	6	49	30	17	47
total	309	64	373	124	24	148	119	34	153

(*) among "exits", the "redundancy" entry shows a form of **subsidized, voluntary** retirement, agreed by trade unions, that the firm proposes to employees who are about to retire, after having carried out a preliminary organisational analysis aiming at limiting the social impact of the retiring process: redundant employees are found within organisational areas with exceeding personnel, among those with the personal/contributory prerequisites required to retire within three years from the termination of the employment relationship; the "income-deprived voluntary early retirements" entry shows the subsidized, voluntary termination of the employment contract; the "other reasons" entry includes exits due to: **contract expiry (26 in 2013), resignations (10 in 2013), death (7 in 2013), just cause (2 in 2013), health problems (1 in 2013) and litigation (1 in 2013).**

The **duration of the employment relationship of personnel exiting** from the Group shows an overall **stability of jobs in the company**. Indeed, 2013 saw 64.7% of resources being used by the Group for a maximum of 20 years and 34.6% for a timespan between 20 and 40 years.

The data of companies working in the energy chain are aligned with the Group's data: 55.5% of exiting personnel worked in the firm for a maximum of 20 years, while 42.2% worked between 20 and 40 years.

TABLE N. 42- ACEA EMPLOYEES: DURATION OF THE EMPLOYMENT RELATIONSHIP (2013)

DURATION OF THE EMPLOYMENT RELATIONSHIP	EXITING PERSONNEL IN 2013		
	MEN	WOMEN	TOTAL
≤ 20 years old	79	20	99
> 20 years old ≤ 30 years old	12	4	16
> 30 years old and ≤ 40 years old	28	9	37
> 40 years old and ≤ 50 years old	0	1	1
total	119	34	153

TABLE N. 43 - COMPANIES OF THE ENERGY CHAIN: DURATION OF THE EMPLOYMENT RELATIONSHIP (2013)

DURATION OF THE EMPLOYMENT RELATIONSHIP	EXITING PERSONNEL IN 2013		
	MEN	WOMEN	TOTAL
≤ 20 years old	20	5	25
> 20 years old ≤ 30 years old	5	1	6
> 30 years old and ≤ 40 years old	10	3	13
> 40 years old and ≤ 50 years old	0	1	1
total	35	10	45

NB: the data refer, in accordance with the GRI Sector protocol (commentary on LA2), to employees of the Group working at the operational companies of the energy chain, mostly in Latium.

Almost all employees are employed in Acea with **stable contractual agreements: 99.5% of the workforce was hired with open-ended contracts** (99.1% in 2012). Personnel employed with professional apprenticeship contracts decreased, in accordance with the end of the multiannual training plan for the integration of apprentices, while fixed-term contracts, differently from 2012, showed a decrease (see table n. 44).

TABLE N. 44 - ACEA EMPLOYEES: CONTRACT TYPE (2011-2013)

(NUMBER)	2011			2012			2013		
	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL
personnel with open-ended contracts	3,970	1,049	5,019	3,695	1,076	4,771	3,659	1,095	4,754
<i>(of which) part-time personnel</i>	21	85	106	23	86	109	23	100	123
personnel with fixed-term contracts	14	5	19	11	18	29	9	6	15
personnel with professional apprenticeship contracts	40	36	76	6	6	12	2	5	7
total	4,024	1,090	5,114	3,712	1,100	4,812	3,670	1,106	4,776

The **turnover rate of 5.7%, decreased**, which confirms the trend of the previous two-year period; the exiting personnel rate remained stable compared to 2012, while a decrease was experienced in the entering personnel rate (see table n. 45).

TABLE N. 45 - TURNOVER RATES, ENTRIES AND EXITS (2011-2013)

TURNOVER RATE			ENTRY RATE			EXIT RATE		
2011	2012	2013	2011	2012	2013	2011	2012	2013
8.9%	7.0%	5.7%	1.8%	3.9%	2.4%	7.3%	3.1%	3.2%

NB: the turnover rate is the result of the sum of the year's hirings and terminations compared to the workforce by the end of the year. The companies to which the data refer are mainly found in the territory of Latium; following are the 2013 data according to gender: women's turnover rate 1.5%, men's turnover rate 4.2%; women's entry rate 0.8%, men's entry rate 1.6%; women's exit rate 0.7%, men's exit rate 2.5%.

In 2013 the company's **average age and length of service** of employees remained unvaried as in the previous year (see tables n. 46 e 47); **67.5% of employees are aged between 36 and 55**, and **14.9% are 35 or less** (see table n. 48).

TABLE N. 46 – ACEA EMPLOYEES: AVERAGE AGE OF THE PERSONNEL (2011-2013)

(YEARS)	2011			2012			2013		
	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL
company's average age	46.2	42.8	45.5	46.9	43.1	46.0	47.5	43.8	46.6
average age of directors	50.2	49.3	50.1	51.3	50.0	51.1	51.7	49.9	51.3
average age of managers	47.4	45.8	47.0	48.4	46.2	47.8	49.2	46.8	48.5
average age of employees	46.2	42.4	44.9	46.9	42.6	45.4	47.5	43.3	46.0
average age of workers	45.7	52.0	45.8	46.3	54.1	46.4	47.0	55.1	47.0

TABELLA N. 47 – ACEA EMPLOYEES: AVERAGE LENGTH OF SERVICE OF THE PERSONNEL (2011-2013)

(YEARS)	2011			2012			2013		
	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL
company's average length of service	13.5	11.8	13.2	15.0	12.3	14.4	15.6	12.8	15.0
average length of service of directors	13.9	19.1	14.8	16.2	19.5	16.8	16.7	19.0	17.1
average length of service of managers	15.1	14.3	14.9	16.6	15.0	16.1	17.5	15.8	17.0
average length of service of employees	14.9	11.4	13.7	15.9	11.8	14.5	16.5	12.3	15.1
average length of service of workers	11.7	15.7	11.8	13.5	19.8	13.5	14.1	20.8	14.1

TABLE N. 48 – ACEA EMPLOYEES: AGE GROUPS (2013)

	MEN	WOMEN	TOTAL
≤ 25 years old	11	10	21
> 25 years old and ≤ 30 years old	127	83	210
> 30 years old and ≤ 35 years old	301	181	482
> 35 years old and ≤ 40 years old	441	157	598
> 40 years old and ≤ 45 years old	619	199	818
> 45 years old and ≤ 50 years old	747	191	938
> 50 years old and ≤ 55 years old	702	169	871
> 55 years old and ≤ 60 years old	634	106	740
> 61 years old	88	10	98
total	3,670	1,106	4,776

Regarding the **level of education of employees**, in 2013 the incidence of **people with degrees or diplomas** in the overall workforce increased, respectively, to **16.7%** and **50.9%** (15.7% and 47.8% in 2012) (see table n. 49); the incidence of employees with other educational qualifications grew by 1%, reaching roughly 18%.

Also in 2013 the incidence of **women holding a university degree** increased, reaching **42.1%** (40.8% in 2012), which confirms the growth in the trend of the previous two-year period.

TABLE N. 49 – ACEA EMPLOYEES: LEVEL OF SCHOOLING (2011-2013)

(NUMBER)	2011			2012			2013		
	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL
degrees	428	285	713	448	311	759	434	316	750
diplomas	1,756	500	2,256	1,772	528	2,300	1,755	522	2,277
other educational qualifications	783	75	858	766	66	832	757	65	822
non defined(*)	1,057	230	1,287	726	195	921	724	203	927
total	4,024	1,090	5,114	3,712	1,100	4,812	3,670	1,106	4,776

(*) the datum on the level of education of employees has not been thoroughly traced for some companies of the Group, among those of whom were recently included in the reporting boundary. The datum recording and monitoring system is currently being enhanced, but data were shown in the table so as to represent the likely situation of the company.

INDUSTRIAL RELATIONS

REPORTING BOUNDARY

Information and data shown in the *Industrial Relations* paragraph involve Acea SpA, Acea Distribuzione, Acea Illuminazione Pubblica, Acea Reti e Servizi Energetici, Acea Energia holding, Acea Energia e Acea Produzione, Acea8cento, Acea Ato 2, LaboratoRI, A.R.I.A., SAO, Aquaser and S.A.MA.CE.

The **Single Contract for electricity**, the **Single Contract for water and gas** are implemented in Acea, while a tailor-made contract, defined by national reference structures is implemented at the Acea8cento company. **All employees** are therefore covered by **collective bargaining agreements**.

The level of unionisation in 2013 was **75.4%**, in line with last year's data (74.8%); there were **325** employees with **executive or union**

representation roles, 17 of which were **Worker's Representatives for Security** (Rappresentanti dei Lavoratori per la Sicurezza, RLS), appointed after a union agreement.

The renewal agreement on the **Single Contract for electricity**, which expired 31st December 2012, was signed at the beginning of the year, only after difficult negotiations took place (see in-depth box).

RENEWAL AGREEMENT ON THE SINGLE CONTRACT FOR ELECTRICITY

The renewal of the **Single Contract for electricity** led to the introduction of important innovation and development elements in the industrial relation system and to the discussion of various important matters, such as:

- **strikes**: a new regulation on the right to strike was agreed upon, reinforcing guarantees and the safeguard of users of the service;
- **the labour market**: the new apprenticeship scheme was implemented as the main means of entering the branch of the companies;
- **the classification of personnel**: a first phase of the transition process towards a new classification system for employees took place, aiming at the inclusion of the former living allowances in the new "integrated minimum wage".

The definition of the **economic aspect** was particularly innovative, and included: the increase in minimum wages in four tranches, the one-off supply for economic coverage and a share for bargaining at a company level of productivity salary, namely the setting of yearly, variable, one-off wage elements linked to increases in productivity/profitability/competitiveness.

Moreover, a **Protocol for the competitiveness and development of electricity companies** was established, aiming at starting negotiations at a company level on the search for instruments to increase the company's productivity and competitiveness.

The new Single Contract for electricity is the first national collective agreement hitherto signed **steering bargaining at a company level towards a flexible management of working hours and relinquishing a remuneration share linked to the achieving of productivity/profitability/competitiveness goals to bargaining at a company level**.

In 2013 **negotiations continued regarding the renewal of the Single Contract for water and gas**, which expired on 31st December 2012, and the pinpointing of the matters required for the conclusion of the contract, such as: working hours, availability, professional apprenticeship, a restructuring of the classification system for employees to reward competence, the reduction in earnings and the definition of the wage aspect. The negotiations experienced difficult moments which led to a temporary interruption of bargaining, later reprised in restricted sessions, and caused two strikes of sector professionals.

Matters discussed by the Industrial Relations Unit with Trade Union Confederations (OO.SS.) involved all aspects of dialogue with Trade Unions: normative, economic aspects and the organisation of work. As far as the resizing of the workforce is concerned, **personnel reduction procedures** were started (articles 4 and 24 Law 223/91) in Acea SpA, Acea Distribuzione, Acea Ato 2, Acea Energia and Acea Produzione, according to previously used patterns, characterised by a low social impact (support to retirement and voluntary participation in the program for those without such prerequisites), for which an understanding on the setting of voluntary resignation incentives was signed separately. Moreover, a personnel reduction

procedure was started at the RDF production centre of Paliano (FR) of the A.R.I.A. company, which had been damaged in June by a fire that had jeopardised its production capacity and the regular use of employees; the procedures used were similar to pre-existing reduction procedures of the Group.

As far as the **organisation and working hours** are concerned, the following agreements were signed:

- an agreement was signed for the Acea Produzione company on the working hours of employees involved in the management of the Operational Centre of Tor di Valle Montemartini;
- a new structure for the lunch break of Acea Energia's personnel dealing with clients so as to ensure optimal service during this time slot;
- the working hours of the A.R.I.A. company were restructured after the fire at the Paliano production site to ensure minimum control activities there.

The agreements reached during the year with 2nd level negotiations involved matters of primary importance for personnel, such as **result bonuses, contractual harmonisation, corporate restructuring, health aspects and safety in the workplace, training** and so forth.

In particular, Acea SpA and the companies of the Group signed an understanding with the main union bodies on the reiteration in 2013 of the regulatory, technical framework of the **2008-2012 result bonus**; the understanding also involved the introduction of an additional share into the wage of companies in the electricity branch, while the companies in the water branch received it as down payment. Companies working in the environment branch (A.R.I.A. and SAO) reached an understanding on current **result bonuses** which included the introduction of a specific additional productivity indicator. As far as the **contractual framework** is concerned, an agreement on the variation of the contract area was reached for the S.A.MA.CE company of the Aquaser Group, acquired in 2013, which shall enter into force in 2014, so as to reach consistency in contract types among the companies of the group that work within the implementation framework of the gas-water CCNL (National Labour Contract). The passage of employees from Acea Distribuzione to Acea Illuminazione Pubblica was formalised; the passage of employees from the ASA company to Acea Ato 2 also took place, together with the contractual harmonisation with the water-gas CCNL. In the framework of **corporate restructuring initiatives**, the information and consultation procedure with the labour unions for the merger of Acea Energia holding and Acea Energia was started, leading to an agreement whose effects shall be visible from 2014.

As far as the **health and safety of workers** are concerned, after the modifications in the organisational structures of the Group, an integrative understanding was signed on 2012's agreements, which appointed the Workers' Health and Safety Representatives (RLS, Responsabili della Sicurezza sul Lavoro) also for Acea Illuminazione Pubblica and defined the management of permits for the fulfilment of the mandate.

2013 also saw the meeting - for Acea SpA, Acea Distribuzione, Acea Reti e Servizi Energetici, Acea Energia holding, Acea Energia, Acea Produzione, Acea8cento, LaboratoRI and companies of the environment branch - of the conditions for the implementation of the **facilitated tax treatment of the accessory components of wages** that can be ascribed to increases in productivity, innovation and efficiency. As far as **training** is concerned, Acea SpA, Acea Distribuzione, Acea Reti e Servizi Energetici, Acea Ato 2, Laboratori, Acea Energia holding, Acea Energia and Acea Produzione joined the **Training program promoted by the FOR.TE programme**, sharing its planning with Trade Unions (see *Enhancement of human resources and communication* paragraph).

The complex negotiation involving the Acea8cento company on different contractual areas was particularly important (see in-depth box).

THE NEW REGULATION OF THE EMPLOYMENT RELATIONSHIP IN ACEA8CENTO

The unit negotiations that involved the Acea8cento company led to the restructuring of the entire legislative framework for the regulation of employment relationships, through the signing of different agreements, such as:

1. the **renewal of the Collective Company Agreement** for the 2013-2015 three-year period on economic values in accordance with the reference CCNL (TLC), with a restructuring of the legislation due to the recent legislative changes (fixed-term contracts, supply contracts, part-time contracts and so forth) and the introduction of a specific Protocol for the use of IT systems and new technologies;
2. the agreement on **working hours**, which led to a restructuring of all timetables;
3. the increase in the amounts for **Result bonuses** and **Tickets** for the 2012-2015 three-year period and the restructuring of Result bonus indicators with a more individual characterisation;
4. an agreement on the matters of **integration/enhancement of tasks** and competence;
5. a framework agreement on **productivity**, linked to the recovery of man hours through the pinpointing of measures for a decrease in the rate of absenteeism due to illness. Such phenomenon, which is very important in companies, was also discussed from a contractual point of view and in the pinpointing of Result bonus indicators, with the identification of a specific target.

As far as the **Protocol for water-related tenders**, signed in 2012 by Acea Spa, Acea Ato 2 and Trade Unions is concerned, the year saw the Joint Committee working upon request of the Trade Unions, during meetings where the Qualification System for Companies and the Vendor Rating used in the Acea Group were described (also see Suppliers chapter).

As far as the **informative advanced notice to employees on possible organisational changes or corporate restructurings** (which could affect employment relationships) is concerned, the company behaves differently according to the following cases:

1. **organisational changes**: if a new Unit is created or missions are changed, the Personnel and Organisation Function of Acea SpA issues an Organisational Regulation and transmits it to the

relevant offices, which affix it and publish it on the company's intranet. Usually, the listed trade union meetings are organized on modifications affecting workers; when effects are visible on single employees (witness changes in place of work, timetables, and so forth), these receive a specific communication;

2. **corporate restructurings**: in case of restructurings, after significant organisational and productive changes affecting working conditions and employment, the way information is provided to employees and their trade union associations is governed by the CCNLs implemented in the Group and Protocols for Industrial relations;
3. **company transformations** (such as transfers, mergers, takeovers, moving of company branches): in case of company

transformations, advance notice to employees is governed by the current regulation⁸⁰, which includes information duties towards workers' representatives, so as to enable the verification of the industrial reasons for the proceedings,

the proper progression of the process and the effects on employment relationships. Because of this consolidated relationship model, discussions with trade unions are often brought forward compared to legal procedures.

LITIGATIONS WITH EMPLOYEES AND TRADE UNIONS

Proceedings **lodged by employees** against Acea mainly concern **notifications on framework modifications, wage differences, unpaid allowances** (such as the hourly pay of shift workers), **downgrading and mobbing**.

2013 saw **107 disputes**, which means a slight decrease compared to the previous year (129 disputes), 16 of which were opened during the year. The pending proceeding with workers of the former COS (Almavia Contract) on the alleged manpower interposition in call-centre services is being closed. More in detail, 7 positions were closed through 6 hirings at the Acea8cento company and an economic agreement. The closing of the last 5 positions is due for 2014. In 2013 litigation was closed with a few employees of the ASA company in liquidation who asked for establishment of an employment relationship with Acea Ato 2 starting from 2010: almost all, 18 employees out of 21, were stabilized and hired by the Acea Ato 2 company in May.

Finally, the Labour Court arranged the reinstatement of a previously-dismissed employee through the payment of wages of the elapsed period, rejecting the relative request for damages.

DIVERSITY AND EQUAL OPPORTUNITIES

DIVERSITY

REFERENCE BOUNDARY

The information and data shown in **Diversity** involve: Acea SpA, Acea Distribuzione, Acea Illuminazione Pubblica, Acea Reti e Servizi Energetici, Acea Energia holding, Acea Energia, Acea Produzione, Acea8cento, Acea Ato 2, Acea Ato 5, LaboratoRI, Acea Gori Servizi Scarl, Crea Gestioni Srl, Gesesa, Sogea, Lunigiana, Solemme, A.R.I.A, SAO, Aquaser and Umbra Acque.

Acea integrates personnel belonging to protected categories (disabled people, orphans and so forth), in accordance with the legislation⁸¹, to which it ensures, also thanks to the activity of the Associazione Nazionale Mutilati e Invalidi Civili (ANMIC, National Association for Mutilated, Disabled civilians) support services, assistance and technical support instruments aiming at facilitating the carrying out of tasks. The **personnel belonging to protected categories** included **260 employees** (164 men and 96 women) by 31.12.2013.

EQUAL OPPORTUNITIES

REPORTING BOUNDARY

The information and data shown in **Equal opportunities** involve: Acea SpA, Acea Distribuzione, Acea Illuminazione Pubblica, Acea Reti e Servizi Energetici, Acea Energia holding, Acea Energia, Acea Produzione, Acea8cento, Acea Ato 2 and LaboratoRI.

Acea created the **Commission for Equal Opportunities (CPO)** in 1991 with the task of promoting and supporting initiatives **aimed at eliminating inequalities**, struggling against the direct or indirect discrimination against women and all individuals at risk, favouring their integration in the working environment. The members of the CPO are partly nominated by Trade Unions and partly by the company. **CPO has a specific area in the company's intranet** designed to inform employees and raise awareness about the value of differences in the company.

The **safeguard of equal opportunities** in Acea is ensured by a **Regulation for the safeguard of the dignity of women and men** and the **Reliable advisor**, an external professional who must collect and deal with notifications on discrimination episodes, sexual harassment and mobbing. 2013 saw Acea create an **interfunctional Working Group on all aspects of diversity in the workplace**, with the aim of enhancing the individual characteristics of people in the company. Moreover, Acea Energia gave its contribution to the **Social responsibility of companies as far as gender is concerned** project (see in-depth box).

⁸⁰ Art. 2112 of the Civil Code and art. 47 of law 428/90 and later modifications after Legislative Decree 276/2003

⁸¹ Law n. 68/99.

THE SOCIAL RESPONSIBILITY OF COMPANIES AS FAR AS GENDER IS CONCERNED PROJECT

In 2013 the Acea Energia Group participated in the *Social responsibility of companies as far as gender is concerned* project, promoted by Rome's Chamber of Commerce, which initiated from a sample of four Roman companies to begin the testing of an indicators system for the promotion of social responsibility as far as gender is concerned, also in view of a possible future classification of companies to reward. The system aims at observing the added-value to competitiveness that gender differences means as far as needs, competences and abilities are concerned. More in detail, a delegation of employees from the company (25 women and 10 men) was interviewed both individually and in focus groups to assess its knowledge of the company's gender policies. Generally speaking, the analysis of results shows that men and women are experiencing a slow but progressive cultural shift towards the enhancement of the role of women in the workplace. Acea Energia is considered by its employees as a very professionally-stimulating reality, which fully respects rights regulated by contracts and takes into account personal needs and the possibility of having flexible working hours and, in case of need, part-time contracts, time off and leaves of absence.

The director of the Investor Relations Function of Acea was awarded along with 75 other women who had distinguished themselves in different professional fields, conciliating their job with family life, at the **Roma Capitale delle donne** (Rome as the capital of women) event, promoted by Roma Capitale and the Roman representative for Equal Opportunities .

THE PRESENCE OF WOMEN IN ACEA

REPORTING BOUNDARY

The information and data shown in *The presence of women in Acea* involve: Acea SpA, Acea Distribuzione, Acea Illuminazione Pubblica, Acea Reti e Servizi Energetici, Acea Energia holding, Acea Energia, Acea Produzione, Acea8cento, Acea Ato 2, Acea Ato 5, LaboratoRI, Acea Gori Servizi Scarl, Crea Gestioni Srl, Gesesa, Sogea, Lunigiana, Solemme, A.R.I.A., SAO, Aquaser and Umbra Acque.

The data on **the presence of women in Acea** show a steady and slight increase in the incidence of women within each professional category as far as the considered three-year period is concerned. In 2013, as compared to 2012, a 1.3% increase in women with degrees, a 1.2% increase in women who are part of corporate

governance bodies, an approximately 1% increase in the managers category, and an increase in women with executive roles (0.4%) which is less evident. (see table n. 50).

For gender data on training and wages, see the specific paragraphs in this chapter.

TABLE N. 50 – WOMEN IN ACEA (2011-2013)

	2011	2012	2013
women in the total workforce	21.3%	22.9%	23.2%
members of corporate government bodies (*)	8.0%	5.5%	6.7%
female directors in the totality of directors	17.4%	18.6%	19.0%
female managers in the totality of managers	27.4%	27.9%	28.8%
women with degrees in the totality of employees with degrees	40.0%	40.8%	42.1%

(*) Boards of Directors, Boards of Statutory Auditors and Supervision Bodies of the companies included in the reporting boundary. As far as the Supervision Bodies are concerned, the datum on the presence of women is not available for 4 companies of the group that are not directly controlled by Acea.

WORKED HOURS AND ABSENCES

REPORTING BOUNDARY

The information and data shown in *Worked hours and absences* involve: Acea SpA, Acea Distribuzione, Acea Illuminazione Pubblica, Acea Reti e Servizi Energetici, Acea Ato 2, Acea Ato 5, LaboratoRI, Acea8cento, Acea Energia holding, Acea Energia and Acea Produzione.

The total amount of worked hours in 2013 **decreased** compared to the previous year (see table n. 51); the incidence of overtime hours on the total of worked hours, both for men and women, was basically stable, reaching 6.9% in men (7.1% in 2012) and 1.7% in women (1.8% in 2012).

TABLE N. 51- ACEA EMPLOYEES: WORKED HOURS (2011-2013)

	2011			2012			2013		
	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL
regular worked hours	5,451,445	1,386,671	6,838,116	5,395,439	1,444,928	6,840,367	5,092,460	1,423,769	6,516,228
overtime hours	407,815	27,616	435,431	412,467	27,033	439,500	379,724	24,049	403,773
total hours worked	5,859,260	1,414,287	7,273,547	5,807,906	1,471,961	7,279,867	5,472,184	1,447,817	6,920,001

The **overall number of days of absence** increased compared to 2012 (+5.3%). Absences due to illness, time off and maternity/paternity leaves increased, while absences for “other reasons”, strikes and special requests decreased.

TABLE N. 52- ACEA EMPLOYEES: DAYS OF ABSENCE (2011-2013)

	2011			2012			2013		
	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL
absences due to illness	24,736	11,869	36,605	23,259	11,029	34,288	26,662	12,095	38,757
absences due to maternity leave (pregnancy and post-partum)/ paternity leave	876	9,576	10,452	800	12,320	13,120	983	13,834	14,817
absences due to strikes	1,057	264	1,321	1,407	397	1,804	566	134	700
leaves due to special requests	5,665	1,012	6,677	5,761	1,052	6,813	5,533	1,081	6,614
time off	3,141	1,803	4,944	2,239	1,982	4,221	3,868	2,232	6,100
various leaves (for reasons of study, health and hygiene)	10,370	4,594	14,964	11,383	5,107	16,490	11,203	5,134	16,337
other reasons (*)	2,798	773	3,571	2,334	836	3,170	778	67	845
total days of absence (excluding vacations and accidents)	48,643	29,891	78,534	47,183	32,722	79,906	49,593	34,577	84,170

(*) The “other reasons entry” is mainly represented by employees “on secondment” and also includes leaves for “public positions” or “testimony” or “unjustified absence” days and spa treatments.

Employees can use different kinds of leaves, and the company provides them with **forms of flexibility**, such as **part-time contracts**, which involved **2.6% of employees** in 2013, **trust-based working hours** for managers and third level employees, which enables a “personalised” management of working hours, in accordance

with the contract as far as work is concerned; **flexibility categories**, start-time (between 7:45-9:00) and end-time (16:10-17:20) for first, second and third level employees who, together with workers, have a **monthly number of hours for leaves** which is to be made up for within the same month.

SAFEGUARD OF HEALTH AND SAFETY IN THE WORKPLACE

REPORTING BOUNDARY

The information and data shown in the **Safeguard of health and safety in the workplace** paragraph involve: Acea SpA, Acea Reti e Servizi Energetici, Acea Distribuzione, Acea Illuminazione Pubblica, Acea Ato 2, Acea Ato 5, LaboratoRI, Acea Energia holding, Acea Energia, Acea Produzione, Umbria Energy, Acea8cento, Acque, Acque Servizi, Acque Industriali, Ingegnerie Toscane, Publiacqua, Acquedotto del Fiora, Crea Gestioni Srl, GEAL, Gesesa, Gori, Sogea, Umbra Acque, Aquaser, Kyklos, Solemme, A.R.I.A., SAO and Innovazione Sostenibilità Ambientale (ISA).

Every company of the Group, in accordance with the current regulation (Legislative Decree n. 81/08 and subsequent amendments), **is directly responsible for the managing of safety**.

Coordination and supervision activities are entrusted to **Acea SpA**, which monitors the implementation of supervision guidelines, policies and the current regulations through the **Safety and protection Function**.

The company has a **self-checking model for safety** which is supported by a computerised system and coordinates the companies of the Group in the management of all phases of the process, such as the verification of the compliance with the regulation, the managing of compulsory documents, the monitoring of deadlines, the managing of possible noncompliance, and so forth.

In 2013 the Security and safeguard Function, together with the Innovation and Communication Technology Function, found a supplier to further **enhance the pre-existing IT model**. More in detail, the specific requests for the timely management of information and data on security, both for workers (risk profile, training, devices for personal protection and so forth) and the workplace were accepted. Acea SpA and Acea Distribuzione, as pilot areas, provided data on specific templates for a massive upload of information. During the year, Acea participated in the initiative, coordinated by INAIL and the ELIS Consortium, for the **integration of guidelines on Management Systems for Safety in the Workplace**, with the best practices as far as the management of safety in companies is concerned.

The project, which is valid for the **2013-2016 three year period**, is divided into three intra-firm work groups on the management of the supply chain, the management of regular and extraordinary maintenance, means of transport and road safety – injuries at work and commuting injuries. Acea takes part in all three work groups, sharing its expertise and best practices of the Group. Most of the companies of the Group have implemented **Certified management systems for health and safety in the workplace** (see Company Identity, Corporate governance and management systems chapter). The **Acea Ato 5, Crea Gestioni e A.R.I.A** companies in 2013 were certified in accordance with the **OHSAS 18001:2007 norm** and Acea Ato2 initiated the implementation of a management system for certifiable safety.

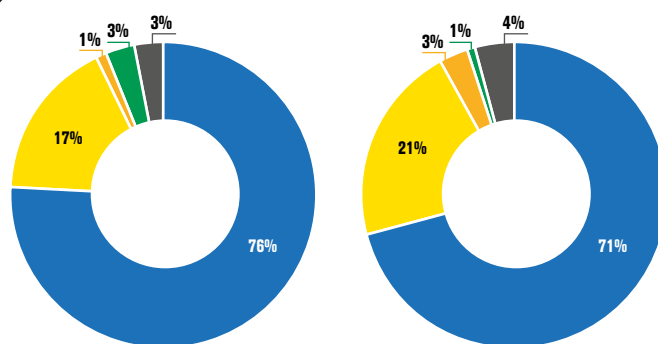
Each company handles its own assessment of **risks for workers** and the **monitoring of injuries**, in accordance with the current regulations, by writing the **Documento di Valutazione dei Rischi** (DVR, Risk Assessment Document). In view of these autonomous activities, the **Safety and protection Function** writes, on a centralised, yearly basis, a **report on injuries** for the companies of the Group, with the aim of giving a useful contribution to risk prevention in the workplace. The analysis method of injuries follows the **Guidelines for the classification of injuries**, drafted by Federutilità in accordance with the **UNI 7249/95 norm**, with reference to the INAIL recognition criteria and ESAW's (*European Statistics of Injuries at Work*) indications.

In 2013 **the data on injuries showed lower figures than the previous two-year period: 259 injuries** were reported during the year, **49 of which were commuting injuries** (which means they took place while employees were travelling from home to the workplace), which led to **9,131 days of absence**. The lost time injury frequency rate remained the same compared to 2012, while the severity index recorded lower figures. As far as the **division by gender** of injuries is concerned, 2013 saw 234 injuries (90% of the total) involving male employees, mainly workers, while 25 (10%) involved female workers, in all employee/administrative cases.

The distribution of injuries by companies in industrial areas shows, compared to 2012, **a decrease in injuries in the water and environment areas and an increase in the energy, corporate and services areas** (see chart n. 27). Most incidents took place in Acea Ato 2 (60 injuries) and Acea Distribuzione (50 injuries), the two largest operational companies of the Group, which are more exposed to injuries due to the nature of their work.

During the year consultation meetings with the **Workers' Representatives for Security** (RLS) took place, ensuring the involvement of workers, according to Legislative Decree n. 81/08.

CHART N. 27 - DISTRIBUTION OF INJURIES ACCORDING TO INDUSTRIAL AREAS (2012-2013)

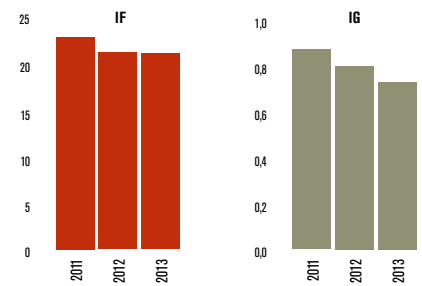


COMPANY	2012	2013
	INJURIES (N.)	INJURIES (N.)
water area	203	184
networks area	46	54
energy area	4	8
environment area	7	2
corporate and services area	8	11

NB: the water area includes 14 companies, 3 in the networks area, 5 in the energy area and 2 in the services area. The Acque Industriali e Ingegnerie Toscane (water), Acea Energia holding and Umbra Energy (energy area) companies, A.R.I.A.'s Waste-to-Energy incinerator in Terni, the RDF plant in Paliano, Aquaser, Kyklos, SAO and ISA (environment area), Laboratori (services area) recorded no injuries during the year.

CHART N. 28 – INJURIES AND FREQUENCY, SEVERITY INDICES (2011-2013)

	2011	2012	2013
injuries (n.)	286	268	259
total days of absence	10,722	(**) 9,947	9,131
worked hours	12,351,212	(*) 12,477,638	(*) 11,870,905
lost time injury frequency rate (IF) (n. of injuries x 1,000,000/worked hours)	23.16	21.48	21.82
severity index (IG) (days of absence x 1,000/worked hours)	0.87	(**) 0.80	0.77



(*) The datum involving worked hours is based on estimated data for the month of December for some companies.

(**) 2012 saw a mortal injury in the Acque Servizi company – which is not shown in the table since it is still being verified by INAIL (Italian government agency for the insurance against work-related injuries) – which, if acknowledged, would equal to 7,500 conventional absence days and lead to a 1.40 severity index.

Acea, apart from complying with norms, aims at **raising employees' awareness on safety matters** by **spreading practices**, documents and new regulations **in the company's intranet** and the **organisation of specific training programmes**. Indeed, the aim of the company is to raise awareness and create a growing culture of safety as an integral part of the organisation (see the *Training and development of personnel* paragraph).

A *vademecum* containing behavioural standards in case of emergencies was drawn up in 2013, so as to raise employee awareness on matters involving health and safety in the workplace. **The document was sent to the personnel of headquarters** and shall be delivered to the employees working in the company offices.

SANITARY SURVEILLANCE

REFERENCE BOUNDARY

Information and data shown in **Sanitary surveillance** involve: Acea SpA, Acea Reti e Servizi Energetici, Acea Distribuzione, Acea Ato 2, LaboratoRI, Acea Energia holding, Acea Energia, Acea Produzione, Acea8cento, Aquaser, Solemme, A.R.I.A., SAO, Crea Gestioni, Ecogena.

The **sanitary surveillance** activity was entrusted to an **internal structure** which works in accordance with current norms (art. 41 Legislative Decree n. 81/08) and **cooperates with external professionals**. The personnel's health is monitored with the assistance of formally appointed expert doctors, who organise the following medical examinations for employees:

- pre-employment examinations;
- preventive examinations, or for a change in duties;
- periodic examinations, on the basis of the risk assessment plan;
- upon request of the worker;
- in case of termination of employment, where provided for by current regulation;
- before the resumption of work, after absence due to health problems which last more than sixty consecutive days.

Moreover, as far as workers exposed to specific risks are concerned, a tailor-made program of medical examinations is ensured.

The framework of activities for the protection of the psychological and physical integrity of workers saw **the expert doctors cooperate with employers** and **those responsible for Prevention and Protection Service in risk assessment activities** for employees, **needed to create a health monitoring plan**.

2013 saw **2,030 visits**, with a total cost⁸² of **roughly 205,000 euros**. Moreover, the presence and activity of a **First-aid facility** enable the company's personnel and visitors to be assisted in cases of distress for which transfer to a hospital is unnecessary.

82 Costs due to periodic and pre-employment examinations are based on the reporting boundary of the paragraph.

ENHANCEMENT OF HUMAN RESOURCES AND COMMUNICATION

REFERENCE BOUNDARY

Information and data shown in **Enhancement of human resources and communication** involve: Acea SpA, Acea Distribuzione, Acea Illuminazione Pubblica, Acea Reti e Servizi Energetici, Acea Ato 2, Acea Ato 5, LaboratoRI, Acea8cento, Acea Energia holding, Acea Energia e Acea Produzione, Acea8cento, Aquaser, Kyklos, Solemme, A.R.I.A. and SAO.

Human capital represented by the expertise of people is a fundamental asset to the company; therefore pinpointing **goals** and sharing **practices to reach them** means enhancing the value of the Acea Group. **The development and enhancement plans for people** are defined through a system for the assignment of goals based on the company's policies and the values of the Leadership model.

The **Management System for People**, introduced last year for the Group's sake, is an important instrument to enhance the company's performance and implement projects for the integration and intra-group sharing of important professional matters (see in-depth box).

THE JOINT WORK INITIATIVE: *INCONTRIAMOCI CONCRETAMENTE*

Acea organised a working day which gathered, for the first time, the **Finance Management and Control of the Group's companies professional family** (including water companies working in Tuscany, Umbria and Campania).

The meeting aimed at sharing goals and main issues of the professional family, and was an important opportunity for joint work aimed at finding efficient solutions to shared problems.

The participants (roughly 80 people) were divided into groups, which were to work on specific professional issues; every Working Group, led by a facilitator from the Development and Organisation Unit of the holding, discussed the given problem and found possible solutions and operational approaches.

The solutions found by each Working Group were discussed in a plenary session and later shown to the CFO and Division managers, along with the hypothetical times and resources needed for their implementation.

The initiative enabled the sharing of professional expertise, leading people from different companies and areas to meet and work together.

2014 will see the continuation of the project, with the involvement of other professional families of the Group.

2013 saw **the extension** of the Management System for People and the Leadership model **to the water companies of Tuscany and Umbria**, with the aim of sharing what had already been implemented in the Group with other companies. Interestingly, the system was partially revised in view of the different features of the businesses. Moreover, people were involved in the organisation of initiatives aimed at spreading knowledge of the system in firms, so as to collect suggestions and remarks.

The **weighing of organisational positions** supports the Management System for People, enabling the **acknowledgement of the actual contribution of individuals to the achieving of business results** and an efficient management of personnel in development programs, remuneration, merit-based policies, internal mobility, and so forth. In 2013 the beginning of the second phase took place: the collection of the curriculum vitae of all employees and workers by use of a centralised database was initiated so as to better manage intragroup mobility and professional development dynamics and correctly allocate resources according to the company's needs, in view of the competence of employees.

REMUNERATION

The **wages** of employees (excluding directors and top managers) are determined in accordance with the relevant **National Collective Employment Contracts**. The **per-capita average gross wages by qualification** remained unchanged in 2013 compared to 2012 as far as employees and workers are concerned, while the wages of managers decreased by roughly 2%.

The **total per-capita average gross wage** remained unchanged, amounting to **40.1 thousand euros**; when including directors, it reaches 42.3 thousand euros, showing a 0.7% decrease compared to 2012.

TABLE N. 53 – PER-CAPITA AVERAGE GROSS WAGES BY QUALIFICATION (2012-2013)

(IN THOUSANDS OF EUROS)	MANAGERS	VAR. %	EMPLOYEES	VAR.%	WORKERS	VAR.%	TOTAL	VAR.%
2012	67.2		38.2		37		40.1	
2013	65.9	-1.9%	38.3	0.2%	37	-	40.1	-

The 2013 ratio between the “basic salary” and the actual gross remuneration according to gender – which means taking into consideration “fixed” and “additional” factors in determining wages – was **91.6% for female employees and 80% for male employees**. The difference between the two values can be explained with the fact that better-paid activities, such as availability, shifts, allowances, overtime work, are often carried out spontaneously by male employees (for instance, the work of emergency technicians who use shifts for the 24-hour time span).

The wages of the members of the Board of Directors is determined by the Shareholders’ meeting, while the additional payment for the members of the Committees created in the Board of Directors is set by the Board itself upon proposal of the appointments and remuneration Committee, after hearing the Trade Union Council. An important part of the wages of executive directors and executives with strategic responsibilities is currently linked to the company’s economic results. Moreover, there is a long-term monetary incentive for the 2013-2015 three-year period for the Managing Director and the company’s top management, in accordance with the *Total Shareholder Return* – measurement of the economic performance and market value of the Acea share compared to a basket of comparable companies.

The remuneration received by the single components of the Administration and control bodies and executives with strategic responsibilities of Acea SpA are shown in the *Report on Remuneration*⁸³.

INCENTIVE SYSTEMS

The remuneration systems used in 2013, namely those connected to the **merit plan**, reinforced the links with the Management System for People and the weighing of organisational positions, thereby integrating and harmonising the entire remuneration system. Management instruments linked to the revision policy for the fixed and/or variable part of wages are used: wage increases, promotions and professional development, tailor-made monetary rewards such as *severance grants*.

The reward system is structured so as to ensure a correct balance between the fixed/variable remuneration and the organisational position of the Group’s employee.

The **short-term incentive system** implemented in Acea aims at giving an **economic recognition commensurate with quality performances and linked to leadership behaviours in accordance with the Model used in the Group**.

The incentive system for directors and managers is linked to the **MBO** (Management by Objectives): a variable remuneration apportioned to the achieving of individual, corporate (company or area) and Group goals set at the beginning of the year, and the assessment of behaviours. The joint analysis of the **performance**

and **leadership** assessments leads every employee to be included in an evaluation matrix. The position in the matrix of assessed employees is revised at a Function/Company/Group Area level by use of a calibration mechanism so as to ensure consistency in the evaluation criteria. The mechanism linked to the MBO includes an “access gates” system, composed of the Group’s goals, for the granting of the premium: the reaching of said goals will affect the total amount of the bonus according to the organisational level of the assessed employee.

All managers, employees and workers, also with part-time, fixed-term, placement and apprenticeship contracts, are included in a reward system for the sharing of company results in form of **result bonuses**, distributed annually in accordance with professional categories and the number of hours worked during the year. This economic reward is calculated on the basis of profitability, productivity, efficiency, perceived and provided quality indicators (a *customer satisfaction* indicator is also taken into consideration). Acea8cento, the Group’s company managing telephone channels for customer relations, has a reward system that takes into consideration provided quality indicators depending on mystery calling surveys, namely the simulation of calls to Acea call centres.

Long-medium term incentive systems are implemented as far as Top Management, namely directors in charge of long term company goals, is concerned: a further monetary incentive, called **LTIP** (*Long Term Incentive Plan*) **2013-2015** is provided for, in addition to the MBO-linked incentive. Such an incentive is apportioned to the gross annual salary (GAS), and is based on the reaching of **economic-financial** goals, set by the appointments and remunerations Committee, and those **linked to the value of the share on the stock market** and the subsequent increase in the Group’s value over time.

There are also **benefits** for employees, such as additional monthly salaries, meal tickets, a discount on the electricity tariff (only for employees hired before 9th June 1996), facilitations granted through the Group Recreational Club (Circolo Ricreativo Aziendale, CRA), the supplementary health policy, the sector supplementary pension fund – Pegaso Fund for employees and Previndai Fund for directors – and a deal signed with the Monte dei Paschi di Siena bank for favourable terms, Directors have further benefits, such as a company car and the reimbursement of fuel costs. The year also marked the beginning of the **Ticketcard** project, to try the electronic meal tickets that are given to employees monthly.

83 The Report on Remuneration, which is autonomous, is available online every year on the institutional website, Shareholders section, Shareholders’ Meeting.

As of 31.12.2013 saw the liabilities allocated to the TFR (employee severance indemnities) and other defined benefit plans, to be distributed to employees at the end of their activity for the company, amounted to 117.4 million euros, 11.4 million euros less than 2012. Such a variation in the stock is due to the reduction of 5 million euros in the TFR fund; to the 4.4 million euros for tariff concessions and additional monthly salaries and the decrease of 2 million euros in medium/long-term incentive plans.

DEFINED CONTRIBUTION PENSION FUNDS

The main supplementary pension funds for Acea's employees are **Previndai** and **Pegaso**; the first is for directors, the second for non-director employees falling under the National Collective Employment Contracts signed by Federutility for companies providing public utility services in the energy and water/gas areas. The Pegaso fund is jointly managed by Federutility – the national organisation representing companies providing local public services which work in the water, energy and gas areas – and the trade union organisations of Filcem-Cgil, Femca, Flaei-Cisl, Uilcem-Uil employees who created it.

The reporting year saw the number of **employees** of the Group⁸⁴ belonging to the Pegaso fund as **2,553**, basically the same as 2012 (2,536 employees). **Acea gave the Pegaso fund roughly 4.3 million euros for the TFR and paid 1.22 million euros for the supplementary company contribution.** The analysis of the distribution of the Acea population according to gender shows a 76.8% incidence of men and a 23.2% incidence of women (80% and 20% in 2012) on the total number of members. The category of employees with the most members of the Fund are those aged between 45 and 60, with a 60% incidence.

TABLE N. 54 – ACEA PEGASO EMPLOYEES: GENDER AND AGE GROUP (2013)

	MEN	WOMEN	TOTAL
≤ 25 years old	1	1	2
> 25 years old e ≤ 30 years old	42	21	62
> 30 years old e ≤ 35 years old	115	42	154
> 35 years old e ≤ 40 years old	188	59	232
> 40 years old e ≤ 45 years old	324	117	422
> 45 years old e ≤ 50 years old	431	123	540
> 50 years old e ≤ 55 years old	387	132	508
> 55 years old e ≤ 60 years old	405	84	485
>61 years old	68	13	79
total	1,961	592	2,553

TABLE N. 55 – ACEA PEGASO EMPLOYEES: POSITION (2013)

(NUMBER)	
employees	1,573
workers	746
managers	234
total	2,553

The net assets of the Pegaso fund allocated to performance reached 666 million euros in 2013 (567 million euros in 2012) with an approximate 17.5% increase. The **Balanced, Dynamic and Guaranteed** branches closed positively, 7.77%, 10.57% and 2.05% respectively. The TFR return, used as a benchmark, was 1.71% in 2013.

TABLE N. 56 – RETURN OF THE SHARES VALUE OF THE PEGASO BRANCHES AND THE TFR (ON 31.12.2013)

TYPE OF INVESTMENT	RETURN OF THE BRANCHES OF THE PEGASO FUND	TFR REVALUATION
Guaranteed	2.05%	
Balanced	7.77%	1.71%
Dynamic	10.57%	

Source: 2013 Pegaso Data

84 For the companies: Acea SpA, Acea8cento, Acea Ato 2, Acea Ato 5, Acea Distribuzione, Acea Illuminazione Pubblica, Acea Reti e Servizi Energetici, Acea Energia holding, Acea Energia, Acea Produzione, LaboratoRI, Crea Gestioni, Sogea, Gesesa, Solemme, Acea Gori Servizi, A.R.I.A., Aquaser, SAO, Ecogena.

SYSTEMS FOR THE EVALUATION OF PERSONNEL

One of the main processes contained in the Management System for People is the **Performance Management**, namely the individual evaluation process aimed at directors and managers of the Group that measures achieved **performance** – which means the reaching of set goals - and **leadership** – the ability of leading people and favouring change, in full respect of the reference system of values. The process consists of two **phases: the first phase**, which is the joint evaluation of **performance** and **leadership** by the direct supervisor; the **second phase**, which takes place in internal discussion forums, aims at better assessing the individual, thereby ensuring the **consistency and comparability** of evaluation criteria.

The result expected from the Performance Management process is a natural distribution of the population involved by the system at the Group level.

The final assessment of individuals is essential to identify training and development programs and the most suitable incentive and remuneration systems. The following instruments were used by the managers to support the correct implementation of the new assessment process:

- **the Performance & Leadership Manual**, which leads to knowing the process and reinforces the single responsibilities of stakeholders;
- **the Leadership Model**, which describes the elements needed to best approach Acea's mission, values and the expertise that managers need to enhance the human capital. Such model is based on two sets of values: the first one involves the principles needed to **manage the business, favouring change and the Group's competitiveness**; the second one involves the values needed to **lead**

people, recognising their abilities and responsibilities. Both sets are to be at the basis of the *"act with integrity and equity"* transversal approach;

- **the Group's informative system**, which supports the Performance Management process, enables assessors to autonomously take care of activities involving the setting and monitoring of goals and those involving leadership, thereby leading to a more efficient management of related activities.

In 2013 there was a continuation of the assessment of directors and managers belonging to the Group, namely 10% of the total workforce.

Acea Distribuzione started the **Leonardo Programme** so as to give continuity to the HRO (High Reliability Organisation) research project, joined in 2012 together with the University of Tor Vergata. The project, aimed at enhancing the company's culture of constant development, focuses on the critical points of processes in order to turn them into opportunities for improvement. The 2012 analysis of the company's organisational reliability led in 2013 to the pinpointing, by use of the Lean Six Sigma technique, of 40 fields needing improvement, 17 of which were completed in the process areas of MT- BT Network, AT Network, Period, Operational Planning, Quality and Safety, Commercial Services and Energy Balance, Human Resources. The Programme has a double approach: guided improvement, with projects defined by organisational structures or company managers, and spontaneous improvement, with projects proposed by employees. The entire company's personnel was asked to give its contribution to the program through the pinpointing of critical points or opportunities for improvement.

TRAINING AND DEVELOPMENT OF PERSONNEL

REFERENCE BOUNDARY

The information and data shown in the **Training and development of personnel** paragraph involve: Acea SpA, Acea Reti e Servizi Energetici, Acea Distribuzione, Acea Illuminazione Pubblica, Acea Ato 2, Laboratori, Acea Ato 5, Gori, Acea Energia holding, Acea Energia and Acea Produzione, Acea8cento, Acquedotto del Fiora, Crea Gestioni Srl, Gesesa, Aquaser, Innovazione Sostenibilità Ambientale (ISA), Kyklos, Solemme, A.R.I.A. and SAO.

The company's competitiveness is linked to the quality and **competence of its human capital**, therefore training, aimed at the professional enhancement of people, is a **key element** for the improvement of performance and the company's competitive capacity.

Acea's training activity, defined in accordance with business plans and the company's strategies, enables the reaching of important goals, such as the **cultural change in the organisation**, with the creation of processes based on the Leadership Model and the company values endorsed by the Group, **the development of personal expertise**, through the definition of managerial, training initiatives for the acquiring of behavioural and management skills, **the updating of role skills**, with training focused on specific company processes, and **the compliance with current norms and dispositions**, with great interest for the evolution of legal, regulatory framework.

The **Personnel and Organisation** Function of Acea SpA takes care of

reaching training goals, especially general ones, and creates the group leader's yearly training plan.

The Function **defines policies, guidelines and instruments** for the Group's companies, centrally manages **management training** and **cross training**, focused on matters shared by the Group, and creates **advanced training** programs, organised by excellent university partners with highly specialised contents.

Operational companies autonomously manage safety training, for the prevention of risks due to technical-operational activities, in compliance with regulatory obligations set by the legislator, and **technical-specialist training**, aimed at acquiring skills needed in the relevant business area. Both types fall under the yearly training plan and complete the group leader's training plan.

The **training process** is outlined after the **collection of data on training needs** and includes the definition of the **involved population and needed contents**, the **pinpointing of suppliers**, the **organisation of courses** with the

support of didactic instruments and materials chosen according to the used method, which can be **traditional** – classroom lessons or private lessons – **experiential** – favouring useful experiences also outside the workplace – and **online**, by use of the **Pianetacea** platform, using an e-learning method. The process ends with the **evaluation of the satisfaction level** of students with organisational aspects, quality of teachers, final balance of participants and **periodic reporting**.

The company's participation in inter-professional bodies for continuous training is a further instrument useful for the enhancement of the expertise of its personnel. More in detail, some of the main companies of the Group (Acea SpA, Acea Distribuzione, Acea Reti e Servizi Energetici, Acea Ato 2, Acea Ato 5, Laboratori, Acea Energia Holding, Acea Energia, Acea

Produzione) **have joined the FOR.TE. Fund** (*Fondo Paritetico Inter-professionale Nazionale per la Formazione continua del terziario*, Joint National inter-professional Fund for the continuous Training of the tertiary sector), which provides funding for the development of employees' skills and the competitive capacity of companies. In 2013 the **Steps** plan ended, funded by the FOR.TE Fund, thanks to which numerous initiatives were organised, such as the **managerial** program which focused on the Management System for People (see in-depth box); new funding was obtained for the **Steps 2** project, which will end in 2014 and will see the organisation of programs based on the Management System for People and will focus on a Leadership and Performance Model, and the organisation of technical, specialist, advanced training programs.

MANAGEMENT TRAINING

2013, after the introduction in 2012 of the Management System for People of the Acea Group, saw the organisation of **two experiential management training courses**: **Essere Leader**, focused on the leader's role in the company, and **La Squadra nel Gruppo Acea**, which used the *team building* technique to favour the correct cooperation dynamics among participants. The goal shared by both programs was to create **integration** and **sharing** processes and, in accordance with the **action learning** training approach, to focus, from a psychosocial point of view, on participants and relational dynamics. Indeed, the two programs were characterised by a huge emotional impact, which enabled participants to share experiences thanks to first-hand experiences and discussions in group activities.

The year saw the Personnel and Organisation Function of the group leader take care of the **sharing process of the Management System for People** with the companies of the Tuscany-Umbria water sector. A presentation event was organised for the company's management staff, and **two training programs** were initiated: the first dwelled upon the **Leadership and Performance Model** with outdoor and class activities; the second focused on the **management of feedback** in the assessment of employees, by examining their role and techniques; the initiative involved 254 participants, for a total amount of 2,500 training hours. Finally, the participation in the inter-professional Fondimpresa fund enabled the technical staff of a few operational sites to benefit from specific training initiatives.

2013 saw, in addition to funded training projects, the organisation of courses on cross-cutting matters, such as **advanced training on Environmental Legislation**: outlined thanks to the cooperation with the "Giovanni Pugliese" Centre of Excellence on European Law (Centro di Eccellenza in Diritto Europeo "Giovanni Pugliese") of the **Law School at the Roma Tre University**, which took place over 17 days with the involvement of all companies of the Group, that is **274 employees**. The overall outcome of the course was appreciated; it was awarded a satisfaction rating of 4 out of 5. Finally, the training activity on the **Code of Ethics and Privacy (Legislative Decree 196/03)** followed with the aim of training all employees of the Group; two methods were used: **e-learning**, for employees with a company computer, and **the blended method**, which met the organisation, at the operational headquarters of the Group, for sessions for those workers who could not access online training (see in-depth box).

TRAINING ON THE CODE OF ETHICS AND PRIVACY FOR THE WORKERS OF THE WATER INDUSTRIAL AREA

2013 saw the organisation of **tailor-made sessions for the workers of the Group** who could not access the e-learning platform because of a lack of company computer, so as to complete the training on the Code of Ethics and the protection of privacy (Legislative Decree 196/03). **12 days of training at different sites** were organised at the operational headquarters of the **Acea Ato 2** and **Acea Ato 5** companies (Ostia Purifier, Roma Est Purifier, Roma Sud Purifier, Cassino, Frosinone, Viale delle Province) with the participation of **301 workers**. The sessions consisted of two daily shifts, so as to not affect the activity of the production site. The courses were awarded a very good satisfaction rating of 4.5 out of 5.

2014 will see the training at different sites involve the workers of all remaining industrial areas of the Group.

The year saw the enhancement of the **online** training of employees with the organisation of advanced courses in management and the *Privacy Code* (Legislative Decree 196/03), the *Group's Code of Ethics* and the Administrative Responsibility of Bodies (Legislative Decree 231/01), also thanks to the use of the Group's multimedia platform Pianetacea.

The ethical values of the Group and the company regulation were also published on the intranet and the institutional website. As far as new employees are concerned, entry training involves courses on the company's mission, *Code of Ethics* and corporate social responsibility.

The year also saw numerous **training initiatives organised by the Group's company**.

More in detail, the **Acea Ato 5** company, in accordance with the Group's Policy on Quality, the Environment, Safety and Energy defined an informational, training plan that involved **all company profiles**, with specific sessions on procedures, forms and operational instructions for the implementation of the Safety-Environment and Quality-Energy integrated Management systems.

The **Acea Energia** company attached great importance to the development of team spirit and the sense of belonging to the company, and organised seminars to raise top and middle management awareness regarding their role in the organisational framework. The **Team Coaching** training project, for the operational change of middle managers and the company's managers, and the **commercial Kick Off**, an outdoor team building initiative for all employees and a few colleagues of the Acea8cento company focused on the sense of belonging to the company, are to be highlighted.

Moreover, **Acea8cento** started training courses on the implementation of new operational systems by those firms whose contact with customers is managed by the company, such as the Customer Relationship Management (CRM) for the management of the clients of Acea Energia's free market.

HR Days was another important initiative, coordinated by **Acea Distribuzione** and carried out in cooperation with Acea SpA, which involved 28 people who work in the management of human resources in the Rieti Area. The teachers worked with colleagues working for Acea Distribuzione or the group leader, dwelling upon many matters (according to their area of competence), such as industrial relations, safety in the workplace, development plans and organisational well-being. Moreover, the initiative measured the effect of training on the activities, defining numeric indicators so as to assess the enhancement of the company's performance after training.

Further **training initiatives** involved:

- **safety** (training of the RLS, the First aid officer, the personnel responsible for the fire-fighting service, and so forth) and **management systems for safety**;
- **environmental management systems**;
- **waste management** (SISTR);
- **credit management**;
- **the regulation on tenders**;
- **Continual Improvement - Chance Management** in Acea Distribuzione.

In 2013 **traditional and experiential training** activities were organised in the form of **503 courses**, for a total amount of **1,117 editions**, with **7,487 participants**. The **e-learning platform** also involved **8 courses** with **3,105 participants**.

In 2013, there were a total of **87,983 training hours**, with a **6.7%** decrease compared to 2012's 94.302 hours. More in detail, **classroom or experiential training** reached a total of **83,364 hours**, while **e-learning training** reached **4,619 hours**.

There were **8.3 overall per-capita⁸⁵ training hours** (6.4 in 2012); more in detail, there were 11.1 classroom per-capita and experiential hours and 1.5 e-learning hours.

TABLE N. 57 - TRADITIONAL AND EXPERIENCE TRAINING COURSES AND FEES (2012-2013)

COURSES	COURSES (N.)		EDITIONS (N.)		PARTICIPANTS (N.)			PARTICIPANTS (N.)			FEES (EURO)	
	2012	2013	2012	2013	2012	MEN	WOMEN	2013	MEN	WOMEN	2012	2013
advanced training	3	8	3	59	59	33	26	485	271	214	13,340	103,853
IT	29	26	42	91	322	225	97	501	396	105	11,807	28,132
starter program (*)	15	11	13	15	98	68	30	70	45	25	3,600	0
linguistics	4	5	28	34	191	112	79	260	159	101	68,179	50,000
specialised	221	197	321	419	2,112	1,371	741	2,201	1,695	506	167,931	145,021
management	18	15	33	31	481	359	122	408	291	117	678,571	737,576
administration and management(*)	53	45	143	53	1,741	1,215	526	503	366	137	19,012	53,727
security	159	196	414	415	3,109	2,756	353	3,059	2,660	399	54,485	186,067
total	506	503	1,001	1,117	8,113	6,139	1,974	7,487	5,883	1,604	1,035,225	1,304,376

(*) Administrative and management training along with training for new employees is mainly supplied by the Group's personnel.

85 The indicator was created by comparing the number of frequency hours (87,983 in 2013) with the overall number of participants (10,592 in 2013).

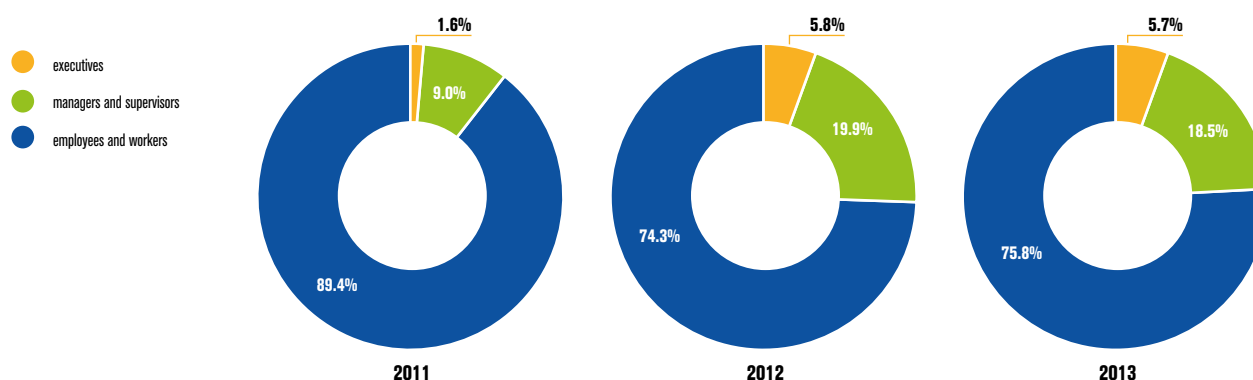
TABLE N. 58 – COURSES AND FEES FOR TRAINING SUPPLIED THROUGH THE PIANETACEA E-LEARNING PLATFORM (2012-2013)

COURSES	COURSES (N.)		PARTICIPANTS (*) (N.)			PARTICIPANTS (*) (N.)			FEES	
	2012	2013	2012	MEN	WOMEN	2013	MEN	WOMEN	2012	2013
advanced training	0	1	0	0	0	340	223	117	0	15,000
management	0	1	0	0	0	32	20	12	0	5,000
security	0	2	0	0	0	590	395	195	0	30,000
Privacy Code (Legislative Decree 196/03)	1	1	2,286	1,523	763	844	584	206	3,900	7,000
Code of Ethics	1	1	2,107	1,400	707	907	624	283	5,800	7,000
Authorities' administrative liability (Legislative Decree 231/01)	2	2	2,163	1,416	747	392	292	100	8,600	7,000
total	4	8	6,556	4,339	2,217	3,105	2,138	967	18,300	71,000

Collectively, **training costs** for 2013, after educational planning and the creation of an educational conducive environment, amount to € **1,375,376** (see tables n. 57 and 58 and chart n. 29).

2.571 **women**⁸⁶ (24% of the total) are currently participating in vocational training courses.

CHART N. 29 – TRAINING HOUR DISTRIBUTION PER QUALIFICATION (2011-2013)



NB the number of training hours per qualification for A.R.I.A. and S.A.O. are estimates.

Acea also supplies training for its own personnel by financially supporting, either completely or partially, its employees' participation in MA. Namely, Laboratori supported the participation of three employees in MA in *Environmental techniques and monitoring* and *Management and maintenance of ecological plants* throughout the year.

COOPERATION WITH UNIVERSITIES AND HIGH SCHOOLS

Acea constantly promotes **partnerships and cooperation with universities**, participates in research programmes and encourages **meetings between businesses and students**. **Agreements** are also reached for internships to be promoted and MA students are provided with the assistance of internal teaching personnel (see chapters *Institutions and the company* and *Environmental issues*).

In 2013 Acea cooperated with universities and higher education institutes by meeting graduates and young students with whom it had had interviews regarding career guidance and in-depth analysis of either previous or current studies. The main initiatives include:

- **Career Day Luiss, "I giovani e il lavoro" 17th edition**, aiming at a narrowing the gap between job demand and supply. Students were provided with instruments to reconcile competences

acquired throughout their university career and job opportunities.

- **HRC Talent Days - Progetto di Orientamento al lavoro (Career guidance)**, addressing graduates and teenagers (16-19) who had not yet chosen their university path, and stressing the importance of both career guidance and individual talent. Acea participated by sponsoring two career guidance days addressing business staff's offspring. Businesses are part of the Network HR Community which prioritises human resource issues.
- **OpenDIAG**, IT, automatic and management engineering at the University of Rome "La Sapienza", where Acea shared its employees' skills, professionalism and future opportunities with students.

⁸⁶ The gender data for A.R.I.A. and S.A.O. are estimates.

Business staff from Acea reporting their professional experience also participated in meetings with universities and institutions. Acea's fields of specialisation and employment issues were both dealt with. Closing events, the presentation of the **University to Work** project's results, career guidance desk and job support for university students precisely fit this backdrop.

2013 also saw **Acea Distribuzione** complete the second edition of the **Network Scuola Impresa** project, which started in 2012 based upon the agreement reached with ELIS Consortium, aimed at organising educational courses to meet the demands of businesses. In its second edition, the business teaching staff was mainly composed of young engineers, adequately trained to educate students through the project "maestri di mestiere" (the master craftsmen). Business issues chosen by students from related technical colleges were also dealt with. Similarly, two young engineering graduates contributed to the **Ultimo Miglio Project**, aimed at deepening the knowledge about present and future developments involving the LV network.

Acea Distribuzione also spoke to students from the University of Tor Vergata about monitoring leadership, Continual Improvement and Human Resource Management System, within the framework of the **HRO (High Reliability Organisation)** research project, which started in 2012 in cooperation with the University. In conclusion, **Acea Ato 5** participated with the largest industry stakeholders in Latium in the **placement UniCasOrienta** initiative, organised by the University of Cassino in cooperation with Unindustria-Confindustria in Frosinone. The aim was to provide graduates with career guidance.

In 2013, Acea supported training, extensive education projects and Master degrees both financially and professionally (teaching, internships, traineeships, etc.). They include among others:

- **Master in Management and corporate social responsibility** at the Faculty of Social Sciences of the University of San Tommaso (Angelicum) – awarding two grants covering enrolment fees and giving priority to staff offspring;
- **Master in Management and Regulation for Sustainable Energy**, which took place at the Luiss University in Rome, and at the end of which an internship was offered to two graduates;
- **Master in Management of Energy and Environment**, organised by the "Il Sole 24 Ore" Business school and with teaching staff from Acea Ato 5;
- **Master in Procurement Management**, organised by the University of Tor Vergata in Rome, with teaching staff from Acea Distribuzione;
- **Master in Service Operation Management - Six Sigma method**, organised by the ELIS Consortium, with teaching staff from Acea Distribuzione;
- **Master in Environment, Energy Efficiency and Smart Cities**, organised by "Il Sole 24 Ore" Business school and with teaching staff from Acea Energia and Acea Distribuzione;
- **Master in Energy and Environment Management**, organised by the University of Roma Tre and with teaching staff from Acea Distribuzione.

The **Mexico Project** was started in 2012 by the company **Aquaser** in cooperation with the **University of La Tuscia in Viterbo**, and aimed at sustainably producing bioenergy, bio fertilisers, water from organic waste within a woodland area in Mexico City. The project also saw the participation of a young graduate in Sciences and Agricultural technology aided by internal personnel.

With reference to internships and vocational traineeships, **framework agreements** were reached in 2013 with the following universities in Rome: La Sapienza, Tor Vergata and European; a fourth one was reached with the Faculty of Law at the University of Perugia. The Group companies have started **6 internships for both high school and university students and recent graduates as well as 21 traineeships**. Providing 29 young people – who had been previously hired with collaboration contracts and internships – with tenure contract clearly shows the employment potential of the Group for younger generations.

INTERNAL COMMUNICATION

Internal communication is instrumental to Acea in disseminating entrepreneurial spirit and knowledge, in creating a conducive working environment and in enhancing professionalism. Communication addressing **employees** is mainly channelled through **intranet services circulating news and interesting notices** together with highlighting the most important news of the day. The intranet also provides employees with the opportunity to:

- find **information about companies and their personnel**;
- skim through the internal phone book;
- read through official documents (relevant Reports, Code of Ethics and policies etc....);
- read through business proceedings and regulations;
- find organisation provisions involving each and every company in the Group;
- read daily press reviews and releases.

In-depth analyses in the field of Safety, Quality, Training, IT and Regulations (including Legislative Decree 231/01) are also available as is a special section, **Personae Acea (Acea People)**, where access is given to employees so they can view management system data and have the opportunity to update their *curriculum vitae*.

The portal has been further developed and **now includes a new section, We4you**, monitored by the Human Resources and Organisation Function and conceived for employees to be given assistance and support in managing presences and salaries.

A joint effort by the Regulatory (Studies and Research) and Human Resources and Organisation Functions, in cooperation with the External Relations and Communication Function, led to **quaderniAcea** first being published in 2013. Building upon a similar initiative and updating both its graphic and publishing layout, details Acea's activities, thereby enhancing both the experience and professionalism of its employees. The first instalment focused on Smart Grid issues and on Acea's commitment to smart grids distributing electric energy.

Throughout the year, the Internal Communication Unit in Acea SpA promoted the direct **participation of business staff**. Namely, the **Oscar Night Acea 2013**, which concluded the educational project **Essere Leader**, and the in-house course, **Communis Agere**, which consisted of a series of meetings dwelling upon public speaking through theatre language, and storytelling. A new initiative featuring in-house

sport events promoting inclusion and further integration among employees belonging to different companies has also initiated. **Meet in Acea** figures among the new initiatives which saw the light in the current year. Coordinated by both the Human Resources and Organisation and the Regulatory (Studies and Research) Functions, it consists of a series of internal meetings focusing on cross-

cutting economic, social, and cultural issues linked with burning issues which, coupled with contributions and the experience of authoritative guests, encourage a fruitful comparison between the reality of the company and events which are external to the company.

SOCIAL ACTIVITIES

REFERENCE BOUNDARY

Information and data shown in involve: Acea SpA, Acea Distribuzione, Acea Illuminazione Pubblica, Acea Reti e Servizi Energetici, Acea Ato 2, Acea Ato 5, LaboratoRI, Acea8cento, Acea Energia holding, Acea Energia and Acea Produzione.

Acea cares about creating a conducive business environment, being responsible for the organisation of events and initiatives promoting mutual knowledge among colleagues and a sense of belonging to the company.

Namely, 2013 saw a **football team set up** for the Business Tournament Gori Sorrento, which was composed of employees from different companies in the Group.

Oggi offro io also figures among the initiatives which saw the participation of employees and promoted social inclusion. Started in cooperation with the Caritas Institute in Rome, the fund-raising initiative was mainly aimed at Rome inhabitants experiencing economic hardship.

Fondo Soccorso is a further instrument of solidarity supporting bereaved relatives of both late, working and retired colleagues. Participation takes place by submitting a form sent to either the Human Resources and Organisation Function or the CRA, whereby a small sum of money is withdrawn from one's salary and given to the Fund.

The CRA, the Medaglie d'oro Association (see related box), the National Association for disabled or invalid Civilians (ANMIC) and the ACLI Nucleus (Christian Associations for Italian workers) are listed among the most important authorities fulfilling social functions and thereby actively involve employees.

Cultural, sport, tourism, welfare, economic and commercial initiatives aimed at enhancing spare time for members, without neglecting social

aspects, figure among the initiatives put forward by the CRA. In 2013, its members, including executives, reached **4,610** (from 4,602 in 2012). Similarly, an excellent quality-price ratio has allowed for an increased number of requests to take advantage of the services offered.

The CRA monitored the **business' day-care centre** activities. Its facilities are available to both employees' children and children of residents of the first municipality. **2013 saw 43 children** in the first term and **46** in the second, hosted at the day-care centre and **awarded scholarships** based on academic results, to the children of employees of high school and university age. Agreements with institutes providing cost-effective complementary **health care services to employees and dependent relatives, free dental services for employees and dependent relatives, personalised subsidised loans at lower rates, free legal advice, and tourist, sport, cultural and recreational initiatives at convenient costs**, also pertain to the CRA (see table n. 59). The CRA has also reached agreements benefiting members, for instance with a phone company which will provide employees the opportunity of buying prepaid calling cards, using internet services and purchasing the latest models of mobile cellular phones at lower prices. Other services include tickets for sports, theatre and music events as well as the opportunity to pay bills and refill mobile phone charges. Throughout the year, the CRA also supported **solidarity initiatives**, including **meals offered to the homeless** on festivities in cooperation with the Community of Sant'Egidio.

TABLE N. 59 - MEMBERS BENEFITING FROM CRA SERVICES (2011-2013)

(NUMBER)	2011	2012	2013
members who benefitted from tourism services	1,026	1,140	1,012
members who benefitted from reduced-cost sport activities	590	574	545
youngsters who joined summer centres	171	150	121
members interested in insurance	1,861	1,729	1,819
members interested in purchase	167	91	575
members who joined the Italian Touring Club (T.C.I.)	41	36	24
refunds of a welfare nature	831	1,082	1,033
members who benefiting from "il dono della Befana" ("the gift of the "Befana")	707	763	826
members who benefitted from scholarships	69	64	35

The ACLI Nucleus (Christian Associations for Italian workers) in Acea works at the service of its employees and promotes initiatives, showing both the presence of the chaplain, whom employees may wish to consult, and meetings where families and parents gather

and exchange ideas. The association also supplies various services including advice about mortgages, loans, school assistance for employees' children attending middle school and secondary school.

MEDAGLIE D'ORO ASSOCIATION

The Association Medaglie d'oro, founded 1956, lists among its members those **retired members and employees who had worked or were currently employed with the company for at least 20 years**. Up to 31st December 2013, it counted **867 members**, 707 of which had retired and 160 currently employees.

Welfare and tax **assistance** are given to the association's members while opportunities to further enhance integration are promoted through **social, educational, cultural, recreational, tourism and solidarity** initiatives and projects. Collectively, 2013 counted 1,976 members participating in the above initiatives, namely:

- 2 social days which saw 30 long-standing members (more than 20 years in the Association) and 10 members who have retired over the last 12 months;
- agreements reached with businesses, a legal office and a physiotherapy centre;
- 7 grants awarded to members' children;
- fund-raising from selling lottery and theatre tickets as well as Christmas boxes to charity institutes;
- visits to museums, exhibitions, archaeological, historical and monumental sites;
- tours in Italy and abroad, summer holidays at the sea and daily excursions;
- theatre shows for members only;
- tax support through the cooperation of a qualified expert and a CAF (tax assistance centre) for income-tax return and property tax payment.

The National Association for disabled or invalid Civilians (ANMIC) cooperates with the agency for the disabled to enter the working world (**260** disabled **employees** were counted on 31.12.2013) which, over the years, has led architectural barriers to be removed and security in the workplace to be enhanced.

Since 1957 the ANMIC safeguards the interests of its members by offering them services, reaching agreements such as the ones reached with insurance companies and the CRA in the field of health care and medical refunds.

SHAREHOLDERS AND CAPITAL PROVIDERS

Acea, a listed issuer, manages relationships with analysts and with present and potential capital providers through its **Investor Relations** Function activities dealing with financial stakeholders, and through its **Legal and Corporate Affairs Function**, monitoring through the process of reporting to supervisory boards (Consob and Borsa Italiana), regulatory corporate requirements. This provides a constant, integrated, timely, transparent flow of information to the financial market and its stakeholders.

ECONOMIC FLOWS TO STOCKHOLDERS AND CAPITAL PROVIDERS

The 2013 management results earned shareholders approximately **89.4 million-euro dividends** from 63.9 million euros in 2012, that is 42 cents per share, with a **63% pay-out** on net profit. Minority shareholders' profits amount to 11.3 million euros.

Acea shares registered excellent performance throughout 2013 reaching up to 8.275 euros per share in the last negotiating session (quoted market capitalization: 1,762.3 million euros), increasing by 81.7% from 2012.

The highest level of transparency in the field of governance will be preserved.



We will support the management in the identification and evaluation of risks that may affect the achievement of the goals set by the Board of Directors favoring conscious decisions.

TABLE N. 60 – TREND OF STOCK INDEX AND ACEA'S SHARES (2013)

	VARIATION % 31.12.13 (COMPARED TO 31.12.12)
Acea	+81.71%
FTSE Italia All Share	+17.63%
FTSE Mib	+16.56%
FTSE Italia Mid Cap	+48.84%

Capital providers are allocated **1377 million euros** from 148.7 the previous year. While 2013 saw an increase in debenture loan interest rates by 6 million euros, a decrease in fees on transferred credits by 7 million euros was also recorded and interest rates fell by approximately 12.5 million euros on short-medium-long term debt.

AGENCY RATINGS

Credit rating is a brief evaluation of the credit worthiness of a debtor based on ability to pay back debt (capital and interest) within due course. Addressing the financial market, Acea voluntarily undergoes independent assessments from main international rating agencies.

TABLE N. 61 – 2013 RATING

AGENCY	LONG-TERM RATING	SHORT-TERM RATING
S&P's	BBB-	A-3
Fitch	BBB+	F2
Moody's	Baa2	

Standard & Poor, in his judgment of October, credited Acea's efficient management, the Group's improving cash margins and credit stabilization with a positive outlook and a BBB-rating, even more so in a hard macro-economic backdrop and a fluctuating water regulatory framework, the latter of which should congratulate Acea on its efforts in the field. The US rating agency believes political interference influencing its major shareholder could trigger corporate risks and lead to negative aggregation processes in the field of Utilities.

Late October saw **Moody's** confirm last year's rating (Baa2). The analyst's evaluation takes into consideration low corporate risks deriving from flurrying market activities in regulated businesses, where, water regulations, though incomplete and unchecked, might lead Acea to improve current assets within the Group.

Fitch downgraded Acea's long-term rating to BBB+ from A- in 2012, following the negative review of Italy and its debt, as well as other local authorities' debt. While evaluations carried out in September report how a negative trend might hamper the companies' relations

with the municipality of Rome and water regulatory uncertainties, they also recorded an improvement in the services supplied reflecting a comprehensive fall in costs and in the organic growth of energy businesses.

THE FINANCIAL REPORT

70 studies and/or notices on Acea were published in 2013. The Investor Relations Function organised **more than 250 meetings with equity investors, buy side analysts, Italian and international credit analysts and capital providers, other than conference calls** with the market when annual and mid-term results were approved. Both previous and current information, files and presentations were posted in the shareholders' area on *the corporate website* to constantly update economic and financial communication in the Acea Group. Financial statements and sustainability reports are also available online as is the information on **ratings**, where the rating agencies brief evaluations and short *reports* are fully illustrated.

ETHICAL FINANCE

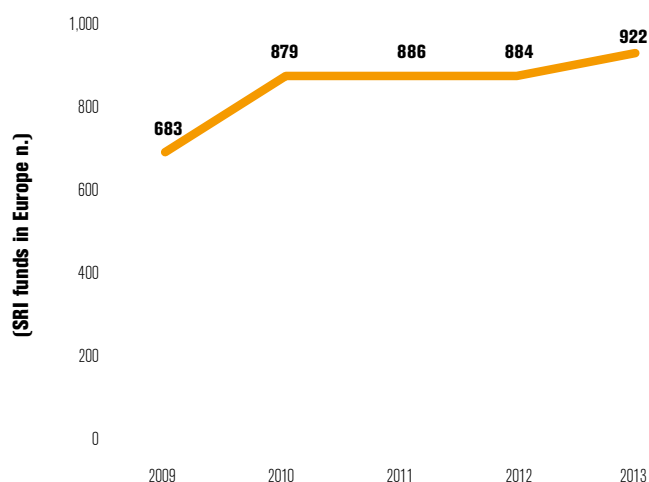
ITS DEVELOPMENTS

The **latest developments in the field of retail ethical funds in Europe** from June 2012 to June 2013 are thoroughly examined by Vigeo in the *Green, social and ethical funds in Europe, 2013 Review*⁸⁷ report. Despite the economic and financial crises have negatively affected responsible investments, undergoing a period of stagnation, the value of managed assets have continued to grow, while active funds have shown signs of recovery since 2013. Reportedly, awareness about opportunities triggered by more comprehensive and far-sighted investment strategies has been raised in the fields of politics and public opinion.

The number of SRI funds (Social Responsible Investment), credited in Europe and addressed to the larger financial market, has risen to 922 active funds in June 2013 from 884 in 2012 (+4%) after 3 years of stagnation. Following a positive trend, the **financial value of managed assets has increased by 14% to 108 billion euros in 2013 from 95 billion euros in the previous year** (see charts 30, 31 and 32).

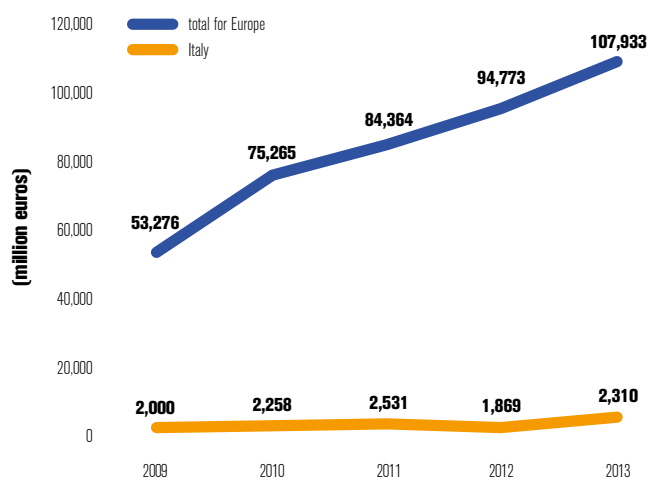
The dynamics of the 11 European countries taken into consideration in the above study, confirm France, the United Kingdom, Switzerland, Belgium and Germany rest on a solid SRI fund basis. Collectively, 77.7% of European SRI funds managing 75.6% of the assets value are currently credited in the above 5 countries. While France still ranks first with 22% of credited funds and 35% of assets under management in spite of a downward trend, the United Kingdom and the Netherlands have recorded the highest surge in managed assets. Still, Germany, the Netherlands and the United Kingdom have seen the highest growth in the number of SRI funds. **Italy** has seen the number of socially responsible retail **investment funds unchanged** while a **slight increase** has been recorded in **the value of managed assets**.

CHART N. 30 – AGGREGATE NUMBER OF SRI FUNDS IN EUROPE (2009-2013)



Source: Vigeo, *Green, social and ethical funds in Europe. 2013 Review*

CHART N. 31 – TOTAL NUMBER OF ASSETS UNDER MANAGEMENT FOR SRI FUNDS IN EUROPE AND ITALY (2009-2013)

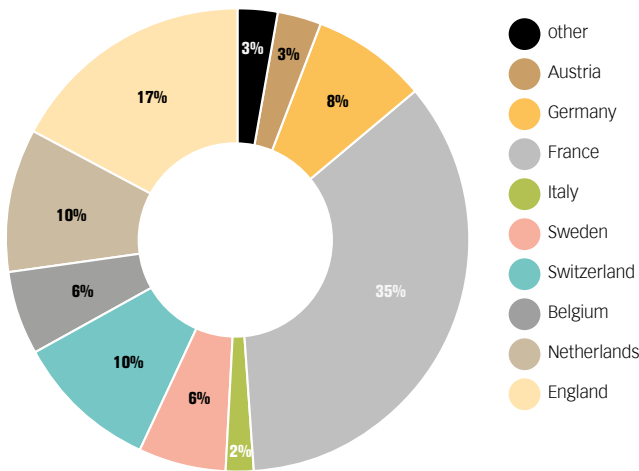


Source: data processed by Acea resting on Vigeo, *Green, social and ethical funds in Europe, 2013 Review*

87 The 13th edition of the report is pivotal for the analyses of retail SRI funds credited in Europe. Analyses comprise the following countries: Austria, Belgium, Denmark, France, Germany, Italy, Luxembourg, Norway, the Netherlands, the United Kingdom, Spain, Sweden and Switzerland. Retail SRI funds based on ethical, social and environmental criteria still in force on 30th June 2013 are also taken into consideration, while funds having a SRI orientation, despite resting on ESG (Environmental-Social-Governance), have been included for the current year.

CHART N. 32 - ASSETS UNDER MANAGEMENT FOR SRI FUNDS PER COUNTRY (2013)

Total AUM 107,933 million euros



Source: Vigeo, *Green, social and ethical funds in Europe, 2013 Review*

ETHICAL ANALYSTS ASSESS ACEA

Relations between Acea and the world of ethical finance have constantly developed: in 2013 Acea was credited by the following analysts, rating agencies and ethical-financial indices.

The Acea share was included in the **ECPI Italy SME's Equity** index gathering 30 small and medium cap businesses quoted on the Italian market, which have recently seen their performance on sustainability being positively assessed. The ECPI method rests upon 100 criteria involving production processes, environmental repercussions, governance, social relationships within the community and management of diversity (gender, age and culture). Within the range of share indices on sustainability conceived by the ECPI-FTSE partnership, Acea is listed in the **FTSE ECPI Italia SRI - Benchmark**, which includes the 100 medium/high cap listed companies in the FTSE All-Share. They have shown good performance with regard ESG (Environment, Social, Governance) features involving environmental repercussions, production processes, social relationships within the community, human capital, corporate governance and markets.

Kempen SNS, assessing Acea since 2005, deems the company's commitment to corporate citizenship constant; hence, Acea is still a target for investments on the part of Kempen Sustainable Smaller European.

To conclude, after updating its own analyses and taking into account environmental and social factors in business management, **Oekom Research** upgraded Acea's rating to B- from C+ in 2012 (in a D-/A+ range), whence the *Prime Status* usually awarded to businesses, which not only meet the specific minimum requirements in the sector but also prove to be leaders in the sustainability of their own division.

INSTITUTIONS AND THE COMPANY

In Acea, the relations with institutions and the stakeholders operating in the same contexts as the Company are based on dialogue and inclusion, respecting the interests of all the shareholders involved, the territory and the community.

THE RELATIONSHIP WITH INSTITUTIONS

The relationship between Acea and institutions affect both the economic dimension (paying duties and taxes) and the social dimension (the relationship with local institutions and specific authorities, the dialogue with Consumers' Associations and other civil representatives, the professional and institutional co-operations).

The economic value distributed to **public administrations** in 2013 in the form of taxes amounted to approximately **128.3 million euros** (88.8 million in 2012). The operation tax rate was 45.6% (51% last year). The overall increase in the tax liability was the result of the increase of the operating income and the number of companies subjected to the IRES surtax.

Acea regularly pays contributions and membership fees to other public and private bodies, such as chambers of commerce, independent administrative authorities, specific associations and representative bodies. In 2013 this kind of expenditures amounted to about 3 million euros. In particular, about 1.8 million euros were paid to supervisory authorities (AEEG, AGCM, Consob and other public service authorities), 115,000 euros were incurred as mandatory charges for chambers of commerce and 1.07 million euros as contributions to confederal bodies and membership fees (Federutility, Confservizi, Unione Industriali).

The cooperation with **institutions** aims at carrying out measures for the social and economic development of the territory, the improvement of the supplied services and the citizens' quality of life, in a perspective of containment of the impacts deriving from structural works (see chapters *Customers and the community*, *Personnel* and *Environmental issues*).

The interaction between Acea and institutions is based on the principles and rules included in the Group's *Code of Ethics*. **Article 19** of the *Code* refers to the relationship with institutions, Public Administration, political parties and trade union organisations. It states:

«Acea shall not contribute in any manner to the financing of parties, movements, committees and other political or labour organisations, even if an association or foundation essential to same, or their representatives or candidates. The relations between the company and political and trade union organisations, as regards issues of interest to the company, are based on mutual respect and cooperation.

Every relationship must be authorised by the competent structures, paying particular attention to avoid situations in which there may be conflicts of interest between Acea and the figure authorised to establish relations with the political or trade union organisation. In any event, Acea shall abstain from conduct designed to exert pressure, either directly or indirectly, on political and trade union figures in order to obtain advantages.»



We will bring technological, process and product innovation to the Group's companies.

In Acea institutional relations are managed through an organisational model defining appointments and responsibilities of the different corporate Functions: **Acea Spa's Chairman** ensures the **legal representation** and the **definition of the institutional strategies**; the **Institutional Affairs Function** ensures the overall representation of the Group's positions at local, national and European bodies and institutions, monitors the legal scenario and co-ordinates the relations with the Consumers' Associations, focusing on the activities concerning the joint conciliation procedures; the **Corporate Affairs Function** is responsible for communication and provides the **Supervisory Authority** with information about movable goods market and companies (Borsa and Consob); the **Regulatory Function** manages relations with the **Regulatory Authorities** in the reference sector, representing the positions of the Group's companies in the participatory procedures for the creation of the regulation carried out by authorities, bodies and institutions.

Together with the parent company, **the Group's operating companies** manage the technical aspects of the provided services – water, electricity and public lighting – also thanks to the **consultation** with different administrative, regulatory and control bodies. Together with the competent institutions and research bodies, Acea carries out many social, environmental, common heritage protection and technological innovation initiatives. As far as **safety, prevention and emergency management** are concerned, Acea takes part in technical **working groups** composed by experts. During the year, indeed, as far as the identification and protection of Critical Infrastructures are concerned, the Group participated in the **Interministerial Technical Commission for Civil Defence (C.I.T.D.C. – Ministry of Internal Affairs)** and in the **national emergency prevention and management periodic exercises**. Moreover, in the event of emergency conditions, Acea supports competent Authorities in the fields of public health, civil protection and public security. Also in 2013 it cooperated with the **National Security Observatory (OSN)** in order to define and protect the **strategic infrastructures and services**, together with the government representatives for Defence, Health and Civil Protection, the main public service operators and qualified representatives from the academic world. In continuation of last year's trend, in 2013 Acea contributed to the following initiatives carried out by the **National Security Observatory**:

- **the 34th COCIM COURSE** – the fifth national emergency exercise – *Gilgamesh 2013* – for the civil and military cooperation in emergency management: this course aims at providing soldiers and civilians with an updated overview of the current rules and procedures in the fields of civil defence, civil protection, civil-military cooperation and national emergency civil planning, UN, NATO and EU;
- **the Cyber World Working Group**, a national *think tank* for institutions and companies, whose mission is to create an interdisciplinary cyber security culture aiming at increasing cohesion between public and private worlds. In 2013, the Cyber World Working Group continued to work on cyber security, particularly focused on the protection of national “critical infrastructure” from computer attacks, analysing all the possible scenarios concerning Hacktivism, CyberWar and CyberWarfare. Acea cooperated with the subgroup focused on the technical and terminological aspects.

As far as **safety in the workplace** is concerned, Acea takes part in an initiative – to be carried out between 2013 and 2016 and coordinated by INAIL and Concorzio ELIS - for the **integration of the guidelines for the Workplace Safety Management Systems** with the best safety management practices adopted by the companies (see chapter *Personnel*).

In order to ensure **the highest safety levels in the supply of managed services**, Acea provided itself with operating tools that, in case of events jeopardizing the normal functioning of grids and plants, ensure a timely re-establishment of normal conditions. In particular, **Emergency management plans and intervention procedures** were defined, moreover, the **control rooms** of the companies constantly **monitor the conditions of water and power plants, public lighting installations and grids**, cooperating with the **Civil Protection**. The **Emergency management plans** allow the company to act rapidly and efficiently in case of failures (of equipment, grids, systems etc.) or extraordinary situations, such as adverse weather conditions (rain, snow etc.), fires or just different kinds of demonstrations (trade union, political, religious etc.) which draw a large audience in the capital city.

In particular, the Emergency management plan adopted by **Acea Distribuzione** faces the possible anomalous conditions which jeopardize the continuity and quality of the electricity supply service, defining the different activation statuses (ordinary, alert, alarm and emergency), the procedures, the operating units and the resources needed to re-establish the service; so operating personnel can implement targeted interventions under the coordination of a Person in charge of emergency management. Finally, the Plan is also composed of detailed operating documents,

aiming at managing specific kinds of problems (flooding, fire, malfunctioning of the remote control grid etc.). The Plan is updated annually and improved thanks to the analysis of actual cases and its efficacy is proved through exercises and simulations. As in previous years, also in 2013 tests and analyses were carried out in order to improve the Plan.

As far as the environment is concerned, after participating in the project of the Ministry of Environment for the definition of the “**Criteria Ambientali Minimi**” (Minimum Environmental Criteria) with which goods and services must comply in order to be admitted to the National Action Plan on Green Public Procurement – GPP NAP⁸⁸, Acea adopted these criteria in the management of its tenders (see chapter *Suppliers*).

The **partnership between Acea and the local public administration** aims at promoting a new development model based on the sustainable use of resources and energy. In particular it was possible to carry out important initiatives with Roma Capitale, such as the **project of sustainable mobility** in Rome, included in the Sustainable Energy Action Plan.

Acea has always played an important role in the innovation sector in Rome. In 2013, together with other companies and thanks to **RoMA project** (Resilience enhancement of Metropolitan Area) it won the tender “Smart cities, Communities, Social Innovation” launched by the Ministry of Education, University and Research, which aimed at developing a Metropolitan Security Analysis Centre in the city of Rome. This Centre will provide the **citizens with the best services**, such as the **Protection service of the Critical Infrastructures** - whose malfunctioning could cause problems to citizens, the territory and industries – and the **Traffic Prediction and Management** service, provided with anticipatory systems which will optimize road traffic; this structure will be a useful tool for **Civil Protection** as well. The project will be **coordinated by Acea Distribuzione**, supported by La Sapienza University, Enea, Telecom, Finmeccanica and other companies; once defined the metropolitan area where to develop the project, the company will work on the public lighting infrastructure for the installation of part of the photosensors, the transmission of part of the signals coming from the sensors through its TLC infrastructures, the development of safety systems and the protection of Critical Infrastructures from natural calamities and effects produced by adverse weather events.

Acea supports **Research Centres, Regulatory Bodies and Specific Associations** promoting or contributing to specific research activities in the businesses in which it operates (see specific box).

88 The GPP NAP, recommended by the European Commission, has been adopted in Italy with Law n. 296/2006 and with Ministerial Decree 11th April 2008 (MATTM).

MEMBERSHIP OF RESEARCH CENTRES, REGULATORY BODIES AND SPECIFIC ASSOCIATIONS IN 2013

The main memberships renewed or started in 2013:

- Agenzia Nazionale per le Nuove Tecnologie, l'Energia e lo Sviluppo Economico Sostenibile - (ENEA);
- AGICI - Finanza d'Impresa;
- Associazione Amici dell'Accademia dei Lincei;
- Associazione Amici della Luiss;
- Associazione Italiana di Illuminazione (AIDI);
- Associazione Italiana esperti Infrastrutture Critiche (AIIC) ;
- Associazione Italiana Professionisti della Security Aziendale (AIPSA);
- Associazione Elettrotecnica ed Elettronica Italiana (AEI);
- Associazione Europea delle società di distribuzione dell'energia elettrica;
- Associazione Idrotecnica Italiana (All);
- Associazione nazionale fornitori di elettronica (Assodel);
- Comitato Elettrotecnico Italiano (CEI);
- CSR Manager Network Italia (Altis);
- Distretto Tecnologico Nazionale sull'Energia S.c.ar.l. (Di.T.NE.);
- Energy and Strategy Group – Politecnico di Milano (ES-MIP)
- Federazione Italiana per l'uso Razionale dell'Energia (FIRE);
- Fondazione Einaudi;
- Fondazione EnergyLab;
- Fondazione Utilitatis (Centro di studi e ricerche per l'acqua, l'energia e l'ambiente);
- Global Compact Network Italia;
- I-Com (Istituto per la Competitività);
- ISES Italia (International Solar Energy Society – Sezione Italiana);
- Istituto Unificazione Italiano (UNI);
- Italian Association for Trenchless Technology (IATT);
- Laboratorio dei Servizi Pubblici Locali di REF-Ricerche;
- Osservatorio Energia di REF – E;
- World Energy Council (WEC).

The relationship between Acea and the **institutions** dedicated to talented youth **education** and **training** creates a link between youth and the world of work, leading to a shared advantage. Acea, in fact, gives high-school graduates and recent university graduates the opportunity to do **internships** at the Group's companies and **supports** master's degrees and research activities by endowing funds and scholarships. (see *chapter Personnel*).

Moreover, the company's **high-qualified personnel** cooperate with universities (in master's degrees and courses or as thesis supervisors). During the year they **gave lectures or shared their experiences with students**, talking about **electric mobility, smart grids, people management models** and organisational change, **corporate social responsibility, procurement management and safety management**.

The Group's operating companies and the **Universities** work together in both environmental-energy and water **technical projects** (see *Research and Environmental issues*).

Acea aims at developing strong links with **companies** working

in similar sectors and technologically innovative companies. It develops **collaborations and partnerships** aimed at controlling the evolution of the reference sectors.

In 2013 Acea **cooperated** with the company "NEC", **operating in the area of technological innovation**, in order to develop new **electricity accumulation systems** to be installed in the transformer rooms; moreover it signed an agreement with Telecom and Fastweb for the **strengthening of ultra-wideband internet connection in Rome**. In particular, Acea will coordinate the works of optical fibre laying with those concerning electricity supply in street boxes. (see chapter *Customers and the community*).

In 2013 Acea and Mekorot WC - the company managing the Israeli water service - signed a **Memorandum of Understanding** aiming at developing an **exchange of experiences, expertise and knowledge** between the two companies regarding the water area, especially the protection of water supply systems, new innovative solutions for the distribution grids of drinking water, wastewater and sludge

treatment and waste incineration. The companies will also have the possibility of cooperating in the development of new water experimental technologies in order to optimise the investments for their commercialisation.

The company **actively participates in many conferences and forums** with the entrepreneurial world, the scientific community, institutions and citizens to discuss **important national and international issues**. Again in 2013 Acea focused on the issues of **sustainable mobility and development of smart cities**, participating in seminars, round tables and workshops such as *Electrocity*, the sustainable mobility exhibition, the 2013 Forum of Milan *Smart Tech Energy & Gas*, about smart grids for energy and gas, the conference titled *Dalle smart grid alle città del futuro*, where they talked about the management of distribution grids (water, gas, electricity, district heating etc.) and the use of survey, control and inspection technologies, the *SmartCityExhibition* of Bologna, the round table titled *Innovazione e smart city*, the workshop titled *Energia nuova per Roma*, dedicated to sustainability and renewable sources. During the year Acea participated also in the 2° *Festival dell'Acqua*, the most important event dedicated to the water sector, where it presented an innovative **satellite monitoring and control system of water infrastructure**, aimed at protecting the territories managed (see chapter *Customers and the community*, paragraph *Delivered quality*).

The dialogue with the shareholders allows Acea to **listen to and evaluate the requests of customers**, citizens and other companies, also through the interaction with the bodies representing them: Federations, Business, Trade union or Consumers' Associations. One of the tasks of the parent company's **Institutional Affairs Function** is to manage **the relations with the Consumers' Associations**, through the Institutional Relations Unit and with the Group's operating companies.

Acea has long since adopted the **joint conciliation** procedure, active in the companies Acea Ato 2 and Acea Ato 5, as far as the water area is concerned, and in the companies Acea Energia and Acea Distribuzione, as far as the electricity area is concerned. The

conciliation activity is targeted to domestic consumers resident in Latium, represented and supported by the Consumers' Associations recognised by the National Council of Consumers and Users – CNCU. Moreover, the joint conciliation is a legal tool, voluntary and not mandatory, which could be useful in solving possible disputes between Acea Energia and companies ("non domestic" consumers) which joined the Confcommercio of Rome, with whom a protocol of agreement was signed in 2012.

In 2013 **access to the joint conciliation procedure**, whose documents are available on the websites of the companies involved, registered a **strong increase** in comparison to the previous year. The total **requests** transmitted by the Associations on behalf of the customers of Acea Energia, Acea Distribuzione, Acea Ato 2 and Acea Ato 5 admitted to the conciliation procedure **were 403** (296 in 2012). In particular, 220 conciliation requests were presented to Acea Energia; 48 to Acea Distribuzione; 114 to Acea Ato 2 and 21 to Acea Ato 5.

Thanks to customer satisfaction surveys, periodically carried out among customers of water and electricity services, Acea observes **the joint conciliation notoriety level** activated by the company and **the use of this tool by those who declare to know it**. The answers of the interviewed people highlight that the joint conciliation is still widely unknown, with notoriety percentages varying from 1% to 5% and a scarce use of this tool among those who know it, between 2% and 22%.

In 2013 Acea strengthened its relationship with the Consumers' Associations, promoting periodic meetings aimed at facing the main problems of the electricity market's customers. These meetings focused on the operating solutions carried out by the company in order to improve crisis management, as far as both the joint conciliation requests and the complaints presented by the customers through the Associations were concerned. In particular, in June, Acea Energia – electricity and gas company – carried out the **project *Al Centro il Cliente (The Client Comes First)***, the result of the collaboration between the company and the Consumers' Associations aimed at finding new ways to make the customers fully satisfied (see in-depth box in chapter *Customers and the community*, paragraph *Customer care*).

THE COMPANY AS A SHAREHOLDER

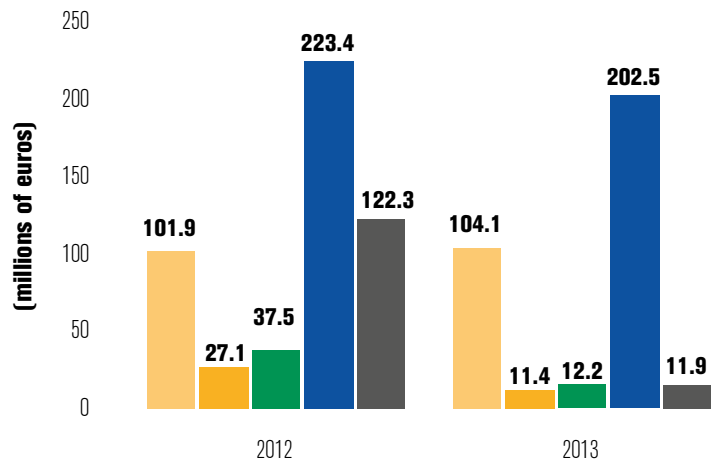
Acea protects and promotes its material and immaterial assets, looking for a sustainable financial position and efficiently managing its internal needs, related to the operating management and other growth perspectives, according to the company's mission and the strategic plan.

Investments in 2013 amounted to **342.2 million euros**. This figure shows a general decrease (513.2 million euros in 2012), especially as far as the **corporate area** is concerned (-110.5 million euros) which last year was committed to the purchase of the headquarters in Piazzale

Ostiense in Rome. Investments on the Energy **Grids** increased (from 102 to 104 million euros) because of the extension and remake of high, medium and low-voltage lines. The industrial areas of **Energy** and **Environment** registered a decrease in investments, due to the repowering and revamping processes of their respective production plants. The **Water** area was affected by the decrease in the investments of Acea Ato 2 and Acque, only partially balanced by the greater amount of investments of Acea Ato 5, Gori, Umbra Acque and Acquedotto del Flora.

CHART N. 33 - DISTRIBUTION OF INVESTMENTS BY MACROAREAS (2012- 2013)

- energy grids
- energy
- environment
- water and accessory services
- corporate (including Acea8cento)



Amortisation, provisions and depreciation during the year amounted to **382.3 million euros** (-4.8% in comparison with 401.4 million euros in 2012). In particular, the amortisations decreased by 244.5 million euros (-7.2% in comparison with 263.4 million euros in 2012) mainly because of the conclusion of the amortisation period of part of Acea Distribuzione's grids. The **depreciation of credits** went from 83.5 to 89.5 million euros and the **provisions** from 54.5 to 48.3 million euros.

The protection of **corporate assets**, the **prevention of fraudulent events**, the **respect of current safety rules**, with special reference to the **protection of privacy** and **sensitive information** (Legislative Decree n. 196/2003) and **safety in the workplace** (Legislative Decree n. 81/2008) are overseen by the parent company's **Safety and Protection Function**, with the support of the people responsible for safety management of the Group's companies.

Moreover, the Function, thanks to its centralized security room, supervises the correct functioning of the **concierge, reception and security services** and **video surveillance, anti-intrusion and security alarm systems**, present in the headquarters and the operating sites of Acea Energia, Acea Energia holding, Acea Produzione, Acea Distribuzione, LaboratoRI, Acea Ato 2 and Acea Ato 5.

In 2013 the works for the **upgrading of the security room** began, with the aim of providing new, more efficient technology. Also **the video surveillance system is being improved**, through a plan which provides for 50 new systems in as many company sites: 6 have already been realized, 8 are being realized and the others are currently being designed.

In Acea there are specific **internal procedures** ensuring the **protection of corporate assets**, such as procedures management and control of access to company sites, the procedure for access to the images recorded by the video surveillance system and the procedure for confidential data destruction.

Acea pays attention to the protection of the **central and peripheral information centre** and the **Group's communication infrastructures**. In particular, the **protection of the information systems** and the **information security management** are overseen by the **Information and Communication Technology (ICT) Function** which sets the operating policies and the information protection standards, according to the organisation's

functioning model, the legal requirements and the **aims and policies established by the Safety and Protection Function**.

Indeed, the company is provided with **guidelines** aimed at managing an efficient protection system of the company's information structure and with specific **procedures** and information security measures. During the year, the Information and Communication Technology began to **update these procedures**, conforming them to legal requirements (Legislative Decree 196/2003) and to the best practices included in the ISO 27001 standard, an international information security management standard.

The security of information systems is also carried out thanks to targeted intervention aimed at protecting them from risks and data violations. For this reason, also in 2013, under the supervision and coordination of the parent company, Acea Distribuzione and Acea Ato 2 created a vulnerability test on the **remote control and monitoring systems** of the respective grids.

In 2013, in order to improve **the protection of information and the relative information systems** where this information is archived, the **parent company's Information and Communication Technology Function** carried out the following initiatives:

- the extension of the Information technology (IT) infrastructure perimeter, monitored and managed by the **Security Operation Centre (SOC)**, aimed at improving IT security standards, reducing accidents, managing and monitoring security alerts;
- the revision of the **document framework**, published last year, dedicated to the security of information systems (ICT).

As far as **technological information** is concerned, which is at the service of corporate assets, during the year the information systems of the Group continued to be renewed and centralised.

As for the clearance of documents maintained over time, many projects were carried out to improve paper archives and electronic documentation management processes.

The **Enterprise Resource Planning (ERP) platform strengthening** programme was started in order to gradually unify SPA platforms and create a unique technologically advanced platform integrated with Acea's document system. Therefore, important corporate processes, such as purchasing and invoice accounting, could be dematerialised (see chapter *Suppliers*).

Moreover, a **unified desktop system** – integrated with the telephone exchange information system – was implemented. It automatically allows the contact centre operator to access the most suitable corporate application in managing incoming calls in the most time-efficient manner.

The Group's operating companies provide themselves with the best innovation technology elements in order to improve the level of services provided. For example, Acea Distribuzione, the Group company responsible for the management of the infrastructure of

electricity distribution, is very active with regard to technological innovation, developing **smart grids** and **functional applications for energy efficiency**; Acea Illuminazione, the company responsible for public lighting in Rome, follows the evolution of **illuminating engineering**, in particular with the application of LEDs; water companies are focused on developing **satellite monitoring systems for water infrastructure** and functional technologies to reduce water leakages and to increase energy efficiency in water treatment plants (see *Customers and the community and Environmental issues*).

MEASURES TAKEN BY SPECIFIC AUTHORITIES TOWARDS ACEA: PRELIMINARY INVESTIGATIONS, BONUSES AND PENALTIES

The penalty and fine system created by the "Autorità per l'energia elettrica, il gas ed il sistema idrico" (AEEGSI - Electricity, Gas and Water System Authority) towards companies providing electricity contributes to drive companies - operating in a monopoly as long as their concession is granted - to improve their performances. Every year the Authority sets the standards to be met (number of interruptions and relative length) according to which the performances of the supplier are evaluated. In the year examined, with reference to the year 2012, AEEGSI approved the payment of an **incentive bonus of around 716,000 euros** to Acea Distribuzione for **service recovery** within the regulation for LV customers (**around 281,000 euros of penalties** will be divided into instalments for the next three years or even partially cancelled if the company shows better data on specific continuity indicators). A **bonus of 424,000 euros** on the new standard was approved, referring to the decrease in the number of interruptions among MV customers (source: Resolution 478/2013/R/EEL). With reference to the continuity of the electrical service in 2012, Acea Distribuzione paid, in the form of **compensation** to the customers and **penalties** to the Compensation Fund of the Electricity Sector, **1,040,000 euros** for long interruptions and **587,000 euros** for exceeding the MV customers' standards.

In the month of July 2013, AEEGSI started a penalty procedure (Resolution 300/2013/S/EEL) towards Acea Distribuzione for the verification of some violations in the procedures of aggregation of the measures, functional for the regulation of physical and economic lots of the dispatching service. This procedure is still in progress.

In November the Authority imposed a financial penalty of **517,000 euros** (Resolution 512/2013/S/EEL) to Acea Distribuzione because of verified violations concerning the interruptions of the service by the electricity companies. The company appealed to the TAR Lombardy (Regional Administrative Court) against AEEGSI's sanction.

As far as Acea Energia is concerned, the Authority imposed a penalty of **150,000 euros** due to the failure to comply with some dispositions concerning the transparency obligations in the commercial telephone service for the protected market (Resolution 441/2013/S/EEL).

Moreover, the procedure started in 2012 for the verification of violations concerning the consumption billing and the commercial quality general standards in the protected market was closed, and AEEGSI accepted the commitments proposed by the energy company (Resolution 540/2013/S/EEL). In particular, Acea Energia's commitments, considered to be able to protect the assumingly violated dispositions, aim at: i) eliminating what is known as "billing queue", that is the charge of the estimated consumption in the period between the data gathering and the issue of the bill; ii) paying a compensation to the customers affected by the lack of billing continuity ("billing interruption") in the investigated period.

As far as **public lighting** is concerned, the performances in the city of Rome contracted slightly compared to last year. The percentage of intervention on faults carried out after the time limit established by the contract went from 0.5 % in 2012 to 1% in 2013; on the basis of this result, Acea paid a penalty of around **29,500 euros** (26,200 euros in 2012).

As far as the **environmental** contentious procedures with the competent public authorities (Arpa, Corps of Forest Rangers etc.) are concerned, please see *Environmental issues and Environmental report*.

ACTIVITIES ABROAD

Acea operates abroad in the water sector in Peru, Honduras and the Dominican Republic⁸⁹, serving about **5 million people**. In terms of consolidation percentage the activities abroad have a moderate influence from an economic and financial point of view, however, due to their social relevance, it is deemed useful to provide a concise description.

The activities, carried out by special purpose entities together with local and international partners, aim at improving the service, where it is lacking, in its technical, management, administrative

and commercial aspects; in this case, Acea ensures training of personnel and the transfer of know-how to local companies. This chapter offers a brief summary of the operating companies' main characteristics and their mission in the reference countries, describing their social and environmental projects and initiatives. The 2012 **Code of Ethics** of the Group⁹⁰ was sent to all the foreign investee companies and it is available on the company's website (www.acea.it), in Italian and English.

CONSORCIO AGUA AZUL SA

Consortio Agua Azul was created with the aim of producing drinking water for the publicly-owned water company: SEDAPAL (Drinking water and sewerage service in Lima). The Consortio built the infrastructures necessary to meet part of the drinking water needs in the **northern part of Lima, Peru**, using the surface and underground water of the Chillón River. It will maintain operational

responsibility for these infrastructures until 2027, at which time they will be transferred under the State's control.

During 2013, 45.4 Mm³ of drinking water were produced, 1.7% less than 2012, due to a lower availability of surface water (-5.4%), but exceeding the contract amount of 2%.

CONSORCIO AGUA AZUL SA - MAIN CORPORATE AND OPERATING DATA

country (area)	Peru (Lima, northern part - Cono Norte)
inhabitants served	750,000
customer	Sedapal (State-owned drinking water and sewerage service of Lima)
source of funding	Shareholders' equity and bonds issued on the Peruvian market
duration of the contract	07.04.2000 - 18.06.2027
aim of the project	BOT (Build-Operate-Transfer) project for the construction and management of the drinking water supply system exploiting the water of the Chillón River and the underlying ground water.
partners	Acea SpA 25.5%, Impregilo International Infrastructure N.V. 25.5%, Marubeni Co 29% , Inversiones Liquidas S.A.C 20%
n. of employees as of 31.12.13	33
business turnover (in thousands of euros)	11,174

In 2013 a **training program on environmental issues and safety** was created. It was targeted to all employees and contract workers. In 2013, 600 visitors from schools, Universities and companies operating in similar or different sectors came to the company's plants.

Moreover, in March and October, the practical part of the **regional course on the functioning of rapid filtration plants** – in which many graduates from different South American countries participate every year - took place. It was organised in cooperation with the National University of Engineering.

In the perspective of corporate social responsibility, in 2013 the Concorcio Agua Azul **confirmed its support to public bodies** (such as the Policia Nacional, primary schools, the Ministry of Agriculture, the Municipality and the fire-fighters of Carabayllo), **non-profit**

foundations (i.e., drug-addict rehabilitation centres) and **local farmers' associations**, with whom it shares the use of Valle del Chillón's water. Moreover, as far as **gardening and canteen services** are concerned, the Consortio turned to **local family-run companies**, offering them many work opportunities. In order to combat the phenomenon of school dropout it provided local primary and nursery schools with **educational material** (975 school kits). School-bags are distributed to the children this year as well, and are made of recycled plastic materials and characterised by printed phrases which promote the correct use of water and the respect for the environment. The questionnaire regarding the workplace, anonymously completed by employees, showed a satisfaction rate of 100%. Also in 2013 the Consortio **offered high-school students, university students and recent university graduates a period of internship**.

⁸⁹ Since 2013, Acea no longer operates in Colombia, where it was present from 2008 to 2012 through the control of Aguazul Bogotá SA ESP (51% belonging to Acea SpA). When the contract expired the public administration internalised the activities again. Aguazul Bogotá still exists, Acea maintains its ownership share, and it is present in Peru through the subsidiary company Consortio Aguazul Bogotá-HCI, of which it holds 60%.

⁹⁰ In particular, article 16.4 of the Group's **Code of Ethics** (2012 edition) defines the **Protection of ethic aspects in the supplies**, stating that: "Acea undertakes to promote, as part of its supply activities, respect for the protection and safety conditions of its employees, a focus on the quality of goods, services and performances, respect for the environment and the pursuit of energy savings, in accordance with the principles outlined in this Code of Ethics and the law. In supply contracts with at-risk countries, defined as such by recognised organisations, contractual clauses have been introduced that involve: a self-certification by the supplier of the compliance with specific social obligations (i.e., measures that guarantee employees' respect for their fundamental rights, the principles of equal treatment and non-discrimination, protection against child labour); the possibility of carrying out monitoring activities at production units or operating sites of the supplier company in order to verify the fulfilment of these requisite.

Within the annual monitoring program, the Peruvian certification body SGS continued its activities of verification of the certified management systems, aimed at certifying the respect of regulatory requirements. The **Quality and Environment Integrated System**, certified according to **UNI EN ISO 9001:2008 and 14001:2004 standards**, was confirmed to Consorcio Agua Azul.

In 2013 the **company's Code of Ethics** - which focuses on the ethical principles and the relations with partners - was approved. During the year, the company met the regulatory requirements concerning the rights of workers, safety and health in the workplace.

CONSORCIO AGUAZUL BOGOTÀ-HCI

The company Aguazul Bogotá and the Peruvian Group HCI created the Consorcio AZB-HCI which was awarded the management contract for commercial services in the **northern part of Lima, Peru**. The contract, effective on 1st July 2010, has a three-year duration and

includes the management of the billing cycle, the maintenance of meters, customer database updating and the installation of new meters within the first two years. During 2013 **46,271 new meters were installed**.

CONSORCIO AZB- HCI (CONAZUL) – MAIN CORPORATE AND OPERATING DATA

country (area)	Peru (Lima, northern part)
inhabitants served	2,500,000
customer	Sedapal (state-owned drinking water and sewerage service of Lima)
duration of the contact	01.07.2010 – 31.12.2013
aim of the project	commercial management of water service and installation of meters
partners	Aguazul Bogotá 60%, HCI Group 40%
n. of employees as of 31.12.2013	434
business turnover (in thousands of euros)	6,597

NB: Acea SpA owns 51% of Aguazul Bogotá

Also in 2013 the Concorcio carried out **awareness campaigns** for the importance of water resources and its consumption among the inhabitants of the served zone. The contract, which had an initial duration of six months, was prolonged until 31.12.2013.

Training courses on the environmental impact, safety and commercial quality were carried out for employees.

Vaccination campaigns were carried out for all the employees.

As far as personnel management – 434 people - is concerned, the

Conсорcio respects the Peruvian Labour and Social Law rules and adopts **corporate policies aimed at protecting the worker's rights and dignity**. The Consorcio provided economic support to employees, through personal loans used for health expenditure, the purchase of safer vehicles and the education of family members.

In August 2013 an anonymous questionnaire regarding the workplace was submitted to the employees. It showed a **satisfaction result of 95%**.

AGUAS DE SAN PEDRO SA

Agua de San Pedro (ASP) has a thirty-year contract for the management of the integrated water service in the city of **San Pedro de Sula, Honduras**. The company launched a program of intervention for strengthening and improving the water service. It provides for the total coverage of the city, with continuous water

service, and sewage collection and purification. In 2013 the number of served customers was 112,322, of whom 72% were supplied with meters. The drinking water service coverage reached 99% and sewerage service 83%. Water production was 81.4 Mm³, of which 54% come from wells.

AGUAS DE SAN PEDRO SA – MAIN CORPORATE AND OPERATING DATA

country (area)	Honduras (San Pedro Sula)
inhabitants served	500,000
customer	municipal authority
source of funding	shareholders' equity and loans from commercial banks
duration of the contract	01.02.2001 – 01.02.2031
aim of the project	concession of the integrated water service for the city of San Pedro de Sula
partners	Acea SpA 31%, IREN SpA 30%, Astaldi SpA 15%, Ghella SpA 15%, Three Comercial 5%, C.Lotti & Associati 4%
n. of employees as of 31.12.2013	416
business turnover (in thousands of euros)	22,542

During the year the company carried out many **social and environmental protection initiatives**. In particular, it focused on the protection of the **Nature Reserve El Merendon**, which has been declared a protected area for water withdrawal for San Pedro Sula. Much intervention has been carried out, such as the “Merendon” **reforestation**, started in 2004 and still **in progress**; the implementation of **fire protection campaigns**; the **construction of a greenhouse system** for corn and bean growing, used by 12 local women in order to allow them to have more income and to promote environmentally-friendly growth; training courses for the management of tomato greenhouses.

Among the initiatives for the employees are: **scholarships for workers and for the children of the employees** with a low salary, **subsidies for the purchase of books and educational material**, training courses on **technical, administrative and environmental issues, safety and health** in the workplace. In particular, in 2013 training courses for both external personnel - attended by 74% of contract employees – and internal personnel – attended by 85% of employees – were carried out. The total number of training hours was 15,280 for 329 people (80% of the entire staff).

During 2013 an **expertise management system** was implemented, aimed at **creating value** within the company. Its implementation was followed by a performance evaluation process which received a score of 84%, making Aguas de San Pedro a leading company in the development of human resources among those operating in the integrated water area.

In 2013 a road safety campaign was carried out and the result was a lower accident rate on the roads.

Also in 2013 medical examinations, information campaigns on the prevention of serious diseases and vaccination campaigns (against flu, hepatitis A and B, tetanus) were carried out for employees and their families. In order to promote integration and socialisation within the company, many recreational events were organized for employees and their families on days of festivity.

During the year, the company **obtained** its laboratory certification according to the **ISO 17025:2005** standard, and the **Quality Management System Certification** was confirmed, according to the **ISO 9001:2008** standard.

ACEA DOMINICANA SA

Acea Dominicana deals with the commercial management of water service in the **northern and eastern parts of Santo Domingo, Dominican Republic**. The activities include the management of the customer relationship, the billing cycle and the estimates, the installation

of new meters and the management of the works concerning new connections. The project is of one the first cases of private participation in water services in the Dominican Republic.

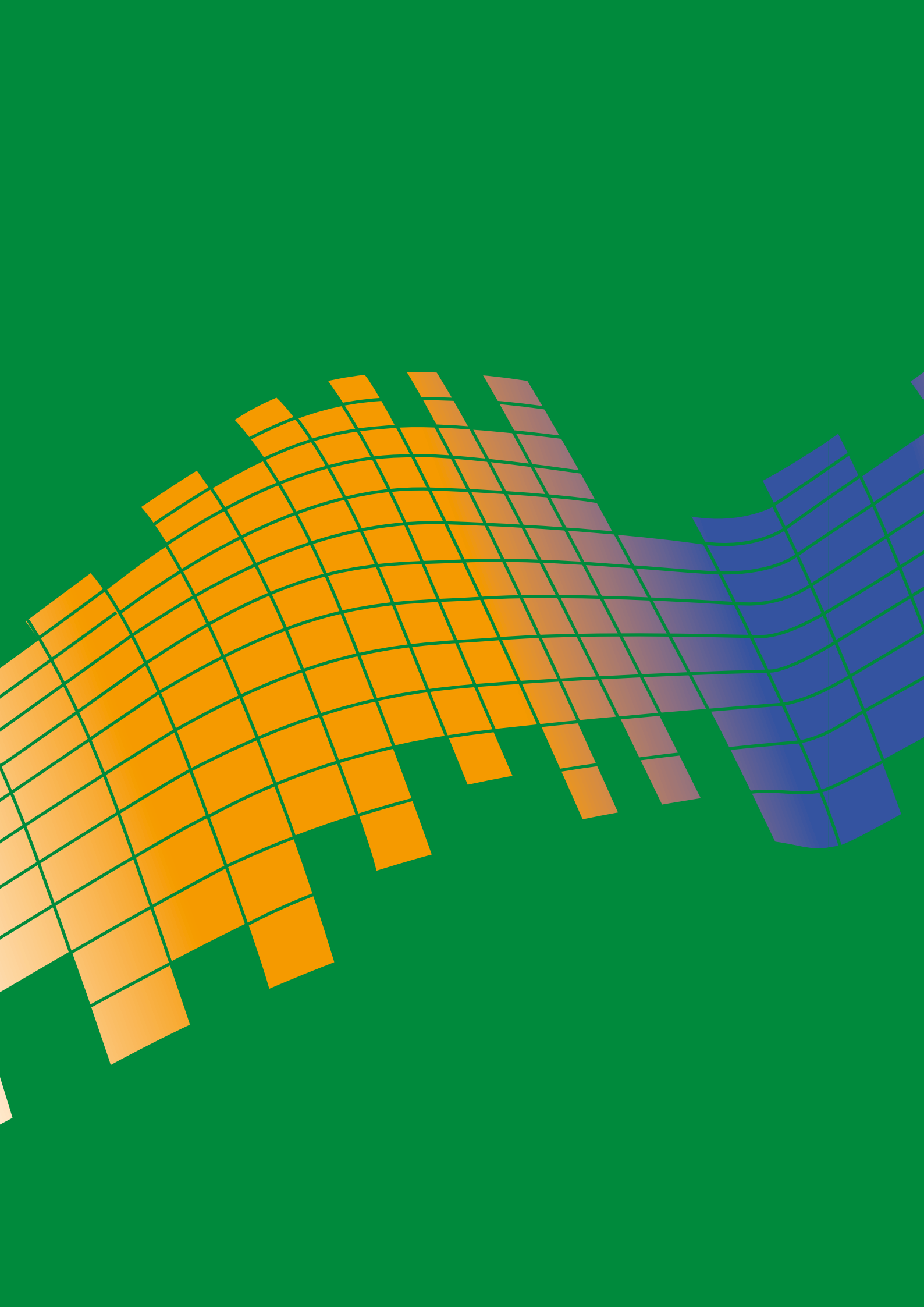
DOMINICANA SA – MAIN CORPORATE AND OPERATING DATA

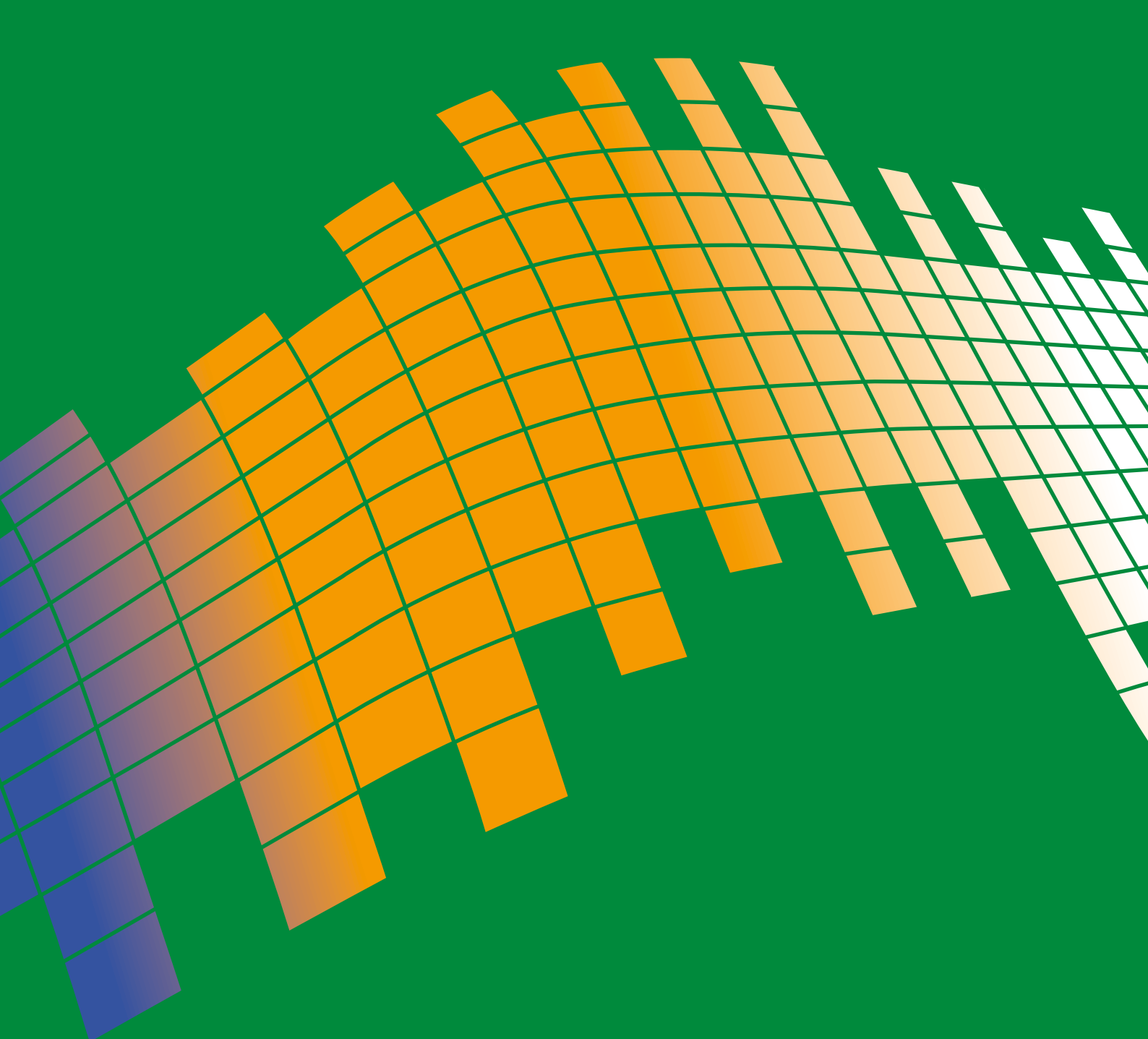
country (area)	Dominican Republic (Santo Domingo, northern and eastern parts)
inhabitants served	1,500,000
customer	Corporación del Acueducto y Alcantarillado de Santo Domingo (CAASD)
duration of the contract	01.10.2003 – 01.10.2016
aim of the project	water service commercial management
partners	Acea SpA 100%,
n. of employees as of 31.12.2013	158
business turnover (in thousands of euros)	3,089

In 2013 Acea Dominicana was involved in a series of campaigns to create awareness of the rational use of water and the importance of paying for the provided service. In particular, in the poorest areas of the capital and in Boca China weekly workshops were organised within the project “Plan Deuda Cero” (Zero debt plan), where groups of employees went “door-to-door” explaining to the inhabitants the importance of the correct usage of water and providing them advice on how to reduce waste in everyday life. Some of the main Dominican TV channels talked about this initiative, through dedicated programs and interviews. This initiative had a positive

effect in the short term, with a sensible decrease in both arrearage and domestic water leakages.

As far as personnel management is concerned, also this year, Acea Dominicana, in compliance with the Dominican Labour and Social Law’s rules, adopted **corporate policies aimed at protecting the rights and dignity of workers**. In accordance with this approach, the health insurance policy was renewed and a severance package was arranged, both of which are non-obligatory in the Dominican Republic.





2013

**ENVIRONMENTAL
ISSUES**

ACEA AND THE PROTECTION OF THE ENVIRONMENT

Acea, as a utility, pays particular attention to social and environmental issues. Indeed, as far as the protection of the environment is concerned, the company looks for the highest management standards and the most advanced technologies. It is characterised by a sustainable style, based on equilibrium and responsibility. For this reason, Acea decided to apply the principle of sustainable development to all areas of the company, trying to make people aware and facilitate the cultural change (see also *Corporate identity* and *2012-2016 Sustainability plan and mid-term objectives*).



MEASURES TO PROTECT THE CLIMATE

The reduction of CO₂ emissions - which are very likely responsible for global warming - is a very important issue for the company. Acea adopted a policy of reduction of CO₂ emissions in its activities, also thanks to the participation in the Carbon Disclosure Project (CDP), for a number of years now. The CDP was an incentive to face this issue in a rigorous and methodical way. Since then, the company has aimed at both spreading awareness on climate change and going towards a carbon neutral structure of its operating processes.

Over the last ten years, after the implementation of initiatives such as the use and production of green power, the increase in efficiency of internal end-uses and the modernisation of the company's car fleet, Acea reached one of the lowest carbon intensity values (tCO₂/euro of turnover) in Italy as far as utilities are concerned (see specific box).

THE 5TH CLIMATE REPORT

From the 23rd to the 27th September 2013, the plenary session of the Working Group of the Intergovernmental Panel on Climate Change - IPCC⁹¹ - took place in Stockholm. During this session, **the first volume of the Fifth Report on Climate Change** (published on the 30th September) was defined.

According to the IPCC, the new trends emerged from independent scientific research - based on the observation of climate change, the comparison with paleoclimate archives and studies and simulations of climate models - allowed to reach some conclusions which dispel any possible doubt:

1. **Global warming is unequivocal** («Warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia»);
2. **“Human influence on the climate system is clear”**.

The next two volumes of the study will be published by April 2014, edited by the Working Group II and III, respectively focused on: studying the vulnerability of environmental and socio-economic systems with respect to climate changes, the consequences of temperature increases and **adaptation** options and elaboration of strategies to reduce the emissions and **mitigate** global warming. The Synthesis Report will be published in 2014.

For further information: <http://www.ipcc.ch>; <http://www.cmcc.it>

91 The IPCC, intergovernmental group of experts on climate change, is a scientific forum created in 1988 by the United Nations with the aim of studying climate change. Its evaluations are mainly based on scientific literature. It regularly provides exhaustive and updated evaluations of the scientific, technical and socio-economic information, in order to better understand climate change.

ACEA IS ONE OF THE “HIGH SCORERS” IN THE CARBON DISCLOSURE PROJECT

The **Carbon Disclosure Project (CDP)** is an independent non-profit organisation holding the biggest international information database on the strategies adopted by companies to counteract **climate change**. The data have been obtained over a period of thirteen years, elaborating the answers which were voluntarily provided by companies in annual questionnaires proposed on behalf of institutional investors, commercial organisations and governmental bodies.

Since its foundation in 2000, the CDP has been a reference point for CO₂ emissions reporting, providing the global market with primary data on climate change. Thanks to the acknowledged reliability of this “project” and the good results obtained so far, in June 2013 **the Italian Ministry of Environment signed a Memorandum of Understanding (MOU) with the CDP** in order to make Italian companies more and more aware of climate changes.

On 3rd December 2013 the presentation of the **CDP 100 Italy Climate Change Report 2013** took place in Milan. This document includes and summarises the information provided by 100 Italian companies participating in this initiative and elaborates a true ranking, based on communication transparency and on the **carbon footprint**.

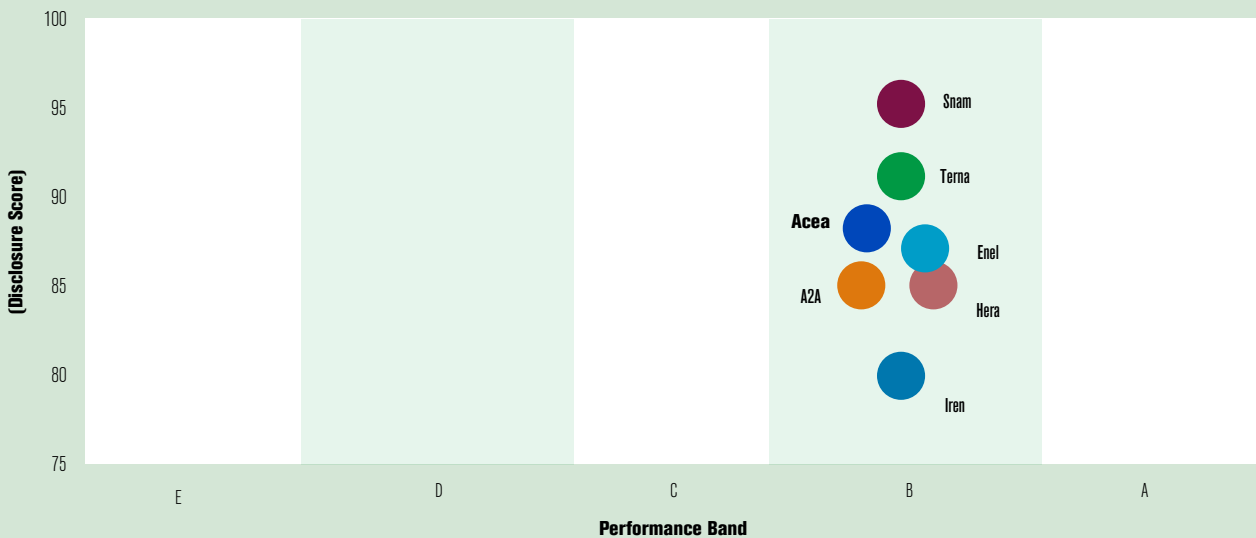
The average score of this panel composed of Italian companies was higher than the previous year; in particular 27 companies improved their score, including **Acea** which **scored 88 B** versus 81 C last year, showing an improved ability to manage and report the phenomena at the basis of climate change. With this score, **Acea is one of the high scorers** - the companies which scored higher than 70, reserved to companies which pay attention to reducing CO₂ emissions.

Moreover, the report shows a dramatic decrease in investments for the reduction of emissions, probably due to the current economic crisis.

For further information:

<https://www.cdp.net/CDPResults/CDP-Italy-100-Climate-Change-Report-2013.pdf>

DISCLOSURE SCORE / PERFORMANCE BAND - UTILITIES



A VALUE TO SHARE: BIODIVERSITY

The loss of biodiversity, due to the disappearance of living species, is one of the main environmental emergencies which humanity has to cope with. Biodiversity is one of the most important driving forces of our Planet, maintaining the conditions necessary for human life and producing an ecosystem richness which is more than the sum of the benefits coming from single living species. It is like all living organisms, united in a sort of super-system, create a multiplying effect on environmental benefits.

It is a global challenge and we must all play our part.

Acea supports biodiversity through:

- **protecting the areas surrounding water sources**, carefully managed, making it possible to maintain stable and optimal biodiversity conditions in vast natural areas. It is an important human and technological initiative which helps to protect natural capital;
- **protecting the peregrine falcon**, thanks to the cooperation between Acea and Ornithologica - a non-profit company focused on the study and protection of birds which allowed, over the last six years, young falcon couples to build their nests on the drinking

water tanks of Salone (Eastern part of Rome). Consequently, around twenty falcons were born. It is possible to follow the breeding thanks to a **webcam** in the nest. Currently, the peregrine falcon is considered a vulnerable species by the IUCN (International Union for the Conservation of Nature) and its presence on Acea's structures is an important biodiversity element for the city (see specific box).

- **reducing the impact of high and medium voltage airlines** in particularly valuable areas. For this purpose, Acea cooperates with bodies for environmental protection in order to give the best technological answers to the problems that the presence of the overhead lines for the transportation of electricity determine on the ecosystems and in particularly on the birds.

PEREGRINE FALCONS' BREEDING IN SALONE

The peregrine falcon (*Falco peregrinus*) began breeding again in Rome in 2005, after an absence of about 30 years. In 2008, thanks to the cooperation between Acea and the ornithological association Ornithologica Italiana, it built its nests, for the first time, on a water tank managed by the Group in the outskirts of Rome (Salone). Thanks to the **webcams in the falcon's nest it is possible to follow its breeding**. In 2013 a couple of falcons, called Appio and Vergine, occupied their nest for the sixth consecutive year and, at the end of May, four baby falcons flew away.

The whole event – the egg deposition, the brooding, the hatching, the birth of the baby falcons and their takeoff – was followed online by many national and international enthusiasts. Its Facebook profile (<http://www.facebook.com/birdcam.italia>), created in February 2011, reached 12,890 "likes" in December 2013.

Despite the presence of the Facebook page, the website www.birdcam.it reached 780,000 views between January and July 2013, from 240,000 users coming from 126 countries all over the world.



ENVIRONMENTAL MANAGEMENT

Since the European Union started to consider the environment as a supranational issue, in the 70s, all the Member States have paid more attention to the ecological status and the protection of the continental territories. Today the quality indicators of water, land and air ecosystems show a positive trend, although the general context still needs innovative protection actions.

Particular attention has been paid to the **environmental management systematisation**, through the implementation of the certifiable systems ISO 14001 and the EMAS (Eco-Management and Audit Scheme) registration.

According to this guideline, Acea has carried out a process of systematisation of its management approaches since the 90s, leading to a preliminary monitoring and reporting process of environmental performances. In 1994 the first eco-report referring to the period 1991-1993 was carried out and in 1999 it was followed by the first Environmental Report, which rigorously reported corporate facts and performances, according to the Fondazione ENI Enrico Mattei's guidelines.

Over the last few years this process was accelerated, through the issuing of the **Quality, Environment, Safety and Energy Policy** and the creation, in 2013, of an **Environment Unit** (within the Safety and Protection Function) and an **Environmental Regulatory Unit** (within the Legal and Corporate Affairs Function) which will be able to provide

general orientation to the procedures of the Group's companies. In particular, the Environment Unit will facilitate the process of environmental certification for the Group's companies, operating in cooperation with the competent structures and managing relations with the certification bodies ISO 14001 and EMAS. The aim of the holding company is to implement a Quality, Environment, Safety and Energy Integrated System in the next two years. In the meanwhile, different companies of the Group obtained an environmental certification: in particular, in 2013, **Acea Ato 5** - which manages the Integrated Water Service (SII) in ATO 5 Lazio Meridionale – Frosinone – **obtained the UNI EN ISO 14001 certification**, and **Acea Ato 2** – which manages the SII in ATO 2 Lazio Centrale – started this process, with the aim of obtaining it within one year. Moreover, in 2013 an **environment and safety integrated management system** was implemented in **Kylos, Solemme and Aquaser** (for all the certifications of the Group's companies active in 2013 or in the course of implementation, please see *Corporate identity*, paragraph *Management systems*). Finally, the Environment Unit will be involved in the rating project of suppliers, gradually introducing new elements aimed at improving quality, environmental and safety protection in the supply of goods, services and works.

The management of the Group's **main production plants** complies with the **UNI EN ISO 14001:2004 standard**. In some cases the **EMAS European**

registration has been obtained. The Group follows, therefore, the principle of continual improvement, establishing new efficiency goals in the protection of environment and monitoring specific performance indicators, which indicate possible anomalies and allow timely intervention.

In 2013 all the **Environmental Certificates** and the **EMAS European registrations** were confirmed. They refer to:

- the **thermal power plants** and the main **hydroelectric power plants**;
- the **Waste-to-Energy plant of San Vittore del Lazio and the Waste-to-Energy plant of Terni (pulper)**;
- the **MSW (Municipal Solid Waste) treatment and disposal plant of Orvieto**.

Although the operating companies make important efforts to keep the environmental management system efficient, sometimes instances of noncompliance may occur – often because of

fortuitous circumstances - which could be contested by the competent **Control Bodies**.

In 2013 **around 90 penalties** were imposed, corresponding to a total amount of **167,934 euros** (of which 78,744 euros to Acea Ato 2, 20,026 euros to Acea Ato 5, 23,000 euros to Umbra Acque and 46,164 euros to Publicacqua).

MANAGEMENT AND CONTROL OF ACTIVITIES WITH ENVIRONMENTAL IMPACTS

Besides monitoring the activities and the processes generating environmental impacts, Acea pays particular attention to the management of some elements – such as asbestos, sulphur hexafluoride and dielectric oil - as well as electromagnetic field measurement and noise measurement, in compliance with the regulations and the local communities (see in-depth boxes).

ASBESTOS MANAGEMENT IN ACEA

The person in charge for asbestos at Acea - appointed in compliance with Ministerial Decree 06/09/1994 - has the task of controlling and coordinating the maintenance activities concerning the “asbestos-risk” products and plants. Before any action is taken on these structures (maintenance, demolition, plant integration etc.), the person in charge carries out inspections, requests chemical analysis and gives instructions on the operating methods of the work to be performed, in accordance with the results of preliminary evaluations.

The activities carried out by the person in charge for asbestos can be divided into **ordinary activities**:

- visual inspection and biannual environmental samples (air quality);
- bookkeeping;
- control activities agreed with ASL RM A Office S.Pre. S.A.L.;

and **extraordinary monitoring**. Any kind of maintenance actions in areas where the same levels of asbestos or suspicious material are found, is preceded by a control carried out by the person in charge, who highlights possible critical points and prepares specific analysis. Many on-call visual inspections were carried out and sometimes samples were taken to be analysed before the maintenance activities or in order to verify the possible presence of asbestos. Documentation is available for all actions taken.

In particular, during the last three years, twenty characterisation actions were performed on suspicious materials in Acea’s plants and structures. In the cases where controls revealed the presence of asbestos, decontamination operations were carried out, removing all traces of this dangerous mineral.

ENVIRONMENTAL MEASURES: ELECTROMAGNETIC FIELDS AND NOISE

In 2013 **Acea Distribuzione**’s Technical Physics Lab carried out different **electromagnetic field and noise measurements** in order to verify the compliance of the plants with the regulations.

These concerned the plants which can be considered “sources” of the physical agent under consideration, and so, usually: primary and secondary substations, high, medium and low voltage power lines. These were often carried out to find the optimal distribution of machineries in the technical rooms, in order to reduce the emissions of the magnetic field so as to test the efficacy of the shielding devices.

These measurements were carried out by skilled personnel with specific tools, according to the procedures required by current regulations. The measurement points were identified both in the potential sources (transformer rooms and power lines) and in third-party properties next or adjacent to them.

The values measured confirmed that power distribution plants comply with the requirements of the regulations. Where possible critical situations could arise, specific actions were taken to create **adequate safety margins in compliance with the regulations**.

Overall, **40 electromagnetic field measurements** (generated by distribution plants), **12 noise measurements** and **1 photometric measurement** were carried out.

SF₆ GAS MANAGEMENT IN ACEA DISTRIBUZIONE'S PLANTS

Due to its remarkable insulating properties (2 - 3 times more insulating than air), sulphur hexafluoride (SF₆) is a gas which allows **the construction of particularly small machinery of medium and high voltage**. This is particularly useful when it is necessary to build power plants in a limited space and these situations occur very often during the process of electrification development in highly urbanised areas.

This gas is not poisonous, even though it is not compatible with life. Its danger is due to high energy absorption in the infrared, which makes it a **greenhouse gas**. For this reason, **its use must comply with strict rules** both at national and international levels.

The electric machineries which benefit from its extraordinary technological characteristics, especially high and medium voltage switches, have a **low risk of fire** and **need little maintenance** even in case of a high number of open/close operations: these characteristics made them successful worldwide.

Until approximately ten years ago, Acea Distribuzione significantly used medium-voltage panels isolated in SF₆ in secondary substations. Today it uses medium and high voltage panels also in primary substations, where, during 2013, around 0.73 t of SF₆ were used for reinstatements or for substitutions after maintenance work was carried out.

The table shows an overview of the total amount of SF₆ gas in Acea Distribuzione's plants.

TABLE N. 62 - SF₆ GAS IN ACEA DISTRIBUZIONE'S PLANTS (estimated data) (2012-2013)

PLANTS	TOTAL AMOUNT 2012	TOTAL AMOUNT 2013
	(t)	(t)
primary substations	19.20	19.90
secondary substations	9.95	9.78
total	29.15	29.68

USE AND MANAGEMENT OF DIELECTRIC OIL

The dielectric mineral oil, due to its peculiar chemical and physical characteristics which make it a **perfect electrical insulator and a good cooling agent**, is used to build electrical transformers, providing necessary insulation in machinery and a heat-disposal effect while operating. Being a by-product of oil, potentially dangerous for the environment, its management is strictly monitored.

The transformers are static electrical machines which conveniently use magnetic induction phenomena occurring between "paired" windings traversed by alternating current – they are able to change both increasing and decreasing voltage with an outcome of more than 95%. The invention of this machine dates back to 1882 by the French Lucien Gaulard, who exhibited it for the first time at the London Exhibition in 1883. Today the transformer is considered to be the main long-distance electricity transmitter, without excessive losses.

In primary substations, transformers decrease the voltage from the level in which the high-voltage transmission occurs (150 and 220 kV) to the medium-voltage level (20 and 8.4 kV), generally used for the city distribution. Medium-voltage cables coming out from the primary substations reach the secondary substations, which are numerous in cities. Here other electrical transformers further decrease the voltage until the final level used by customers (380 and 2220 V) is reached.

The table shows an overview of the amount of dielectric oil managed in Acea Distribuzione's plants.

TABLE N. 63 - DIELECTRIC OIL IN ACEA DISTRIBUZIONE'S PLANTS (estimated data) (2012-2013)

PLANTS	TOTAL AMOUNT 2012	DIELECTRIC OIL MANAGEMENT 2013		TOTAL AMOUNT 2013
	(A)	NEW PURCHASES	DIVESTMENTS	(A+B+C)
		(B)	(C)	
	(t)	(t)	(t)	(t)
primary substations	4,587	88	-39	4,636
secondary substations	4,800	26	-	4,826
total	9,387	87.70	-38.89	9,462

THE “ENVIRONMENTAL EXPENDITURES”

The **environmental expenditures** reported by the Group – referring to the Group’s companies that already have an environmental accounting system (about 90%) – are defined, at the European level, as *“the costs of steps taken by an undertaking or on its behalf by others to prevent, reduce or repair damage to the environment which results from its operating activities”*⁹².

The **environmental costs in 2013**, divided into investments and current expenses, amounted to about **103 million euros** (see table n. 64).

TABLE N. 64 – ENVIRONMENTAL EXPENDITURES OF THE MAIN OPERATING COMPANIES (2011-2013)

GROUP'S COMPANIES	INVESTMENTS (millions of euros)			CURRENT EXPENSES (millions of euros)		
	2011	2012	2013	2011	2012	2013
Acea Produzione	13.59	15.09	1.05	0.37	0.79	0.77
Gruppo ARIA (*)	0.01	0.0	0.0	6.10	7.91	8.67
Aquaser (**)	0.40	0.81	0.19	0.99	1.05	0.91
Acea Distribuzione	0.38	0.71	0.40	1.44	0.40 (***)	0.22
Water (****)	72.00	70.24	64.73	4.94	30.18	25.70
total	86.38	85.24	66.37	13.84	40.32	36.27

(*) Costs referring to the two Waste-to-Energy plants.

(**) Costs referring to the two composting plants.

(***) This figure has been modified, in comparison with 2012, to correct a transcription error.

(****) Laboratori, Acea Ato 2, Acea Ato 5, Publiacqua, Acquedotto del Fiora, Umbra Acque and Acque.

The recommendation 2001/453/CE includes, among environmental costs, those referred to **waste management**. In 2013 the **Group’s water companies**, which produce a huge amount of **sewerage sludge** and other industrial waste, spent about **31.4 million euros** for its **disposal**, to be summed to the total amounts reported in the table.

92 See Recommendation 2001/453/CE.

ENERGY AREA

REFERENCE BOUNDARY

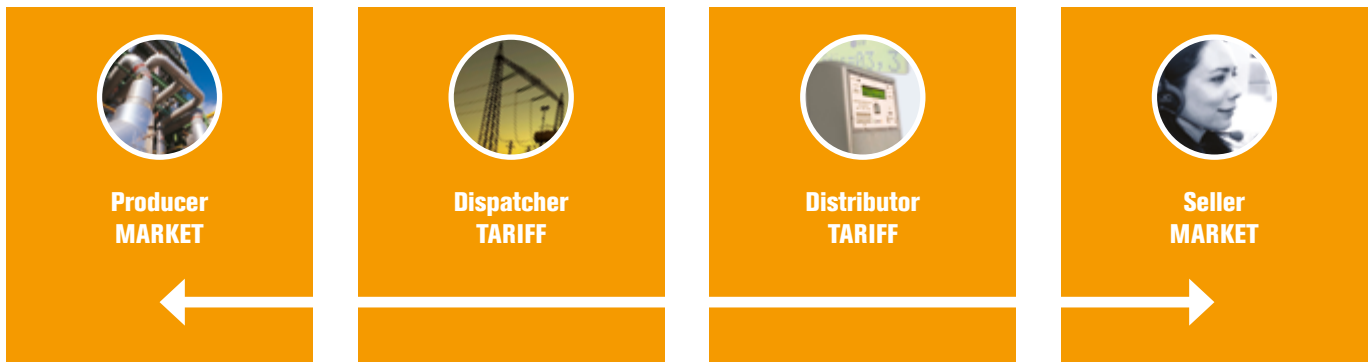
The chapter *Energy Area* includes Acea Reti e Servizi Energetici, Acea Distribuzione, Acea Produzione and the A.R.I.A. Waste-to-Energy plants. The waste-to-energy activities are described in detail in the chapter titled *Environment Area*.

The energy supply chain managed by the Acea Group includes the following activities:

- **producing** electricity and heat;
- **distributing** electricity in the area of Rome and Formello, including the public lighting management⁹³ ;
- **selling** electricity, heat and gas.

In Italy the transformation process in the electricity market started in 1999, when new mechanisms were imported from the Anglo-Saxon world, where they had already been successfully developed in the previous decade. In the current electricity supply chain, the process of providing customers with electricity is based on the cooperation of four different segments, managed by different stakeholders operating in a different but integrated way, within the value creation chain (see chart n. 34).

CHART N. 34 - ELECTRICITY SUPPLY CHAIN



It is a complex system that - 15 years after its creation - still presents some problems, partially related to the specific good provided: electricity. Indeed, although it is the most sustainable energy carrier, it has a great social and environmental impact, requires large infrastructure investments and needs the support of research and development activities.

This area needs, on the one hand, the support of the market and individual entrepreneurial spirit and, on the other hand, the regulatory action of a public stakeholder who could control all the stakeholders. Acea operates in almost all the segments of this supply chain, being an electricity producer, a distributor in Rome and a seller in the whole national territory.

ENERGY PRODUCTION: FOSSIL AND RENEWABLE ENERGY SOURCES

THE GROUP'S PRODUCTION AND PLANTS

Acea Produzione, 100% of whose capital is held by Acea SpA, manages a series of electricity generating plants composed of:

- 2 thermal power plants in the city of Rome: Montemartini (about 80 MW) and Tor di Valle (about 145 MW);
- 7 hydroelectric power plants in the regions of Latium and Abruzzi (about 120 MW)

for a total of about 345 MWe of installed power available.

Besides these energy generating plants, there are **two additional waste-to-energy plants** of the company A.R.I.A., 100% owned by Acea, in San Vittore del Lazio and Terni, for a total of about **37 MW of power**. When the revamping works of line 1 of San Vittore del Lazio's plant is completed, the waste-to-energy available power will amount to approximately **50 MWe**.

Moreover, the Group has a modern **photovoltaic power farm** producing about **14 MWe**, which remained the property of Acea after having sold most of its photovoltaic power plants (about 32 MWe) in 2012 (for an overview of the installed electrical power see table n. 69).

⁹³ Since 2013, the development of the plants and the management of the public lighting service has depended on the company Acea Illuminazione pubblica SpA.

THE ELECTRICITY PRODUCED

The **total gross electricity production in 2013 was 786 GWh**. The **increase by about 20%** in comparison with 2012 (652 GWh) is mainly due to the positive effects – of more efficiency – generated by the works of repowering, completed the previous year, on the hydroelectric power plants of Salisano and Orte. Moreover, last year the weather conditions were good, with the rainfall levels above the 10-year average. A **great increase in production**, with **260 GWh** (202 GWh from the San Vittore plant and 58 GWh from the Terni plant) was registered in the **waste-to energy area** (+19% in comparison with 2012), thanks to the rebooting of the Terni plant. About 46% of the waste-to-energy production is **renewable** as it is associated to the combustion of the

biodegradable part of refuse-derived fuel (RDF), 48% of the total, and the biodegradable part of pulper, about 39%.

The total amount of electricity generation coming **from renewable sources**, about **634 GWh**, represented the biggest portion (about 81% of the total), with **497 GWh coming from hydroelectric power**, **120 GWh from waste-to-energy** and **17 GWh from photovoltaic power** (see table n. 65).

Finally, at the thermal power plant of Tor di Valle, **99 GWh of thermal energy** were generated and used to serve about **34,000 inhabitants** of the southern part of Rome (Mostacciano, Torrino, Mezzo Cammino)⁹⁴ through a district heating grid.

TABLE N. 65- PRODUCED ELECTRICITY, DIVIDED BY PRIMARY ENERGY SOURCE (2011-2013)

PRIMARY ENERGY SOURCE	2011	2012	2013
	TJ (GWh) (*)		
diesel fuel	16.8 (4.7)	7.0 (1.9)	4.7 (1.3)
natural gas (combined cycles and cogeneration)	63.9 (17.8)	37.4 (10.4)	37.1 (10.3)
waste-to-energy (for 2013: about 52% of the total)	268.9 (74.7)	392.9 (109.1)	505.8 (140.5)
total of thermoelectric power	349.6 (97.1)	437.1 (121.4)	547.6 (152.1)
hydro	1,155.2 (320.9)	1,298.9 (360.8)	1,788.1 (496.7)
waste-to-energy (for 2013: about 46% of the total)	268.9 (74.7)	392.9 (109.1)	430.6 (119.6)
solar photovoltaic	185.8 (51.6)	217.5 (60.4)	62.3 (17.3)
total of renewable sources	1,609.9 (447.2)	1,909.3 (530.4)	2,281.0 (633.6)
overall total	1,959.6 (544.3)	2,346.4 (651.8)	2,828.6 (785.7)

(*) 1 GWh=3.6TJ

In 2013 **average conversion efficiency** of the energy contained in primary sources (1,996.7 GWh) into electricity (785.7 GWh) was about **39%**.

94 In particular, district heating serves 34,152 inhabitants (in 2012) and the total volume of the served buildings is 3,118,962 cubic meters.

TABLE N. 66 – POTENTIAL ELECTRICITY, DIVIDED BY PRIMARY ENERGY SOURCE (2011-2013)

PRIMARY ENERGY SOURCE	2011	2012	2013
	TJ (GWh) (*)		
diesel fuel	64.4 (17.9)	27.0 (7.5)	18.4 (5.1)
natural gas (combined cycles and cogeneration)	197.6 (54.9)	141.1 (39.2)	154.1 (42.8)
waste-to-energy	2,378.2 (660.6)	3,273.8 (909.4)	4,419.72 (1,227.7)
hydro	1,370.5 (380.7)	1,571.7 (436.6)	2,151.0 (597.5)
solar photovoltaic	1,325.8 (368.3)	1,553.9 (431.6)	444.9 (123.6)
overall total	5,336.5 (1,482.5)	6,567.5 (1,824.3)	7,188.1 (1,996.7)

(*) 1 GWh=3,6TJ

The data on the efficiency of each plant can be found in table n. 67.

TABLE N. 67 – AVERAGE EFFICIENCY OF ELECTRICITY PRODUCING PLANTS (2011-2013)

PLANT	AVERAGE EFFICIENCY 2011 (%)	AVERAGE EFFICIENCY 2012 (%)	AVERAGE EFFICIENCY 2013 (%)
Tor Di Valle (combined cycle - CCGT)	40.7	n.a (*)	n.a. (*)
Tor Di Valle (cogeneration section)	73.6	72.9	69.9
San Vittore	18.6	20.1	17.9
Terni	repowering	repowering	16.4
Montemartini	26.1	26.0	25.4
Salisano	85.8	88.0	87.9
S.Angelo	79.0	70.5	73.4
Orte	98.6	98.6	98.6
Castel Madama	83.0	82.6	83.0
Mandela	91.4	91.4	91.6
small plants	58.1	62.1	62.7
photovoltaic plants	14.0	14.0	14.0

(*) The extremely low production levels of 2012 did not allow the elaboration of a significant efficiency indicator; in 2013 the combined cycle's production amounted to zero.

NB: The average efficiency is given by the ratio between the gross electricity produced and the potential energy of the primary source.

SUBSIDIES FOR THE PRODUCTION OF ELECTRICITY FROM RENEWABLE SOURCES IN ITALY

Renewable sources are subsidized because investment and management costs of technology used to convert them into electricity are not compatible with their market mechanisms: they would not be competitive if they were not supported due to their reduced environmental externalities.

In Italy, the current legislative framework regulating access to subsidies is complex. The solar production (photovoltaic power) has been subsidized since 2005 with specific measures which should lead to the *grid parity* – that is the end of the subsidies – by 2016. By that date, the total photovoltaic installed power should reach 23,000 MW, corresponding to 6-7 billion euros/year of subsidies which will be reduced to zero in 20 years. The other kinds of renewable sources, included in the Directive 2001/77/CE, are subsidized with production bonuses (*feed-in-tariff*), according to the different management and investments of their technologies.

The Legislative Decree 28/2011 is very important in this context. The following Ministerial Decree on the Economic development of the 6th July 2012, *Subsidies for the production of electricity from plants using renewable sources different from photovoltaic*, implemented a system of access to subsidies completely different from the previous ones, which is based on **auctions and registers**:

1. the plants using renewable sources with power up to 5 MW access subsidies according to the rules contained in specific **Registers**;
2. the plants with higher power access subsidies through Dutch **Auctions**.

The aim of this new system is to reduce the overall subsidy costs, establishing a maximum allocatable amount and improving the system's transparency.

As far as electricity produced by non-solar renewable sources is concerned, **some of Acea's plants are subsidized**, partially because of previous legislative frameworks. In particular:

- San Vittore's **waste-to-energy plant** (final power 36 MW) benefits from CIP6 subsidies and a residual portion of Green Certificates;
- The **hydroelectric** plants of Salisano (Rieti – power 24.6 MW) and Orte (Terni – power 20 MW), after having completed the repowering in 2012, obtained the IAFR (*Plant powered by renewable sources*) qualification and were eligible for the subsidy scheme of Green Certificates without needing to be registered.

Table n. 68 and the following sheets present descriptive data of the Group's thermal power and hydroelectric plants. Waste-to-energy plants will be described in a specific chapter (see also *Environmental report*).

TABLE N. 68 – ACEA PRODUZIONE'S POWER PLANTS

THERMAL POWER PLANTS	HYDROELECTRIC PLANTS
Tor di Valle's plant: combined cycle section (*) (Rome) methane fuel – gross power 125.7 MW	A. Volta plant of Castel Madama (Rome) gross power 9.4 MW
Tor di Valle's plant: cogeneration section (**) (Rome) methane fuel – gross power 19.3 MW	G. Ferraris plant of Mandela (Rome) gross power 8.5 MW
Montemartini's plant (Rome) diesel fuel – gross power 78.3 MW	Salisano's plant (Rieti) gross power 24.6 MW
	G. Marconi plant of Orte (Viterbo) gross power 20 MW
	Sant'Angelo's plant (Chieti) gross power 58.4 MW
	Cecchina's plant (Rome) gross power 0.4 MW
	Madonna del Rosario's plant (Rome) gross power 0.4 MW
Overall total: gross power 345 MW	

(*) The combined-cycle unit of Tor di Valle's plant has a bleeding system on its steam turbine

(**) The cogeneration gas turbine unit of Tor di Valle is open-cycle and provides the district heating service to the Roman neighborhoods of Torrino Sud, Mezzocammino and Mostacciano.

HYDROELECTRIC PRODUCTION

A. VOLTA PLANT OF CASTEL MADAMA (ROME)

type of plant	run-of-river water
use of the energy produced	coverage of basic needs
nominal electrical power (rating)	9.4 MW
storage capacity of the basin or tanks	148,000 m ³
available head (as granted)	40.29 m
maximum obtainable capacity	25 m ³ /s
gross energy produced in 2013	30.38 GWh

G. MARCONI PLANT OF ORTE (TERNI)

type of plant	run-of-river water
use of the energy produced	coverage of basic needs
nominal electrical power (rating)	20 MW
storage capacity of the basin or tanks	6 million m ³
available head (as granted)	11.45 m
maximum obtainable capacity	180 m ³ /s
gross energy produced in 2013	80.91 GWh

G. FERRARIS PLANT OF MANDELA (ROME)

type of plant	run-of-river water
use of the energy produced	coverage of basic needs
nominal electrical power (rating)	8.5 MW
storage capacity of the basin or tanks	6,400 m ³
available head (as granted)	27.15 m
maximum obtainable capacity	30 m ³ /s
gross energy produced in 2013	23.05 GWh

SANT'ANGELO PLANT (CHIETI)

type of plant	tank
use of the energy produced	coverage of peak electricity demand
nominal electrical power (rating)	58.4 MW
storage capacity of the basin or tanks	83.30 million m ³ Bomba 21 million m ³ Casoli
available head (as granted)	141.20 m
maximum obtainable capacity	40 m ³ /s
gross energy produced in 2013	179.15 GWh

SALISANO PLANT (RIETI)

type of plant	run-of-river water (aqueduct)
use of the energy produced	coverage of basic needs
nominal electrical power (rating)	24.6 MW
available head	85.94 m Capore 242.50 m Peschiera
maximum obtainable capacity (as granted)	5.5 m ³ /s Capore 10 m ³ /s Peschiera
gross energy produced in 2013	180.95 GWh

HYDROELECTRIC PRODUCTION - SMALL PLANTS

CECCHINA (ROME)

type of plant	run-of-river water (aqueduct)
use of the energy produced	coverage of basic needs
nominal electrical power (rating)	0.4 MW
maximum obtainable capacity (as granted)	1.1 m ³ /s
available head (as granted)	30 m
gross energy produced in 2013	1.08 GWh

MADONNA DEL ROSARIO (ROME)

type of plant	run-of-river water (aqueduct)
use of the energy produced	coverage of basic needs
nominal electrical power (rating)	0.4 MW
maximum obtainable capacity	0.825 m ³ /s
available head (as granted)	43 m
gross energy produced in 2013	1.21 GWh

THERMOELECTRIC PRODUCTION

TOR DI VALLE PLANT - COMBINED CYCLE (ROME)

type of fuel	natural gas
use of the energy produced	mid-merit (electricity) and district heating (thermal energy)
nominal electrical power of the alternators (rating)	41.04 MW gas turbine n. 1 41.04 MW gas turbine n. 2 43.6 MW steam unit
plant's surface	35,000 m ²
height of the chimneys	30 m
amount of fuel consumed in 2013	0.00 kNm ³
gross electricity produced in 2013	0 GWh.
total gross return in 2013	0.00%

TOR DI VALLE PLANT- COGENERATION (ROME)

type of fuel	natural gas
use of the energy produced	coverage of peak electricity demand (electricity) and district heating (thermal energy)
nominal electrical power of the alternators (rating)	19.32 MW _e
height of the chimneys	20 m
amount of fuel consumed in 2013	4.042 kNm ³
gross electricity produced in 2013	10.27 GWh
total gross return in 2013	24.01% only electrical 69.85% with thermal recovery

MONTEMARTINI PLANT (ROME)

type of fuel	diesel fuel with low sulphur level
use of the energy produced	coverage of peak electricity demand
nominal electrical power of the alternators (rating)	26.1 MW gas turbine n. 1 26.1 MW gas turbine n. 2 26.1 MW gas turbine n. 3
height of the chimneys	1 x 13.35 m + 2 x 20 m
amount of fuel consumed in 2013	0.51 Ml
gross electricity produced in 2013	1.28 GWh
total gross return in 2013	25.35%

The data regarding the installed capacity are divided by energy source and reported in table n. 69. In comparison with last year, it is possible to highlight a negative variance in the solar photovoltaic area and a positive variance in the waste-to-energy area. It is the result of the 2012 strategy of developing this industrial area and maintaining the rest of the installed power stable, expecting positive signs from the generation market.

TABLE N. 69 - INSTALLED ELECTRICAL POWER OF THE GROUP DIVIDED BY ENERGY SOURCE (2011-2013)

ENERGY SOURCE	2011	2012 (MW)	2013
diesel fuel	78.3	78.3	78.3
natural gas (combined cycles and cogeneration)	144.9	144.9	144.9
waste-to-energy (*)	25	25	37
hydro	121.7	121.7	121.7
solar photovoltaic (**)	52	46	13.5
overall total	421.9	415.9	395.4

(*) In 2013 the WtE of Terni was restarted in order to complete the works of revamping, while the San Vittore del Lazio plant was taken into consideration only for the two lines in operation.

(**) On 28.12.2012 about 32.5 MW_p were released, therefore 13.5 MW_p remained in 2013. Moreover, Acea Reti and Servizi Energetici built plants for third parties, corresponding to a total power of 3 MW_p.

The availability indices of Acea Produzione's plants, divided by plant, are reported in table n. 70.

TABLE N. 70 – AVAILABILITY INDICES OF ACEA PRODUZIONE'S PLANTS (2011 - 2013)

ENERGY SOURCE	PLANT	TOTAL AVAILABILITY (%)			PLANNED UNAVAILABILITY (%)			ACCIDENTAL UNAVAILABILITY (%)		
		2011	2012	2013	2011	2012	2013	2011	2012	2013
methane	Tor Di Valle (combined cycle - CCGT)	95.2	95.9	95.6	0.0	0.0	0.0	4.8	4.1	4.4
	Tor Di Valle (cogeneration section)	99.2	99.4	78.4	0.8	0.0	1.1	0.0	0.6	20.5
diesel fuel	Montemartini	99.9	100.0	99.5	0.0	0.0	0.5	0.1	0.0	0.0
hydro	Salisano	37.1	99.3	97.7	62.9	0.1	0.2	0.0	0.6	1.8
	S.Angelo	86.9	92.3	94.5	8.4	4.1	0.2	4.6	3.6	5.2
	Orte	69.3	75.5	95.6	30.6	17.8	0.0	0.1	6.8	4.4
	Castel Madama	99.4	98.5	91.9	0.5	1.5	0.2	0.2	0.0	7.9
	Mandela	97.5	99.4	97.5	0.3	0.2	2.4	2.2	0.4	0.0
	Small plants	94.7	85.2	99.7	0.1	0.0	0.0	5.2	14.8	0.3

NB: It is not possible to provide the data concerning the hours of planned/unplanned unavailability because the indices are calculated considering also the partial shutdowns and the load limitations.

For a proper interpretation of the data reported in table n. 70 it is necessary to consider the following definitions:

- **total availability (%)**: index referring to the period in which the plant, or a section of it, was available for production, including the periods in which it was not in operation due to the needs of the electricity market. It is obtained by the ratio between the available electricity – equal to the difference between the maximum energy that can be produced and the unavailable energy (see following points) – and the maximum energy that can be produced during the month.
- **planned unavailability (%)**: index referring to the period in which the plant, or a section of it, was unavailable because of planned events (maintenance, etc.). It is obtained by the ratio between the energy unavailable in the period of the planned event and the maximum energy that can be produced during the month.
- **accidental unavailability (%)**: index referring to the period in which the plant, or a section of it, was unavailable because of failures. It is obtained by the ratio between the energy available in the period of failure and the maximum energy that can be produced during the month.

ENERGY DISTRIBUTION: GRIDS AND “SMART GRIDS”

DISTRIBUTION GRIDS

Acea Distribuzione is the Group's company which holds the Ministerial concession for the management of the **electricity distribution grid** of Rome and Formello, extended for **about 29,000 km** and able to serve about 2.7 million permanent residents.

Considering the volumes of distributed electricity, about 12,000 GW/year, Acea is the third Italian operator in this area. Table n. 71 reports the main plant data.

TABLE N. 71 – THE CONSISTENCY OF PLANTS AND OVERHEAD AND UNDERGROUND DISTRIBUTION LINES (2011-2013)

TYPE	UNIT OF MEASUREMENT	2011	2012	2013
Plants and powers				
primary substations HV/HV – HV/MV	n.	68	69	70
transformers HV/HV e HV/MV	n.	174	173	170
transformation power	MVA	7,693	7,750	7,787
secondary substations in operation	n.	12,979	13,030	13,078
transformers MV/MV - MV/LV	n.	12,671	12,749	12,760
transformation power	MVA	5,845	5,953	6,032
overhead and underground grids				
high voltage grid – overhead lines	km	372	372	335
high voltage grid – underground lines	km	241	241	252
medium voltage grid – overhead lines	km	488	475	456
medium voltage grid – underground lines	km	9,705	9,775	9,845
low voltage grid – overhead lines	km	1,689	1,683	1,669
low voltage grid – underground lines	km	17,148	17,324	17,450

To note is the environmental indicator correlated to the **territory protection** – calculated as a percentage of **high-voltage underground cables (HV) on the total HV overhead** (air + underground) – which **increased to 43%** in 2013 (it was 39% in 2012). Therefore, the visual impact of the necessary high-voltage air lines is constantly decreasing.

In the next few years this improvement process will accelerate, thanks to the rearrangement of the **high-voltage (150 kV) and very high-voltage (220 and 380 kV) distribution and transmission electrical grid**, according to the Memorandum of Understanding between Acea Distribuzione, Roma Capitale and Terna SpA. The project provides for the construction of 123 km of new overhead lines and the demolition of almost 300 km of existing overhead lines in a territory including **11 natural protected areas**. The aim is to obtain the last necessary authorisations within the first months of 2014 and to start the works in the same year.

Energy losses in the grid, mainly due to the Joule heating of the conductor, amount to **about 6.4% of the total conveyed**, in line with average national values.

However, management of the electrical distribution grid of Rome aims at continuous improvement in performance, also in energy efficiency; for this reason, many initiatives for the reduction in energy loss are being implemented – or have been planned and will soon initiate. They include, for example, the installation of low-loss transformers and the substitution of medium-voltage levels from 8.4 kV to 20 kV. Moreover, the project *Smart-network Management System*⁹⁵ continued, which aims at improving the performance of the grids thanks to the evolution and the integration of the operating systems dedicated to their management.

These initiatives provide for a reduction by 1.5% of Joule energy losses in the distribution grid of Rome by 2016. It will correspond to about 1,200 t/year of CO₂ avoided.

SMART GRID

In 2013, Acea Distribuzione took steps forward in both the projects which had already started and research in **the area of smart grids**.

The **pilot project Smart Grid**⁹⁶, which began in 2011, concerns a portion of grid which is already in operation in the area of Raffinerie and Ponte Galeria; the works of the pilot project – divided in subprojects – continued **until completion in 2013** and a monitoring phase will be carried out throughout 2014. The results obtained thanks to the measures of MV-grid automation, MV/LV-grid monitoring and LV-line remote control had Acea Distribuzione include a pre-industrialisation phase (called **Smart Oriented**) in its 2013 investment plan. It will be completed by the first months of 2014 and aims at:

- replicating the results obtained by the pilot project in urban contexts different from the city of Rome;
- extending the expected benefits with regard to the continuity service in the interested areas;
- engineering the solutions found (prototypes so far) in order to make them reach the final industrial phase, enabling different providers to use the solution developed thus far, with single technological partners;
- enabling systems and processes to reach the next step of mass investment.

During the year, further steps forward have been taken regarding technological innovation applied to energy distribution grids, in particular in the **project concerning the Distributed Storage** on a medium-voltage dorsal line (see chapter *Customers and the community, Quality in the energy sector*).

95 The project was presented in 2010 by Acea Distribuzione to the Ministry of Economic Development, asking to access the tax benefits provided for by the Fund for Technological Innovation (FIT). After the positive conclusion of negotiations, in July 2012 the company presented the final project, for a total amount of approximately 11.6 million euros. The last procedural steps before the start of the project are in progress.

96 The Smart grid pilot project of Acea Distribuzione was presented to the authority for electricity gas and water in November 2010 and selected and admitted among the incentivated pilot projects (see *resolution ARG/elt 12/11*).

ENERGY SAVING

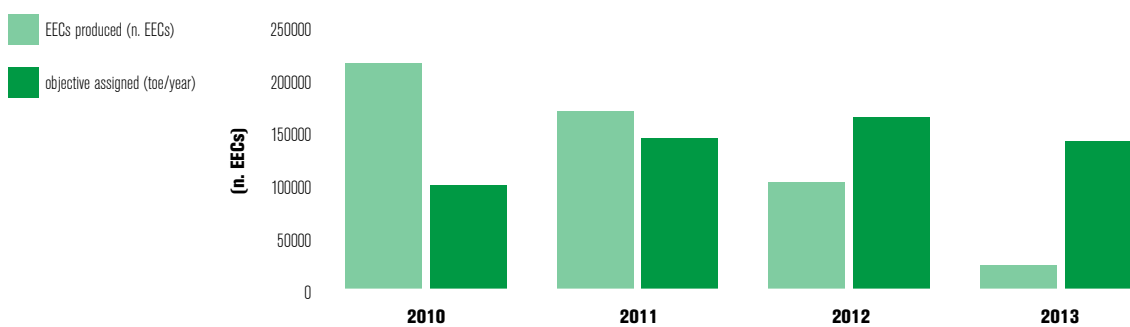
ENERGY EFFICIENCY CERTIFICATES AND COGENERATION

In Italy, in the last decade, there has been a **very advanced regulatory framework** (Ministerial Decree 20/07/2004 and Ministerial Decree 21/12/2007, integrated with Legislative Decree 115/2008) **pushing the operators of the energy area to carry out** more and more challenging **energy-saving initiatives**. The keystone of the legislator’s mechanism was to create an **energy-efficient market**, where the demand side is represented by the obligation – for electricity or gas distribution companies – to obtain measurable and “certifiable” savings, while the supply side is satisfied by special purpose companies, a typical example of a green economy. The product exchanged in the market is the **Energy Efficiency Certificate (EEC)** which certifies the savings in energy end-uses, through energy efficient-improving measures. As we know, energy saving leads to a cost reduction and, most often, efficiency initiatives are paid by the value of the energy saved. However, if an energy saving unit (toe) is assigned with an economic value added, as provided for by the ECC mechanism, an incentive to invest in efficiency is introduced: over the last 8 years more than 9 million EECs have been exchanged on the portal of the Gestore dei Mercati Energetici (GME – the Italian Power Exchange). On 28th December 2012 an Interministerial Decree introduced important news to this mechanism, in order to make it even more efficient. In particular, it defined **new criteria for the quantification of the savings** related to standard initiatives (described in precise technical sheets) and established **new national energy saving quantitative objectives** for the period 2013-2016, in accordance with **the National Energy Strategy (SEN)** issued by the Italian Government in view of European objectives in 2020.

Acea, as an obligated subject through the controlled company Acea Distribuzione, decided to provide itself with its own company of Energy Services (ESCo), **Acea Reti e Servizi Energetici**, which was created to seize the opportunities that the energy saving market offers to its operators. Since 2006 the company has carried out an intensive energy efficiency activity, implementing many initiatives for different clients and in many of Acea’s plants. The result was the production of hundreds of thousands of Energy Efficiency Certificates, in **excess** (about 600,000 EECs) **compared to what was necessary to fulfil the obligation of Acea Distribuzione** (about 700,00 EECs). Most of this excess has been sold in the market, in order to capitalise the work done, funded with significant economic resources. Indeed, each EEC obtained corresponds to an investment of about 100 euros, generating a saving of about 3 tons/year in terms of avoided CO₂ emissions. Considering that an EEC – obtained, for example, by replacing single-window panes with modern double-window panes – corresponds to a reduction of climate-changing emissions of 120 t CO₂ in 40 years, it is possible to understand why energy efficiency is considered to be the most low-cost way to fight climate changes. In this perspective, Acea invested in energy efficiency and obtained a result – in terms of reduction of emissions in the atmosphere, referred only to the mandatory quota – of about 6 million tons of CO₂ in the period between 2005 and 2013, compared to an investment of about 70 million euros.

In the last four years, especially in 2013 (see chart n. 35), Acea reduced the production of EECs, deciding to slow down the implementation of new energy saving initiatives and give space to the necessary in-depth analysis of the recent regulatory news which has been introduced, in view of a new scenario.

CHART N. 35 – ENERGY SAVING OBJECTIVES ASSIGNED TO ACEA DISTRIBUZIONE AND EECs PRODUCED (2010 - 2013)



YEAR	OBJECTIVE ASSIGNED (TOE/YEAR)	EECs PRODUCED (N. EECs)
2010	99,149	215,185
2011	143,702	169,430
2012	163,776	101,798
2013	140,938	23,270

Among the activities pertaining to Acea Reti e Servizi Energetici are the planning and implementation of **trigeneration plants**⁹⁷ which produce, in a combined way, electricity, heat and cold. In 2013, the controlled company **Ecogena managed plants for a total of 3.5 MW of**

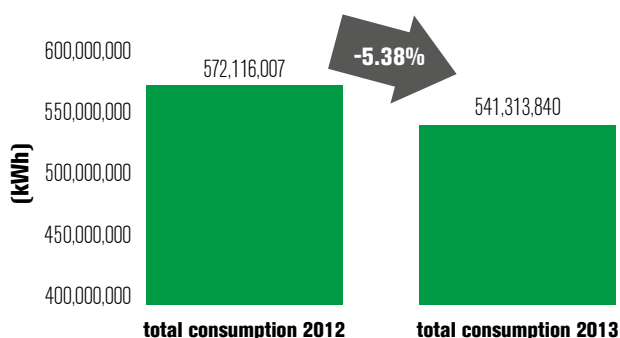
cogeneration power, combined with district heating networks, and started the construction of some plants in Cinecittà and Europarco, which will have a total power of 2.0 MW.

ENERGY EFFICIENCY IN THE ACEA GROUP

The Group considers the objective of reducing energy consumption through **efficiency recovery in the managed processes** as a priority. Over the last few years many energy efficiency measures have been taken in the **water area companies** as well as in the **grid and environment areas**. In particular, as far as the **water area** is concerned, it is important to highlight that the Group's main companies, as a whole,

showed in 2013, a **decrease in consumption of more than 5% in comparison to the previous year** (see chart n. 36), despite the constant increase in the levels of services required by the regulatory developments of the national water area. Both the efficiency measures carried out in the last few years and the management attention to the reduction of greenhouse gases contributed to the reduction in consumption.

CHART N. 36 - WATER COMPANIES: COMPARISON OF THE CONSOLIDATED ENERGY CONSUMPTION (2012-2013)



NB: The data concerning energy consumption of the main water companies (Acea Ato 2, Ato Ato 5, Publiacqua, Acque, Acquedotto del Fiora, Umbra Acque, Gori, Gesesa), represented in the chart, are summed according to their share of consolidation. Values can be modified due to possible adjustments, as provided for by the Authority, although it is estimated that, in case of adjustments, the data variability would not be more than 1%.

As far as the **energy audit and energy saving activities of the network area** are concerned, the Group regularly carries out inspections in its plants. In 2013, for example, the company **Acea Distribuzione** assessed the energy saving obtained thanks to the replacement of voltage level 8.4 kV with level 20 kV (this activity has been in progress for many years). It amounted to about 0.7 GWh/year. Moreover, the company planned other energy saving measures for 2014. In 2013, the company **A.R.I.A.**, after the energy audit started the

previous year in the **San Vittore del Lazio plant**, carried out an in-depth analysis in order to assess the potential areas of improvement, in a cost-benefit and technical feasibility balance, considering the possible related legislative requirements. This screening phase concluded with the identification of two sections where it is possible to act: the compressed air production system and the external lighting plant. During 2014 the following steps preparatory to the implementation of the improvements will be taken.

97 Through the cogeneration, that is the combined production of electricity and thermal energy, it is possible to reach high performance, between 80% and 90%. The trigeneration, which is a particular application of the cogeneration, allows to use a part of the thermal energy recovered to produce cooling energy in the form of chilled water for air-conditioning or industrial processes.

ENVIRONMENT AREA – WASTE MANAGEMENT

REFERENCE BOUNDARY

This chapter includes the activities of the company SAO, focused on waste sorting, recovery, treatment and disposal, the A.R.I.A. waste-to-energy plants the Aquaser compost production plants.

Today everybody knows about the importance of an efficient waste management cycle and the economic, environmental and social implications related to it.

In recent years, Acea decided to use its expertise and entrepreneurial spirit also in this area. In particular it focused on:

- treatment of municipal solid waste (MSW) or other kinds of waste (green waste from waste sorting, industrial waste etc.), recovery of material (glass, plastics, iron, other metals, paper and cardboard) and disposal of the residues in landfills;
- waste incineration with energy recovery;
- production of high-quality compost to be used for agriculture.

A LEGISLATIVE FRAMEWORK IN ITALY: THE CODICE AMBIENTALE (ENVIRONMENTAL CODE)

At the national level, the legislative measure concerning waste management is represented by Legislative Decree n. 152/2006 (known as “Codice Ambientale”) replacing Legislative Decree n. 22/1997 (known as “Decreto Ronchi”). Moreover, there are self-executing communitarian rules, whose application is immediate, and national measures of transposition of the European directives. For Acea there are two further important Decrees: Legislative Decree n. 36/2003, about landfill management, and Legislative Decree n. 133/2005, about waste incineration and co-incineration management. The legislative framework resulting from all the above-mentioned dispositions is complex and, sometimes, of difficult interpretation.

Some operating aspects concerning the above-mentioned activities will be now analysed, in order to highlight the high level of technology and specific skills necessary for modern and efficient waste management.

INTEGRATED WASTE TREATMENT: A SUSTAINABLE MANAGEMENT

Acea Group, through the company SAO (Servizi Ambientali Orvieto), manages an important municipal waste treatment plant in Orvieto, Umbria, where it carries out sorting, composting and landfilling activities, in compliance with certified environmental management systems **UNI EN ISO 14001:2004** and **EMAS III/2009** and the security system **OHSAS 18001:2007**.

In accordance with Acea Group’s environmental and sustainability policy, SAO manages its activities with the aim of recovering as many materials as possible, supporting the production of energy

from renewable sources and the reduction of waste to landfill.

In July 2013 a **new organic waste anaerobic treatment system** was created, which makes it possible to produce electricity from the combustion of biogas produced by digestion.

In the site, there is a photovoltaic plant, owned by Acea Reti e Servizi Energetici, covering the whole surface of the building where the sorting, treatment and composting plants are located. In 2013, the photovoltaic plant produced 556,740 kWh (about 543,000 kWh in 2012) 385,157 kWh of which were used by on-site plants.

ENERGY RECOVERY FROM BIOGAS AND PHOTOVOLTAICS

Biogas production, deriving from the organic deterioration of landfill waste, is used by SAO for energy recovery. The plant dedicated to this activity is mainly composed of a 1 MW_e internal combustion engine, close to the landfill, where drains collect biogas. In the periods of plant downtime (due to failures, maintenance etc.) biogas is burned in flares.

The plant is provided with a system which reduces smoke coming from the chimneys, ensuring the elimination of pollutants.

The **photovoltaic** plant, created and managed by Acea Reti e Servizi Energetici, covers the whole surface of the building where sorting, treatment and composting plants are located. It has a nominal power of 515 kW_p and it produced a total of 557 MWh in 2013, almost completely used to cover approximately 24% of the total energy need of the plants.

Source: SAO’s Environmental Statement, May 2013

WASTE INCINERATION AND ENERGY RECOVERY

The European Union decided to separate growth and developments of the Member States from the parallel process of waste production. Therefore, the proposed legal framework aims at reducing waste by paying more attention to large product design and packaging containment. Moreover, great relevance has been given to the recycle of residues deriving from human activities. In the alternative, energy recovery is considered a good solution, while the landfill should be taken into consideration only when all other alternatives are not feasible or too expensive. Directive 2008/98/CE of the European Parliament and the Council – 19th November 2008 – is a key measure in this area. One of the **recovery** measures is the **waste-to-energy process**⁹⁸, which provides great advantages from an economic and energy perspective, and thanks to this treatment, it is possible to obtain a significant volume reduction and biological waste stabilisation. Both the production of refuse-derived fuel (RDF) and its use for waste-to-energy process in specific plants can be included in this perspective. Indeed these processes are inspired by waste management integrated policies aimed at reducing the amount of waste to landfill and recovering energy.

A.R.I.A. is Acea's company which focuses on the waste-to-energy process, carried out thanks to **two plants**, in San Vittore del Lazio and Terni. They both have an environmental management system, in compliance with the **UNI EN ISO 14001:2004** standard and are registered to **EMAS**. The security management system complies with **OHSAS 18001:2007** standard.

The **San Vittore del Lazio plant** (FR) is composed of **three independent waste-to-energy lines**, designed to be powered by **refuse-derived fuel** (RDF). Each line has an electrical power of about 12 MW_e. Currently line 1 is being revamped, so the plant treatment capacity – that will ultimately be of 320,000 t/year – **was 224,200 t/year in 2013, with a gross electricity production of about 203 GWh**. Because of its technologically advanced characteristics and its treatment potential, the plant plays a significant role in the urban waste management in Latium.

TABLE N. 72 – THE SAN VITTORE DEL LAZIO WASTE-TO-ENERGY PLANT: OPERATING DATA (2011 – 2013)

	UNIT OF MEASUREMENT	2011	2012	2013
RDF incinerated (*)	t	158,557	218,256	224,220
gross electricity produced	(GWh)	149.43	218.24	202.23
conversion efficiency (**)	kWh/kg RDF	0.94	1.00	0.90

(*) In addition to RDF, the plant also uses methane (3,649,586 Nm³ in 2013) as an auxiliary fuel to maintain optimal conditions stable in the combustion room.

(**) Ratio between gross electricity produced and amount of incinerated waste.

The **Terni plant** is composed of a **single waste-to-energy line** with a total power of 12 MW_e and uses **paper mill pulper** as a fuel, derived from the processing of the cellulose used to produce paper. **At the end of December 2012** the plant was **restarted**, after discontinuation of approximately two years – this period was necessary to carry out radical revamping measures.

TABLE N. 73 – THE TERNI WASTE-TO-ENERGY PLANT: OPERATING DATA (2013)

	UNIT OF MEASUREMENT	2013
pulper incinerated (*)	t	69,417
gross energy produced	GWh	57,856
electrical efficiency (**)	kWh/kg	0.83

(*) Besides pulper, the plant also uses methane (1,582,143 Nm³ in 2013) as an auxiliary fuel to maintain the optimal conditions stable in the combustion room.

(**) Ratio between gross electricity produced (MWh) and amount of incinerated pulper.

THE PRODUCTION OF COMPOST

The waste cycle managed by the Group also includes the treatment of **organic waste**, composed of waste from pruning, the organic fraction of municipal solid waste (MSW), and **sewage sludge** from the water-integrated management cycle. Thanks to this raw material waste, cleverly mixed and interacting in technologically advanced plants, a **high-quality compost** is produced. It is highly appreciated by farmers, who use it to strengthen impoverished soils.

The company **Aquaser** manages two composting plants: one in Aprilia, in the province of Latina, where the controlled company Kyklos operates, and one in Monterotondo Marittimo, in the province of Grosseto, where the controlled company Solemme operates.

98 Paragraph IV of Legislative Decree n. 152/2006: recovery measures "R1".

KYKLOS COMPOSTING PLANT

Waste treatment carried out in the plant managed by Kyklos uses the best available techniques to reduce, as much as possible, the negative effects on the environment that could occur during the bio-chemical transformation operations for the production of compost.

Once waste reaches the plant, it can follow two lines: **green waste (pruning)** is received outdoors and shredded; wet waste (**sewage sludge** from wastewater and the **organic fraction of municipal solid waste** – OFMSW) is immediately discharged into a large barn, where air is drawn and purified before its emission in the atmosphere, in order to avoid the diffusion of odours. In this barn the most important operations take place, first of all, the optimal mix of the different kinds of waste. This is a critical step, because the right dosage of the different kinds of waste determines the quality of the final compost, that is its capacity to improve soils, especially when they are used for excellent crops.

The material resulting from the first mix is put into 8 bio-cells which constitute the heart of the composting plant. They are closed spaces, inside the main barn, where the biological process parameters (temperature, humidity, amount of oxygen, air flow rate) can be easily controlled through probes. Bio-cells are equipped with air insufflators and water sprayers, in order to reduce the temperature of the fermenting mass, to maintain the correct humidity level and to provide oxygen to the bacterial flora. 9 days later, the masses are extracted from the bio-cells and transferred to floors which are aerated from below, in the same barn. After approximately 25 days of controlled aeration, the masses complete their accelerated bio-oxidation phase and lose their initial odorous characteristics. At this point, the masses are transferred to another barn, where forced air renewal and purification take place before being emitted into the atmosphere. They stay put for 65 days and then become compost; the following step is to transfer the compost into a specific storage area, from which it is eventually taken to be sold.

The possible emission of odours, as said before, is controlled through two different aspiration machines in the two barns: the main one, where the bio-cells are, and the second one where the maturation of the oxidised mass occurs.

In both gas flows the destruction of odours is obtained through a pre-treatment wash of the exhausted air in a container placed horizontally and in a *scrubber* where dust particles and ammonia are captured.

The gas flow is routed through a vegetal-material bio-filter (made of heather roots) upon whose surface special microorganisms metabolise the pollutants, in particular the substances responsible for the odours.

The liquid containing a high concentration of pollutants which is formed during the composting steps (leachate) is currently collected and treated in external authorised plants. However, it is foreseen that as of early 2014, processed water and most rainwater will be purified **in-house** in a reverse osmosis plant which is being finalised. The treated water will be completely re-used in different steps of the process, for example, to sprinkle the masses in the bio-cells or to feed the *scrubbers*. In this way primary source consumption will be reduced to zero.

During the year, the process for the implementation of an integrated environmental and safety management system continued, in accordance with the UNI EN ISO 14001 and OHSAS 18001 standards.

In 2013, the solid and liquid transportation and recovery/disposal service was applied to more than **240,000 tonnes of waste**, of which about **165,000 tonnes** of sewage sludge, coming from most of the Group's water companies. Its final destination was:

- 3% for direct spreading in agriculture;
- 84% for composting.

The remaining 13% was disposed, since it could not be recovered. The **Kyklos** plant, with a **current potential of 66,000 t/year** of compostable waste, **will be able to treat up to 120,000 t/year**, thanks to the authorisation obtained in March 2013. Moreover, the creation of a

new anaerobic digestion section was authorised, so it will be possible to recover thermal and electrical power through the combustion of biogas produced during the same digestion.

The plant of **Solemme** has a **potential of 26,100 t/year** of compostable waste, including civil sewage sludge, agrifood sludge, mowing and pruning. Thanks to the authorisation obtained in December 2012 for the **creation of a new anaerobic digestion** section – for which specific urban adjustments are being carried out – it will be possible to reach a treatment capacity of **up to 70,000 t/year**.

For further details about compost produced, please see the *Environmental report*.

WATER AREA

REFERENCE BOUNDARY

The reference boundary includes Acea Ato 2 - presented in detail – Acea Ato 5, Acque, Gori, Acquedotto del Fiora, Publiacqua and Umbra Acque.

Acea is considered as solely responsible for the environmental data of water companies, regardless of the percentage of the holding company in the share capital, due to its role in industrial management of activities.

For years, water management has been carried out only in the city of Rome. Today Acea manages the integrated water service (SII – Servizio Idrico Integrato) in the Optimal Environmental Areas (ATO – Ambiti Territoriali Ottimali) of four regions – Latium, Campania, Umbria and Tuscany. It can thus be defined as a leading company of this area, and also operates abroad⁹⁹.

The total number of customers served in Italy amount to approximately **8.5 million inhabitants**, with **1,271 million cubic meters** of

drinking water introduced in the grid in 2013 (see chart n. 37).

Only in ATO 2 – Lazio Centrale, including the city of Rome and other 111 municipalities – 73¹⁰⁰ of which under management as at 31st December 2013 – **the volume of water introduced in the grid** at the service of 3.7 million inhabitants – resident and floating population – was **604.6 million cubic meters** (473 million cubic meters of which in the “historic grid” of Rome and Fiumicino).

CHART N. 37 – VOLUME OF DRINKING WATER INTRODUCED IN THE GRID BY COMPANY (2013)

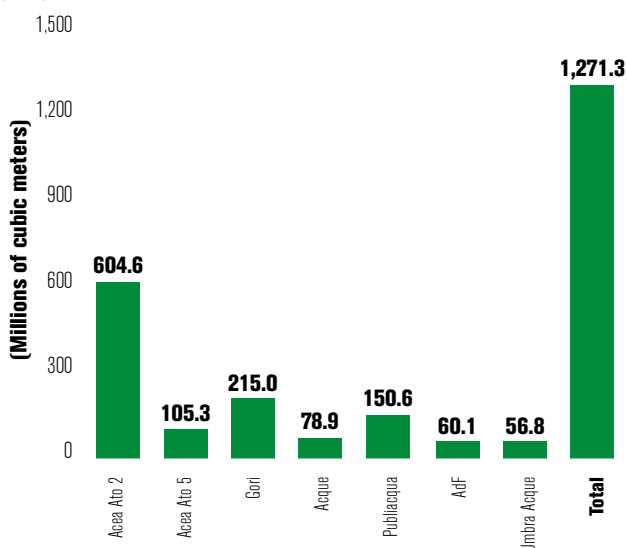
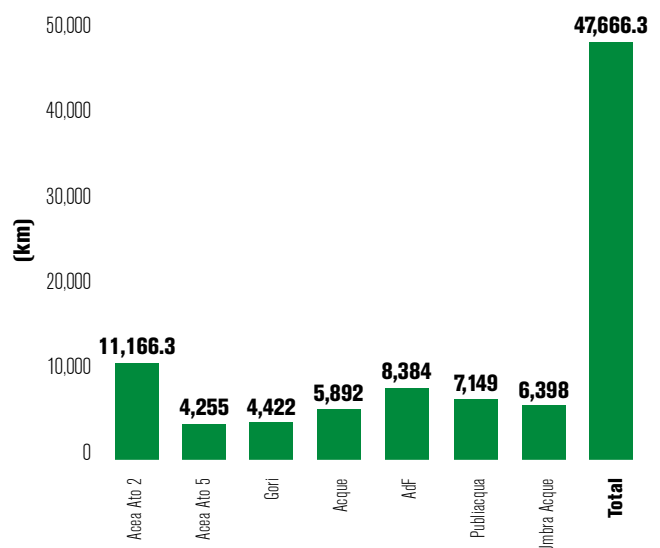


CHART N. 38 – THE GROUP'S WATER DISTRIBUTION GRID IN ITALY (2013)



NB: The grid includes aqueduct, feeding and distribution. For Acqua Spa, in the absence of definitive data from 2013, the 2012 data have been used.

ACTIVITIES IN CENTRAL LATIUM: SOURCES AND PROTECTED AREAS

In ancient Rome the city's water supply was ensured by big aqueducts powered by uncontaminated sources, which were often very far from the city centre. In this way they had neither pollution problems – typically caused by the exploitation of local sources – nor consequent epidemics.

Today, through the company **Acea Ato 2**, the Group has a similar approach and Rome is one of the few metropolis in the world with a **great availability of water** which does not need any preliminary purification treatment, since its **quality** is naturally excellent.

The supply system of this important service - at the service of the entire province of Rome – is based on **eight big aqueducts**, for a total of more than 200 km of grid (plus 1,341 km of water piping and 9,618 km of drinking water distribution grid) and a capacity of up to 20,000 litres/second. Besides this paramount heritage, there are also many wells and the reserve of Lake Bracciano, in case of emergency.

⁹⁹ In Peru, Honduras, and the Dominican Republic. In these countries it serves a total of 5.3 million inhabitants, as far as both the integrated water service and the commercial aspects of the service are concerned. The incidence of the activities abroad on the total income of the water area amounts to 1.6%. In accordance with GRI guidelines, a general overview is presented in the chapter entitled *Activities abroad*.

¹⁰⁰ In 21 other countries the integrated water service has only been partially managed.

Acea is aware of the fragility of the ecosystems responsible for the constant renovation of water resources, that is why it pays particular attention to their **protection** and **safeguard**, in compliance with the dispositions of Ministerial Decree n. 152/2006, article 94, concerning the **protection of the areas which include surface or underground waters intended for human consumption**.

Table n. 74 reports the location and surface in square meters of the protected areas.

TABLE N. 74 – THE MAIN PROTECTED SOURCES IN ATO 2 – LAZIO CENTRALE

SENSITIVE AREA	LOCATION	SURFACE (m²)
Peschiera's sources	Municipality of Cittaducale (Rieti, Latium)	598,530
Le Capore's sources	Municipality of Frasso e Casaprota (Rieti, Latium)	586,600
Acqua Marcia's source	Municipality of Agosta-Arsoli-Marano Equo (Rome)	3,519,600
Acquoria's source	Municipality of Tivoli (Rome)	10,050
Acqua Felice – Pantano's sources	Municipality of Zagarolo (Rome)	441,280
Pertuso's sources (*)	Municipality of Trevi – Filettino (Latium)	77,740
Doganella's sources	Municipality of Rocca Priora (Rome)	350,000
Acqua Vergine's sources	Municipality of Rome	500,000
Torre Angela's wells	Municipality of Rome	50,300
Finocchio's wells	Municipality of Rome	31,153

NB: The protected areas of the sources of Vallepietra are being studied by the Region, the proposals on the protected areas of the wells of Ex Casmez and Doganella have been completed and are to be presented to the Region. Following the Resolution of the Regional Council n. 537 of the 2nd November 2012, new areas for the protection of sources have been identified in the collection areas of the Alban Hills (Acqua Felice – the sources of Pantano and Acqua Vergine, the wells of Torre Angela and Finocchio). The new surfaces (extensions) are not currently quantifiable.

(*) In normal conditions, the sources of Pertuso are used by Enel to produce electricity, while the sources in the cities of Vallepietra and Ceraso contribute to the supply of the aqueduct of Simbrivio. In case of a seasonal lack water it is necessary to use the sources of Pertuso as well, interrupting electricity production. This process is regulated by a specific ordinance issued by the Commissioner for water emergency of Simbrivio.

As far as non-drinkable resources are concerned, they are provided with lower-value supply sources, distributed through a specific distribution grid of Rome dedicated to the watering of gardens and parks.

WATER QUALITY

All the companies of the Group monitor the quality of the supplied drinkable water and the wastewater returned to the natural environment after its purification, in a well-organised and regular manner. The analytical checks on the water distributed to customers are especially relevant, due to their consequence on health. A synthesis of the activities carried out in this area is presented in tables n. 75 and 76 and in charts n. 39 and 40.

TABLE N. 75 – ANALYTICAL CHECKS ON DRINKING WATER, TOTAL AND BY COMPANY (2011-2013)

COMPANY	N. OF ANALYTICAL CHECKS		
	2011	2012	2013
Acea Ato 2	337,529	328,202	339,229
Acea Ato 5	94,327	79,953	78,830
Gori	82,193	70,488	71,409
Acque	254,297	330,569	355,380
Publiacqua	189,508	192,653	185,399
Acquedotto del Fiora	65,007	87,079	90,472
Umbra Acque	79,876	80,257	80,205
total	1,102,737	1,169,201	1,200,924

CHART N. 39 – ANALYTICAL CHECKS ON DRINKING WATER, TOTAL AND BY COMPANY (2013)

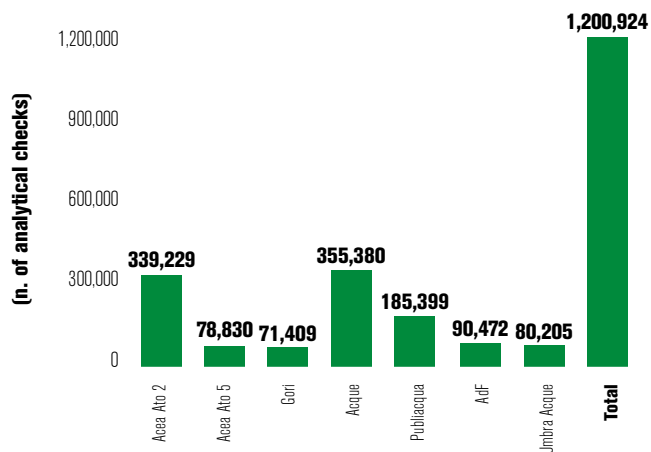
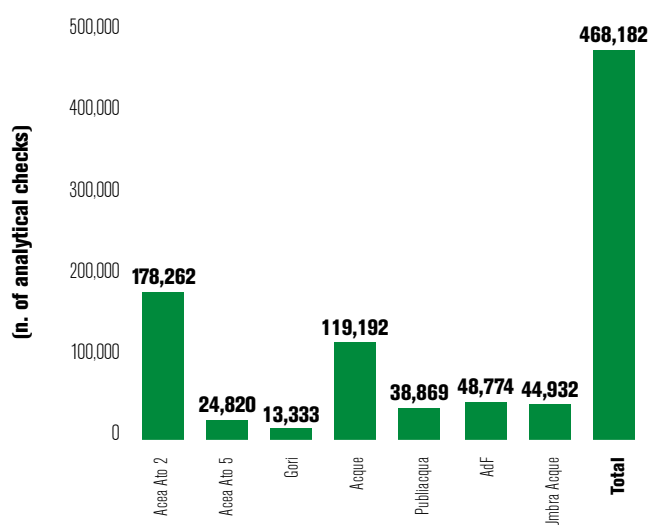


TABLE N. 76 - ANALYTICAL CHECKS ON WASTEWATER, TOTAL AND BY COMPANY (2011-2013)

COMPANY	N. OF ANALYTICAL CHECKS		
	2011	2012	2013
Acea Ato 2	95,527	122,231	178,262
Acea Ato 5	17,786	23,816	24,820
Gori	14,986	9,821	13,333
Acque	105,076	125,546	119,192
Pubblicaqua	34,405	37,664	38,869
Acquedotto del Fiora	42,902	48,259	48,774
Umbra Acque	47,638	45,124	44,932
total	358,320	412,461	468,182

CHART N. 40 - ANALYTICAL CHECKS ON WASTEWATER, TOTAL AND BY COMPANY (2013)



The current **reference legislation on waters intended for human consumption** (Legislative Decree n. 131/2001) defines some chemical and biological parameters to “assess” the quality of drinking water, establishing the maximum values not to be exceeded in order to avoid health risks. Among the parameters taken into consideration there is also the content of **arsenic** and **fluorine**, which can increase when underground water, used as a resource, enters into contact with **volcanic geological formations**. This happens in some limited areas served by Acea Ato 2, in particular **in the area of the Alban Hills**, where the nature of the soil makes underground water enter into contact with these chemical elements.

However, this problem is being solved thanks to a timely implementation of corrective measures, which permitted **the value to stay below the established threshold** in almost all cases (see also *Customers and the community*, paragraph *Quality in the water area*).

As far as the city of **Rome** is concerned, the **quality of the supplied drinking water** is very high, as water is pure and with high degree of mineralisation. To maintain this natural heritage requires great efforts and analytical checks.

These activities are extremely important, that is why the Group’s companies decided to implement them both autonomously (with the help of attentively selected companies) and through the **controlled company LaboratoRI** which, in accordance with the **ISO/IEC 17025 standard**, carries out chemical-physical and bacteriological analysis in different matrices, including water (see tables n. 77-79).

TABLE N. 77 – ANALYTICAL DETERMINATIONS CARRIED OUT BY LaboratoRI - ATO 2-LAZIO CENTRALE (2011-2013)

TYPE OF ANALYSED WATER	N. OF ANALYTICAL DETERMINATIONS		
	2011	2012	2013
drinking water	313,804	309,751	307,391
wastewater	94,557	117,440	164,130
surface water	36,413	36,828	34,861
total	444,774	464,019	506,382

TABLE N. 78 - ANALYTICAL DETERMINATIONS CARRIED OUT BY LABORATORI ON DRINKING WATER - HISTORIC GRID OF ROME (2011-2013)

CATCHMENT AREA	N. OF CATCHMENT POINTS	N. OF SAMPLES			N. OF ANALYTICAL DETERMINATIONS		
		2011	2012	2013	2011	2012	2013
catchment	45	590	510	542	22,973	22,364	21,788
aqueduct and feeding water pipes	26	301	338	358	10,611	9,502	10,952
tanks/water centres	21	260	217	246	8,299	7,483	8,426
distribution grids	320	3,885	3,970	3,783	126,437	123,748	124,802
t total	412	5,036	5,035	4,929	168,320	163,097	165,968

TABLE N. 79 - AVERAGE CHEMICAL AND MICROBIOLOGICAL CHARACTERISTICS OF THE DRINKING WATER DISTRIBUTED IN ROME AND PARAMETERS OF THE LEGISLATIVE DECREE 31/01 (2013)

PARAMETERS	UNIT OF MEASUREMENT	AVERAGE VALUE 2013	LEGAL PARAMETRIC VALUE (D. LGS. 31/01)
Turbidity	NTU	<0.5	without anomalous variations
Temperature	°C	12.8	n.a.
Hydrogen ion concentration	pH units	7.35	>6.5 e < 9.5
Electrical conductivity	µS/cm at 20 °C	548	<2500
Chlorides	mg/l Cl	7.10	<250
Sulphates	mg/l SO ₄	15.3	<250
Calcium	mg/l Ca	97.7	n.a.
Magnesium	mg/l Mg	18.9	n.a.
Sodium	mg/l Na	5.34	<200
Potassium	mg/l K	2.55	n.a.
Hardness	°F	32.1	(*)
Free chlorine residual	mg/l Cl ₂	0.16	(**)
Alkalinity	mg/l CaCO ₃	315	n.a.
Fixed residual calculated	mg/l	394	(***)
Nitrates	mg/l NO ₃	3.64	<50
Nitrites	mg/l NO ₂	<0.05	<0.50
Ammonia	mg/l NH ₄	<0.10	<0.50
Fluorides	mg/l F	0.14	<1.50
Total organic carbon	mg/l C	0.51	without anomalous variations
Iron	µg/l Fe	7.16	<200
Copper	mg/l Cu	0.001	<1.0
Lead	µg/l Pb	0.30	<10
Cadmium	µg/l Cd	<0.2	<5.0
Chromium	µg/l Cr	<5.0	<50
Nickel	µg/l Ni	<2.0	<20
Manganese	µg/l Mn	0.24	<50
Arsenic	µg/l As	1.00	<10
Vanadium	µg/l V	3.2	<140
Total trihalomethanes	µg/l	1,40	<30
Trichloroethylene	µg/l	0.15	<10
Tetracloroetilene	µg/l	0.14	<10
1.2 - Dichloroethane	µg/l	<0.30	<3.0
Benzene	µg/l	<0.10	<1.0
Benzo (a) Pyrene	µg/l	<0.003	<0.010
Coliform bacteria at 37 °C	MPN/100 m	0	0
Escherichia coli	MPN/100 ml	0	0
Enterococci	UFC/100 ml	0	0

(*) suggested values: 15-50 °F – the lower limit is for softened or desalinated waters.

(**) suggested value 0.2 mg/l.

(***) maximum suggested value: 1,500 mg/l.

SEWERAGE SERVICE AND WASTEWATER TREATMENT SYSTEM

After catchment and distribution of the drinking water, the integrated water service ends with the **wastewater treatment system**, the last step of the industrial cycle **before resending the resource to the environment**. Water, which has been used for different civil purposes, is collected through sewerage - a complex system of pipes and canalisations which avoid dangerous leakages - and sent to purifiers, where pollutants are eliminated through physical (filtering, sedimentation, flocculation) and biological processes (aerobic degradation of the organic substance with bacteria).

After the necessary treatments, the water leaving the plant has chemical and biological characteristics compatible with the life of the water body receptor. Legislative Decree n. 152/2006, in its third part, establishes the values of the parameters that do not have to be exceeded in order to ensure full compatibility (see table n. 81).

Table n. 80 reports the percent coverage of sewerage and purification services - on the total number of customers served by aqueduct - of the Group's main water companies.

TABLE N. 80 - PERCENT COVERAGE OF SEWERAGE AND PURIFICATION SERVICES WITH RESPECT TO THE TOTAL NUMBER OF CUSTOMERS OF ACEA GROUP'S MAIN WATER COMPANIES (2012-2013)

COMPANY	2012		2013	
	SEWERAGE	PURIFICATION	SEWERAGE	PURIFICATION
Acea Ato 2	91.5%	87.5%	91.5%	87.5%
Acea Ato 5	67%	55.2%	67.3%	55.5%
Gori	79.1%	49.8%	79.3%	50%
Acque (*)	91.1%	80.3%	91.1%	80.3%
Publiacqua	94.4%	76%	94.3%	76%
Umbra Acque	88.9%	80.7%	88.9%	80.7%
Acquedotto del Fiora	83.7%	77%	83.7%	77%

(*) Since the 2013 final data of the company Acque are not yet available, the table reports the data as of 31.12.2012.

NB: for the total number of customers see table n. 13, in chapter Customers and the community.

The **sewerage managed by Acea** covers **more than 24,200 km** and **links 831 purification plants** of the Group's water companies. The total volume of **wastewater** treated in 2013 is about **916 million cubic meters** (see charts n. 41-43 and the *Environmental report*).

CHART N. 41 - SEWERAGES, TOTAL AND BY COMPANY (2013)

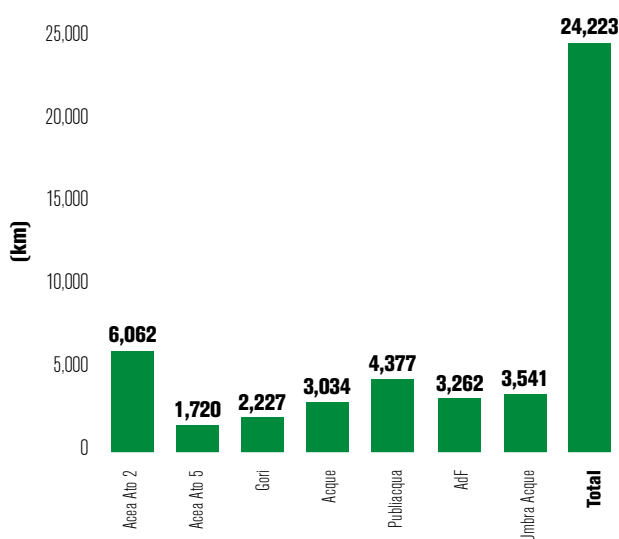
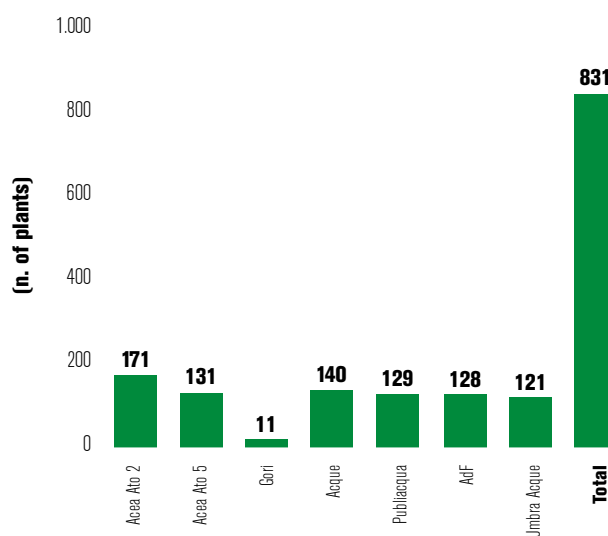
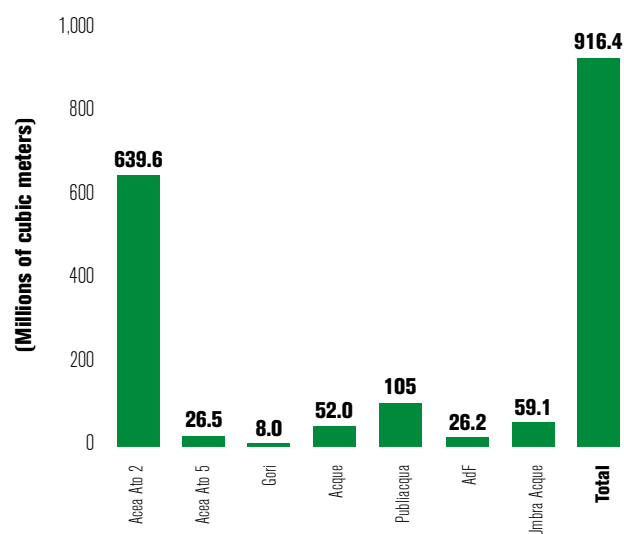


CHART N. 42 - PURIFICATION PLANTS, BY TOTAL AND BY COMPANY (2013)



NB: Acque SpA's plants refer to 2012.

CHART N. 43 – VOLUME OF TREATED WASTEWATER, BY TOTAL AND BY COMPANY (2013)



In 2013, the main wastewater treatment plants of the “historic” area of Rome and Fiumicino treated approximately **560 million cubic meters of wastewater**, which is 7% more than last year¹⁰¹. Taking into account also the small purifiers and the plants of the municipalities which are part of ATO 2, we reach a **total treated volume of roughly 640 million cubic meters**.

Thanks to the “**purification efficiency**” of the wastewater treatment plants it was possible to maintain the values of the pollutant parameters in leaving purified water **within the limits provided for by law**. The details of the main parameters of water exiting the treatment plants are found in table n. 81.

TABLE N. 81 - PARAMETERS OF WATER LEAVING THE MAIN WASTEWATER TREATMENT PLANTS MANAGED BY ACEA ATO 2 SPA – COMUNE DI ROMA (2013)

Parameter	ROMA SUD PLANT	ROMA NORD PLANT	ROMA EST PLANT	OSTIA PLANT	CONCENTRATION LIMITS IN SURFACE WATER (LEGISLATIVE DECREE 152/06)
	Average values (mg/l)				
BOD ₅	15	11	7	5	≤ 25
COD	63	32	63	32	≤ 125
TSS	33	26	33	14	≤ 35
Nitrogen (ammonia, nitric and nitrous)	9	10	8	7	-
phosphorous	1	2	2	1	-
	absolute values (t)				
COD	20,944	3,052	5,997	844	-
TSS	10,891	2,484	17,172	368	-

The sludge produced during the purification process is used in agriculture, through the direct spread of such on land, or after the composting process. For further information, please see chapter *Environment Area*, paragraph *The production of compost*.

¹⁰¹ In 2013 the total amount of rainfall was slightly higher than in 2012.

THE USE OF ENERGY AND WATER

REFERENCE BOUNDARY

The reporting boundary of this chapter includes Acea SpA, Acea Reti e Servizi Energetici, Acea Distribuzione, LaboratoRI, Acea Produzione, A.R.I.A. - with its two waste-to-energy plants - and Aquaser - with its two composting plants (2013 data).

As far as the water area is concerned, it includes Acea Ato 2, Acea Ato 5, Acque, Gori, Acquedotto del Fiora, Publiacqua and Umbra Acque.

Containing the use of resources such as water and energy is a challenging objective for Acea Group, which could lead to positive environmental, social and economic effects.

ENERGY CONSUMPTION

The following tables show the Group's **direct energy consumption**, that is the consumption based on the use of primary sources to make the production system work, including the consumption for the generation of electrical and thermal energy (table n. 82) and the fuels used for the car fleet (table n. 83).

TABLE N. 82 – ACEA GROUP'S DIRECT ENERGY CONSUMPTION (2011-2013)

ENERGY BY SOURCE	2011	2012	2013
	TJ (GWh)		
methane (for electricity generation, district heating and office heating)	534.2 (148.4)	498.0 (138.3)	652.0 (181.1)
diesel fuel (for electricity generation and office heating)	87.3 (24.2)	46.4 (12.9)	35.2 (9.8)
RDF/SRF and pulper (Waste-to-Energy)	2,376.8 (660.2)	3,273.8 (909.4)	4,446.5 (1,235.1)
gasoline (road transport)	20.7 (5.8)	26.9 (7.5)	20.8 (5.8)
diesel (road transport)	19.8 (5.5)	29.7 (8.3)	24.4 (6.8)
LPG (heating)	0.6 (0.2)	0.6 (0.2)	0.6 (0.2)
total EN3	3,039.3 (844.3)	3,875 (1,076.5)	5,179.5 (1,438.7)

NB: The data include A.R.I.A., Acea Produzione, Acea SpA, Acea Ato 2, Acea Distribuzione and Acea Produzione.

Considering that 1 TJ is approximately 23.9 toe, the **indicator GRI-G3.1 EN3** = (5,179.5 x 23.9) = **123,790.1 toe**

TABLE N. 83 – CONSUMPTION OF ACEA'S CAR FLEET (2011- 2013)

CAR FLEET CONSUMPTION	2011	2012	2013
gasoline			
L	639,227.8	831,595.2	643,912.2
TJ	20.7	26.9	20.8
diesel fuel			
L	566,066.1	848,330.4	697,739.20
TJ	19.8	29.7	24.4

NB: The boundary of the car fleet consumption includes, until 2011: Acea SpA, Acea Distribuzione, Acea Reti e Servizi Energetici, LaboratoRI, Acea Produzione, Acea Energia, Acea Ato 2 and Marco Polo. Since 2012 Acea Ato 5 is also included.

Table n. 84 shows **indirect energy consumption**, that is the **electricity used by the Group**, including the leakages occurring in the distribution grid of Rome during the transformation and transportation steps.

TABLE N. 84 – ACEA GROUP'S INDIRECT ENERGY CONSUMPTION (2011-2013)

ENERGY SOURCE	2011	2012	2013
electricity leakages in the transformation and transportation grids	1,692.4 (470.1)	1,377.4 (382.6)	1,512.7 (420.2)
leakages and self-consumption in the production of electricity	144.7 (40.2)	169.9 (47.2)	182.5 (50.7)
heat leakages in the district-heating network	59.0 (16.4)	41.8 (11.6)	82.1 (22.8)
public lighting consumption	582.0 (161.7)	583.9 (162.2)	582.1 (161.7)
electricity consumption for waste management plants	-	-	18.4 (5.1)
electricity consumption for the distribution of drinking and non-drinking water	1,736.3 (482.3)	1,765.1 (490.3)	1,618.6 (444.7)
electricity consumption for wastewater purification	1,066.7 (296.3)	1,069 (297.0)	1,095.5 (304.3)
electricity consumption for offices	37.4 (10.4)	37.4 (10.4)	41.4 (11.5)
total indirect energy consumption	5,318.5 (1,477.4)	5,044.6 (1,401.3)	5,115.6 (1,421.0)

NB: The three-year data include the consumption of A.R.I.A., Acea Produzione, Acea Distribuzione, Acea Reti e Servizi Energetici, Acea SpA and the water companies included in the reporting boundary of the chapter.

In order to quantify electricity consumption in terms of primary sources, it is possible to consider the average Italian mix of energy sources published by the GME in its **2012 Annual report**. In particular: natural gas and other gaseous fuels, about 40%; oil products, about 4%; solid fuels, about 21%; renewable sources, about 25%; imports, about 10%.

WATER CONSUMPTION

The **Group's water consumption**, reported in table n. 85, refer to both **industrial processes**, such as the uses for district heating, and the **civil uses**. In 2013, there was a dramatic decrease in consumption, firstly because of the lack of contribution of the combined-cycle

electricity production plant of Tor di Valle, which was non-functional so it did not use water for cooling. Moreover, there was an overall **decrease in consumption in civil uses** by 25% in comparison to 2012.

TABLE N. 85 – ACEA GROUP'S WATER CONSUMPTION (2011-2013)

	2011	2012	2013
industrial processes: district heating and others for thermoelectric generation (*) (source: aqueduct, wells)	0.15	0.14	0.16
sanitary/civil use (**) (source: aqueduct)	1.26	1.90	1.43
cooling of thermal power plants (source: outflow from Roma Sud purifier)	6.69	0.80	0.00
total water consumption	8.10	2.84	1.57

(*) These include: process water used in the thermal power plant of Tor di Valle and process water used in the waste-to-energy plants of A.R.I.A., mainly from aqueduct and, to a lesser extent, from wells.

(**) The companies to which the data refer are: Acea SpA, Acea Distribuzione; Acea Produzione, LaboratoRI, Acea Ato 2, Acea Ato 5 and Umbra Acque.

WATER LOSSES

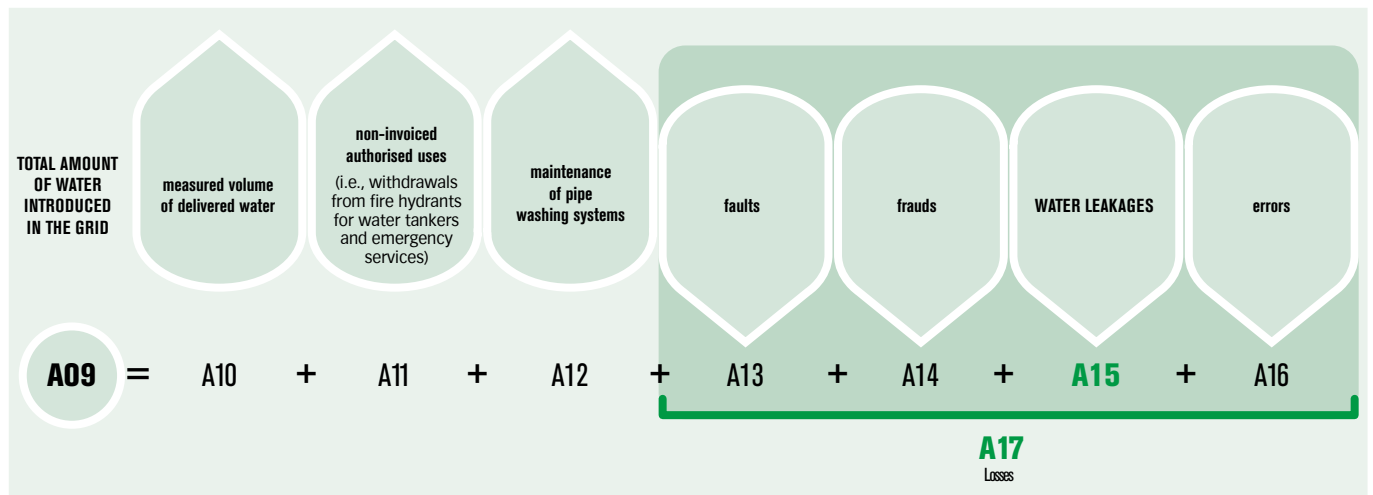
In a water grid designed to carry tens of millions of cubic meters of drinking water every year - using pipes and infrastructures, often underground in the case of significant physical and chemical stress – leakages are a significant aspect. In order to contain them as much as possible, the Group’s companies use many resources and carry out **initiatives aimed at a progressive decrease in water leakages** in the aqueducts, until they reach “physiological” values. Among the initiatives carried out by the Group’s companies in 2013 there are, for example, leakage detection campaigns of **Acquedotto del Fiora** - according to a plan which calls for conclusion of the optimisation and efficiency studies of each hydraulic department by 2015 - and the three-year plan of leakage containment carried out by **Umbra Acque** which, in 2013, installed pressure reducers in different districts, leading to a recovery of 25 litres/second (for further

information see chapter *Research*).

Chart n. 44 shows the **model indicated in Ministerial Decree 99/97 for leakage assessment** in water grids, thanks to which it is possible to compare national companies.

In 2013 **leakages¹⁰² in Acea Ato 2**, with reference to the historic grid of Rome and Fiumicino, amounted to **about 27% of the total amount introduced in the grid**. Among other water distribution grids managed by the Group’s companies, this year **Acque (Pisa)** also reported a **good performance**. As far as leakages are concerned (21.5% of the total amount in the grid) data were better than in the last few years. For further information on each water company, see the *Environmental report*.

CHART N. 44 – WATER LEAKAGES, PARAMETER A15 (MINISTERIAL DECREE 99/97)



102 According to Ministerial Decree 99/97, water leakages are indicated by parameter A15; leakages caused by plant defects (i.e., structural failure of seal leakage in the pipe joints, holes or splits in the pipes of cement or metal structures etc.) are quantified. This parameter is calculated by subtracting the water sold (A10) and all kinds of water delivery failures (consumption for emergencies (A11), washing (A12), faults (A13), the effects of fraud (A14), measurement errors (A16) from the total amount of water in the grid (A09).

EMISSIONS, MOBILITY AND WASTE

REFERENCE BOUNDARY

The boundary of this chapter includes Acea SpA, Acea Reti e Servizi Energetici, Acea Distribuzione, LaboratoRI, Acea Produzione, A.R.I.A., with two waste-to-energy plants, and the SAO plant. As far as the water area is concerned, it includes Acea Ato 2, Acea Ato 5, Acque, Gori, Acquedotto del Fiora, Publiacqua and Umbra Acque.

EMISSIONS IN THE ATMOSPHERE

The monitoring of emissions in the atmosphere due to Acea's plants, especially the **waste-to-energy plants**, is carried out by **chemical analysers** which constantly analyse the smoke produced by chimneys and provide different parameters which are periodically controlled by internal personnel and qualified external labs.

The data show positive results, with the values of the main pollutants **significantly below the legal limits** (see table n. 86); despite this, new high-performing technologies which could improve the quality of emissions are being sought every day.

TABLE N. 86 – EMISSIONS IN THE ATMOSPHERE PRODUCED BY THE WASTE-TO-ENERGY PLANTS OF SAN VITTORE DEL LAZIO (2011-2013) AND TERNI (2013)

POLLUTANT	REFERENCE PARAMETER LEGISLATIVE DECREE 133/2005	U. M.	2011	2012	2013	
			SAN VITTORE DEL LAZIO PLANT	SAN VITTORE DEL LAZIO PLANT	SAN VITTORE DEL LAZIO PLANT	TERNI PLANT
HCl	10	mg/Nm ³	1.88	0.38	0.10	4.78
NO _x	200	mg/Nm ³	148.17	49.25	51.01	92.13
SO ₂	50	mg/Nm ³	4.18	0.0117	0.0217	0.41
total dust (particulate)	10	mg/Nm ³	1.41	0.007	0.005	0.92
PAH (polycyclic aromatic hydrocarbons)	0.01	mg/Nm ³	-	0.000024	0.000036	0.013
dioxins and furans (PCDD +PCDF)	0.1	ng/Nm ³	-	0.0385	0.0106	0.0093
heavy metals (Sb, As, Pb, Cr, Co, Cu, Mn, Ni, V)	0.5	mg/Nm ³	-	0.00625	0.00847	0.0069

Moreover, in order to complete the informative framework, in the waste-to-energy plant of San Vittore del Lazio, the **quality of air in the points which are most affected by the pollutants discharged from chimneys is monitored**, as well as the **quality of the soil and the groundwater** around the plant.

In particular, **two fixed control units** of San Vittore del Lazio and Cervaro monitor the parameters PM₁₀, NO_x, the total amount of dust and meteorological parameters. These **data are available online** on the website www.acea.it/sportelloaria/. In 2013, in these two control units, two 15-day monitoring campaigns were carried out in order to quantify heavy metals.

The **mobile units** monitored - in a discontinuous way, every six months and through 15-day campaigns – the parameters PM₁₀, PM_{2.5}, the total amount of dust for the determination of heavy metals, dioxins, PAHs and furans.

The results of all the **monitoring campaigns**, with fixed or mobile control units, showed that the parameters **did not exceed the limit values**.

ATMOSPHERE MICROPOLLUTANTS AND PARTICULATE

In Europe air pollution provokes 400,000 premature deaths per year and negative effects on the health of a large part of the population, more or less severe according to the country.

The “responsible” particles for air pollution are:

Hydrochloric acid (HCl): it is a colourless, irritating gas, composed of the combustion of materials containing chlorine, like PVC plastics. It is toxic if inhaled in high concentrations.

Particulate (PM): it is composed of fine particles of natural origins (dust storm, forest fires, sea spray) or artificial origins (use of fossil fuels in motor vehicles and power plants, etc.). It is composed of PM₁₀ and PM_{2.5} - ultrafine particles whose diameter is up to 10 µm or up to 2.5 µm – and soot (or carbon black).

Nitrogen oxides (NO_x): they are a mix of two oxides: NO and NO₂, derived from high-temperature combustion of any combustible material burning in the presence of nitrogen (air). In urban areas they are visible in the form of brown fog, they are dangerous if inhaled and contribute to acid rain.

Sulphur oxides (SO_x): they are a mix of three oxides, SO, SO₂ and SO₃, mainly derived from the combustion of fuels containing sulphur as an impurity. They are dangerous to humans and contribute to acid rain.

Polycyclic aromatic hydrocarbons (PAH): they are organic compounds whose main molecular characteristic is the presence of two or more rings connected to one another. They are formed in the incomplete reactions of combustion of organic substances and have a more or less significant carcinogenic potential according to each specific substance.

Dioxins and furans: the general term “dioxin” refers to a group of 210 polychlorinated aromatic chemical compounds, composed of carbon, hydrogen, oxygen and chlorine, divided into two families: dibenzo-p-dioxins (PCDD or “dioxins”) and dibenzo-p-furans (PCDF or “furans”). They are mainly substances of anthropic origins, particularly stable and persistent in the environment. Toxic for humans and animals, they are formed in the combustion reactions, especially if uncontrolled.

Heavy metals: they are emitted during combustions in the form of particulate. Their toxicity depend on their solubility in water, that is their capacity to be taken, absorbed and metabolised by humans.

Source: the text is taken from: *Le prove importanti delle conseguenze dell'inquinamento atmosferico sulla salute incitano a richiedere linee guida più severe*, p. 7, *L'Ambiente per gli Europei, Supplemento settimana verde 2013*.

There are several reliable and efficient technological solutions which keep emissions low. Acea, based on the precautionary principle, chose the best available ones and provided WtE plants with smoke treatment systems, which are the predominant part of the entire industrial complex because of their technological and management significance.

As usual, Acea works in compliance with UNI EN ISO 14001 management standards (Environmental Management Systems) and when it plans its annual improvement goals, it aims every day at more challenging objectives with respect to pollutant emission reduction.

THE TREATMENT SYSTEMS OF THE SAN VITTORE DEL LAZIO WASTE-TO-ENERGY PLANT

This plant is provided with particularly **efficient smoke treatment and de-pollution systems** for the protection of environment and health.

The smoke reduction system, carried out in all incineration sections, is composed of the following elements:

- a “**precipitator**”, which is the first treatment step of the smoke which comes from the boiler. Thanks to this, it is possible to reduce boiler ash, collecting and periodically eliminating it;
- a “**dry-type**” reactor, using sodium bicarbonate and activated carbon to reduce acid pollutants, heavy metals, dioxins and furans;
- a “**bag filter**”, which is the second step of smoke filtration to reduce fine-grained particulate. While it is working, the filter is covered by a solid layer of material which adsorbs the pollutants and improves the general performance of the reduction system. The solids collected in the bag filter are put in specific silos and periodically eliminated;
- a **nitrogen oxide reduction system (NO_x)**, called DENOX, which uses an ammonia conversion reaction producing nitrogen;
- a **fan**, ensuring the right speed of combustion smoke in its path through the boiler and the purification/filtration section, allowing for discharge in the environment through a 50-meter chimney.

SMOKE PURIFICATION IN THE WASTE-TO-ENERGY PLANT OF TERNI

The purification of the smoke produced by pulper incineration takes place in a section composed of:

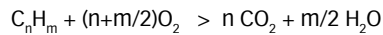
- an area of **smoke dry-washing** through sodium bicarbonate dosing;
- a **“bag filter” for de-dusting**.

The smoke leaving the boiler reaches the purification section of the gases (HCl, SO₂ e HF). This section is composed of a concentric cylindrical reactor, where, at its entrance, sodium bicarbonate is introduced. The smoke flow generates the necessary turbulence necessary to create the optimal mix. In the gas flow the activated carbons are also introduced. They are necessary to reduce heavy metals, dioxins and furans. The reactor gives the smoke a residence time of more than 3 seconds, in order to make the acid gases complete their reaction with bicarbonate. The smoke goes through the main channel of the reactor in an ascending direction and then goes down through the external channel.

Finally the smoke is filtered through the bag filter and the separated dust is sent to the collection silos through a conveyor belt.

As far as emissions in the atmosphere are concerned, **carbon dioxide (CO₂)** deserves special mention.

This colourless and odourless gas is completely harmless to humans. Together with water, it is the main product of the combustion reaction of hydrocarbons (C_nH_m), that is to say fossil fuels:



The problem is that it retains solar heat in the atmosphere and warms the Planet. Below specific limits (about 350 parts per million), the presence of carbon dioxide is necessary to maintain a temperature compatible with life on Earth; without small quantities of this gas the temperature in the atmosphere would be too low. However, if its concentration increases, the consequent greenhouse effect causes an excessive warming of air as well as other unpredictable and often dramatic and violent climate phenomena, due to the energy they are able to release.

As already mentioned in the paragraph *Measures to protect the climate*, Acea quantified its CO₂ emissions, assessing the carbon footprint of each macro production processes in compliance with the guidelines of the “Greenhouse Gas Protocol” (www.ghgprotocol.org). Table n. 87 shows the total values resulted from the 2013 assessment.

TABLE N. 87- ACEA GROUP'S CARBON DIOXIDE EMISSIONS (2013)

TYPE OF CO ₂ EMISSION (GHG PROTOCOL)	(t)
scope 1 emissions (direct emissions)	229,574
scope 2 emissions (electricity consumption)	232,000
Acea Group's total CO₂ emissions in 2013	461,574

NB: direct emissions (scope 1) include the plants of A.R.I.A., Acea Reti e Servizi Energetici, Acea Produzione, the car fleet (table n. 83) and the heating emissions (Holding offices). Indirect emissions (scope 2) include the companies: A.R.I.A., Acea Produzione, Acea Distribuzione, Acea Reti e Servizi Energetici, Acea SpA and the water companies included in the reporting boundary of the chapter, only for the share owned by Acea.

The value **0.20** was used as an emission factor per unit of electricity produced (t CO₂/MWh). It is calculated on the basis of the national mix of fuels as of 2012 (2012 GME annual report) and the CO₂ emission coefficients for each source, outlined in EU Decision 2007/589/CE.

This framework shows equal contributions of “indirect” emissions (scope 2), linked with electricity consumption, and “direct” emissions (scope 1), which originate from the processes of combustion, including thermoelectric generation, waste-to-energy process, transportation, office heating, etc. In 2013 “direct” emissions reported a significant increase in comparison to 2012 (approximately +74%) due to the increase in the waste-to-energy production, thanks to the restart of the Terni waste-to-energy plant. The latter, together with Montemartini and Tor di Valle, is one of the three thermoelectric generation plants subject to the *Emission Trading Scheme* (ETS). Table n. 88 shows the allowances assigned within the *National Allocation Plan* (NAP) against actual emissions between 2011 and 2013.

TABLE N. 88 - CO₂ EMISSION QUOTAS PROVIDED FOR BY THE NATIONAL ALLOCATION PLAN (NAP) AND ACTUAL EMISSIONS BY PLANT (2011-2013)

	2011		2012		2013	
	ASSIGNED BY THE NAP	ACTUAL	ASSIGNED BY THE NAP	ACTUAL	ASSIGNED BY THE NAP	ACTUAL
Tor di Valle	235,788	26,089	235,788	23,377	13,502	29,060
Montemartini	1,218	4,762	609	1,988	0	1,344
waste-to-energy plant at Terni	--	--	--	--	0	97,329

NB: The Terni waste-to-energy plant is in full operation again, after its repowering in 2013. The data on actual emissions is estimated.

Table n. 89 reports the main pollutants emitted in the atmosphere (CO, NO_x, SO_x, dust) by the Group's plants, net of the contributions due to the main productive processes:

TABLE N. 89 – TOTAL EMISSIONS OF POLLUTANTS IN THE ATMOSPHERE PRODUCED BY ACEA GROUP'S PLANTS (2011-2013)

EMISSIONS	2011	2012	2013
			(t)
CO	6.74	10.12	9.94
NO _x	95.79	96.76	155.03
SO _x	0.71	0.04	0.23
dust (particulate)	0.32	0.05	0.46

NB: emissions refer to the companies: A.R.I.A. and Acea Produzione.

It should also be noted that the monitoring process carried out in all the plants at risk¹⁰³ showed **an irrelevant quantity of substances responsible for ozone layer depletion.**

THE GROUP'S CAR FLEET

In accordance with its commitment to reduce emissions in the atmosphere, Acea pays particular attention to the **renewal of the company's car fleet** (composed of about 2,500 units), which **continued in 2013** without any slowdown, replacing the most obsolete cars with latest-generation models.

Also in 2013, the result of this policy was the **lower average age of circulating vehicles** and the consequent **decrease in the emissions** of both the main pollutants and carbon dioxide.

A positive, though marginal, contribution was given by the **43 electric vehicles** used by the operational teams (for further information please see the *Environmental report*).

Since 2012, indeed, Acea Distribuzione has provided its operational units, located in different parts of the territory, with 43 fully-electric light vehicles, with the aim of testing the compatibility of the technical performance of the vehicles with the operating needs and, at the same time, collecting specific and reliable data on their conditions of use. In particular, a **monitoring process of the vehicle use** was implemented. It reports: maximum and average daily miles covered, specific consumption (in terms of km/kWh), reliability/problems with the vehicles, maintenance costs, estimates of the CO₂ emissions avoided, monthly capacity factors of the energy stored in the batteries, etc. Moreover, in accordance with the electric mobility project in Rome, Acea Distribuzione installed and activated - after receiving specific authorisations - the first **12 charging stations for electric vehicles**, whose use could provide useful data on the system functioning, including problems with connection of the charging stations to the low-voltage electrical grid and the possible obstacles to the diffusion of these new technologies.

TABLE N. 90 – EMISSIONS OF POLLUTANTS IN THE ATMOSPHERE PRODUCED BY ACEA'S CAR FLEET (2011-2013)

TRANSPORTATION EMISSIONS	2011	2012	2013	Δ % 2013/2012
				(t)
CO ₂	2,699	3,993	3,166.6	-20.7
NO _x	4.8	7.9	6.4	-19.0
CO	28.0	39.5	30.7	-22.3

ACEA GROUP'S WASTE

The Group pays attention to the **waste cycle management**, because of its environmental relevance.

Its commitment reflects the general principles on which the EU's environmental policy is based. First of all, the Group tends to reduce the production of waste at the source, with targeted measures aimed at forcing the supply chain to minimise packaging; secondly, it tries to find ways to transform the recovered material into an exploitable source.

Energy recovery is also taken into consideration. It is carried out when the recovery of the material is not convenient. For example, most of the sludge deriving from the treatment of wastewater is recovered for the production of high-quality compost. A small part of it is incinerated with energy recovery. The portion which is not recovered and sent to landfill is negligible. The recovery activities are carried out in-house by the Group's companies.

Table n. 91 reports the **total amount of waste produced**. For further information please see the *Environmental report*.

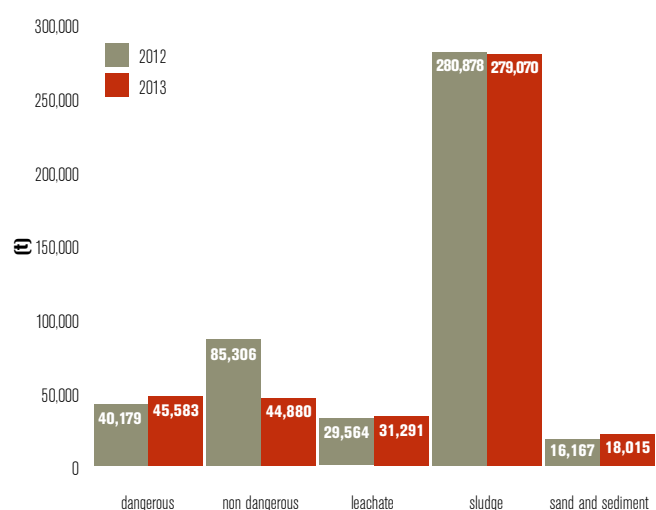
TABLE N. 91 – ACEA GROUP'S TOTAL AMOUNT OF WASTE (2012-2013)

TOTAL AMOUNT OF WASTE PRODUCED	2012	2013
all the activities except for the treatment of wastewater (t)		
dangerous	40,178.5	45,682.5
non dangerous	85,305.8 (*)	44,879.6
leachate (non dangerous)	29,564.19	31,290.7
wastewater treatment (t)		
sludge	280,878.0	279,069.7
sand and sediment	16,167.4	18,014.8

(*) modified figure.

NB: The data refer to the companies: A.R.I.A., Aquaser, Acea Produzione, Acea Distribuzione, Acea Reti e Servizi Energetici, Acea SpA and the water companies included in the reporting boundary of this chapter.

CHART N. 45 – ACEA GROUP'S WASTE PRODUCTION (2012-2013)



103 Especially conditioning plants using - as refrigerant gas - substances subject to the Montreal Protocol of 1987, in particular chlorofluorocarbons.

RESEARCH

Research and development activities are carried out by the Group's operating companies in different business areas. Particular attention is paid to **technological innovation** activities, often supported by research bodies and scientific and academic institutes (see also *Socio-Economic Relations with the Stakeholders*, chapter *Institutions and the company*). Some of the main projects under development are:

- **Acea Distribuzione:**
 - pilot project **Smart grid**, for the development of innovative solutions for the integration of distributed generation and better service continuity; the works of the pilot project continued until its conclusion in 2013 and a monitoring phase will be carried out in 2014;
 - project **Smart-network Management System**: a technological evolution in low and medium voltage electrical distribution grid management in the city of Rome;
 - other in-depth analysis of technological innovation applied to energy distribution grids: in particular, a project concerning **Distributed Storage** on a medium-voltage dorsal line.
- **Acea Ato 2:**
 - in cooperation with the company LaboratoRI: **study of distribution grids and leakage detection** according to the approach of "determining districts" provided for by Ministerial Decree 99/97; in 2013 this activity was carried out especially in the municipalities of **Fiano Romano** and **Velletri**. In cooperation with LaboratoRI, Acea Ato 2 supplies other research and study activities (see table 92).
- **Umbra Acque:**
 - **project Life Palm** (Pump and leakage management), co-financed by the European Union. The project started in 2010 and concluded in September 2013. The aim was to create a tool which permitted reaching and maintaining the objectives of "minimum" leakages, optimising the pumping systems in order to reduce energy and management costs. At the end of the project, thanks to the leakage detection, it was possible to recover approximately 15 l/s in two specific districts;
 - **project AERE**, aimed at increasing **energy efficiency** in wastewater treatment plants. The project - developed in cooperation with the Research Unit of Environmental Sanitary Engineering of the University of Florence and other Italian companies particularly focused on the integrated water system management – concluded in 2013;
 - **project Life "From Urban Wastewater Treatment Plant to Self-Sustainable Integrated Platform for Wastewater Refinement"** in process in a wastewater treatment plant of Perugia and provided for the creation of a platform for the disposal of liquid waste and the production of biogas to be used for cogeneration.
- **Publiacqua:**
 - a system of **control and reduction of grid leakages**. As far as the systematic waste leakage detection is concerned, in 2013 a two-year (2012-2013) plan was completed. It was a systematic research plan focused on the most critical water systems, for a total of 2,559 km of analysed grid.
- **Acquedotto del Fiora:**
 - the **leakage detection** campaigns continued. For dozens of municipalities, hydraulic study, leakage detection and identification of pressure management intervention have been completed. In 6 municipalities the studies continue;
 - in 2013 the intervention for **energy optimisation of some plants** were carried out. For example, the installation of a new pumping system at the lifting station of Raspolino with optimisation of the district heating system which depends on it;
 - a study and a test have been carried out in order to check the functioning of the well-field in Grosseto and **new pumps for the most energy-consuming wells** have been purchased. Their laying and possible connection to an inverter will be carried out in 2014.
 - **new remote control points** have been activated given the possibility of executing important campaigns of energetic analysis and planning optimisation intervention for 2014.
- **LaboratoRI:**
 - **leakage detection**: several leakages have been detected in the Fiano Romano grid, which has been repaired and improved. In particular, for the entire first semester of 2013, the water flow rate and pressure were monitored through **measurement campaigns**. It was possible to monitor the improvement of the grid functioning after intervention. All problems detected in 2012 have been solved. A **further improvement of the grid structure** – aimed at facing higher consumption in summer - has been planned and verified. A leakage detection project has been started for the municipality of Velletri as well: the mathematical model is being developed;
 - **the study of rehabilitation intervention** for the rivers **Tiber** and **Aniene** has continued. The first step, carried out with La Sapienza University of Rome, was the determination of the biological quality status of the rivers, in accordance with Directive 2000/60/CE, with the aim of finding correlations between chemical parameters and biological/hydrometric indices;
 - **further studies/research** developed this year:
 - the functional verification of drinking water treatment plants for Acea Ato 5;
 - studies on water instability and precipitation in the water systems of Sora, Ripa, Veroli and Ferentino – Acea Ato 5;
 - environmental impact study for the modernisation and requalification of Acea Produzione's cogeneration plant of Tor di Valle;
 - consulting for management and optimisation of Inverse Osmosis treatment plant for water resulting from pulping process, connected with the Terni waste-to-energy plant – A.R.I.A.;
 - performance analysis and technological optimisation of the rainwater collection plant of the SAO plant complex in Pian del Vantaggio, Orvieto.

Many water and environmental research activities are carried out with **LaboratoRI** and **Acea Ato 2** (see table n. 92).

TABLE N. 92 - MAIN RESEARCH ACTIVITIES UNDERTAKEN BY LABORATORI AND ACEA ATO 2

SOURCES AND QUALITY OF DRINKING WATER	
PROJECT TITLE (YEAR)	DESCRIPTION
Protected areas (2013)	Technical proposals for protected areas of the well fields of Doganella have been drawn up.
Removal of contaminants from water addressed to human consumption in the South and West Basins (2010-2013)	Activity for the definition of proper processes of treatment of contaminant removal (arsenic, vanadium, fluorides, and manganese) has been pursued, in order to adjust the quality of water caught in critical territories to the standards provided by the Legislative Decree 31/2001.
Preliminary experimentation for removal of fluorides from water addressed to human consumption (2013)	Preliminary experimentation on a membrane to select the chemicals capable of removing fluorides in drinking water. Potentiality and efficiency of removal will be verified transferring the experimentation onto a pilot scale.
Functionality optimisation in processes of drinking water treatment for plants located in the South, West and North Basins of ATO 2 (2011-2013)	Functional control of drinking water treatment plants in order to verify performance achieved at various stages of water treatment and process optimisation. During 2013 this activity has been carried out on 26 plants already installed in the previous years and after related inspection.
WASTEWATER TREATMENT PLANTS	
PROJECT TITLE (YEAR)	DESCRIPTION
Monitoring of volatile organic compounds (VOC) and hydrogen sulphide (H ₂ S) of wastewater treatment plant in Northern Rome (2013)	Within the framework of activities for the implementation of methodologies aimed at monitoring odorous emissions, in cooperation with ENEA, a pilot experimentation has been launched in the area of the plant located in Northern Rome, to assess VOC and hydrogen sulphide in the short-medium term.
State of discharge in wastewater treatment plants (2013)	Reports have been prepared on the state of discharge of certain wastewater treatment plants in the municipalities of Segni, Rome (Selvotta and Colle dei Pini), Castel Madama, Ciciliano, Monte Porzio Catone, Lariano, Ciampino, Zagarolo, Montelanico, Rocca di Papa and Marino.
HYDROGRAPHIC BASINS	
PROJECT TITLE (YEAR)	DESCRIPTION
Support to management – Aqueduct and water springs of Peschiera (2012-2013)	Upgrade of runoff curves based on the 2012 experimentation data. Analysis of the oscillating movement of water level in flood bypasses and definition of the size by the flow rate variation with experimental data collected in 2012 and new data obtained between January and February 2013.
Support to Supervision of Water availability (2009-2013)	The project, launched in 2009, developed the draft and proposed the contents and format for a periodic report that, by monitoring the weather forecast, estimates the recharge of sub-surface water for those territories supplied with catchment and drinking water plants. Periodic gauging (monthly) carried out on the springs of Peschiera and Capore falls within this project.
SEWERAGE	
PROJECT TITLE (YEAR)	DESCRIPTION
Urban Drainage Modelling for the Sewerage Basin in Northern Rome, Southern Rome, and Eastern Rome (2004-2013)	Upgrade of urban drainage modelling for the main sewerage basins of Rome, has been pursued. The mathematical model is able to reproduce a simulation of the system functioning in different conditions and is helpful to evaluate: the system response against the relevant “historical” water precipitation and the frequency of activation of spillways compared to historical data.

INDEX OF GRI CONTENTS: STANDARD ELEMENTS AND PERFORMANCE INDICATORS

Following is a list of **standard elements** and the **economic, social and environmental** core and additional **indicators** required by the *Guidelines GRI-G3.1 (2011 edition)*¹⁰⁴, and indicators introduced by the *Electric Utility sector supplement*¹⁰⁵, accompanied by the reference sections and pages where they can be found in the related document.

In the *Guidelines* the meaning of each standard element and performance indicator is described, while in the *Sector Supplement*, contents of specific indicators are defined; both documents are available on the website www.globalreporting.org.

STANDARD GRI-G3.1 ELEMENTS

1. STRATEGY AND ANALYSIS

- 1.1 Statement from the most senior decision-maker of the organization (e.g., CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy.**
Introductory letter page 5, *Corporate identity* pages 26 et seq.
- 1.2 Description of key impacts, risks, and opportunities.**
Introductory letter page 5, *Corporate identity* pages 22-27, 30 et seq.

2. PROFILE OF THE ORGANIZATION

- 2.1 Name of the organization.**
Corporate identity page 16
- 2.2 Primary brands, products, and/or services.**
Corporate identity pages 16 et seq.
- 2.3 Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.**
Corporate identity pages 18-20
- 2.4 Location of organization's headquarters.**
Acea SpA, Piazzale Ostiense 2, 00154 Rome
- 2.5 Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.**
Corporate identity pages 16, 22 note 12
- 2.6 Nature of ownership and legal form.**
Corporate identity page 18
- 2.7 Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).**
Corporate identity pages 22-24; *Socio-economic relationships with the stakeholders* pages 50 et seq.
- 2.8 Scale of the organization, including: number of employees; net turnover (for private organizations) or net revenues (for public bodies); total capitalization.**
Corporate identity pages 18, 22; *Socio-economic relationships with the stakeholders* pages 99, 120
- 2.9 Significant changes to the dimensions, structure or ownership set-up which took place in the reporting period (including: the location or the changes in activities, the opening, closure or the expansion of the plants; changes in the share capital structure and other formation, maintenance and amendment of the share capital transactions).**
Corporate identity pages 19, 20 et seq., 24 et seq., 35; *Socio-economic relationships with the stakeholders* page 127
- 2.10 Awards received in the reporting period.**
Corporate identity pages 28 et seq.; *Socio-economic relationships with the stakeholders* pages 85, 106, 126, 128, 135

3. PARAMETERS OF THE REPORT

Profile of the report

- 3.1 Reporting period (i.e., fiscal/calendar year) for information provided.**
Communicating sustainability: method notes page 6
- 3.2 Date of most recent previous report.**
Communicating sustainability: method notes page 6
- 3.3 Reporting cycle (annual, biennial, etc.).**
Communicating sustainability: method notes page 6
- 3.4 Contact point for questions regarding the report or its contents.**
Communicating sustainability: method notes page 9

Purpose and boundary of the report

- 3.5 Process for defining report content, including determining materiality, prioritizing topics within the report; and identifying stakeholders the organization expects to use the report.**
Communicating sustainability: method notes pages 6-8
- 3.6 Boundary of the report (i.e., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers).**
Communicating sustainability: method notes page 8

104 For standard elements already provided in the guidelines GRI.G3 (2006 edition) and maintained in the G3.1 2011 edition, the definitions utilised in the Italian translation of the 2006 version were conformed to, while for standard elements modified by the *Guidelines GRI-G3.1*, definitions have been translated from the 2011 English version; for a more exhaustive explication of their meaning, refer to the original English version, which has been taken into account for the drawing of the report.

105 *Electric Utility Sector Supplement* indicators (EU) are integrated in the table; the document regulates peculiar matters for energy companies, introduces new indicators (EU) and commentaries on indicators already provided by the *GRI Guidelines*, 2006 edition.

- 3.7 State any specific limitations on the scope or boundary of the report.**
Communicating sustainability: method notes page 8; Socio-economic relationships with the stakeholders page 92, note 75
- 3.8 Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.**
Communicating sustainability: method notes page 8
- 3.9 Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report.**
Communicating sustainability: method notes page 9
- 3.10 Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/ acquisitions, change of base years/periods, nature of business, measurement methods).**
 Recalculations and aggregations subject to variations compared to the 2012 report are duly pointed out and justified in the current report.
Communicating sustainability: method notes page 8; Socio-economic relationships with the stakeholders pages 64 note 44, 99, 129 note 89
- 3.11 Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.**
Communicating sustainability: method notes page 8; Socio-economic relationships with the stakeholders page 103
- 3.12 Table identifying the location of the Standard Disclosures in the report. Identify the page numbers or web links where the following can be found: Strategy and Analysis 1.1 – 1.2; Organizational Profile 2.1 – 2.10; Report Parameters 3.1 – 3.13; Governance, Commitments, and Engagement 4.1 – 4.17; Disclosure of Management Approach, per category; Core Performance Indicators; any GRI Additional Indicators that were included; and any GRI Sector Supplement Indicators included in the report.**
Index of GRI contents: standard elements and performance indicators, page 168

Assurance

- 3.13 Policy and current practice with regard to seeking external assurance for the report. If not included in the assurance report accompanying the sustainability report, explain the scope and basis of any external assurance provided. Also explain the relationship between the reporting organization and the assurance provider(s).**
Corporate identity page 8

4. GOVERNANCE, COMMITMENTS, INVOLVEMENT OF THE STAKEHOLDERS

Governance

- 4.1 Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.**
Corporate identity pages 35-38
- 4.2 Indicate whether the Chair of the highest governance body is also an executive officer (and, if so, their function within the organization's management and the reasons for this arrangement).**
Corporate identity pages 37 et seq.
- 4.3 For organizations that have a unitary board structure, state the number and gender of members of the highest governance body that are independent and/or non-executive members.**
Corporate identity page 37
- 4.4 Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.**
Corporate identity pages 36, 38; Socio-economic relationships with the stakeholders page 120
- 4.5 Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).**
Corporate identity pages 36 et seq.; Socio-economic relationships with the stakeholders page 111
- 4.6 Processes in place for the highest governance body to ensure conflicts of interest are avoided.**
 The risk of conflicts of interest within Acea is constantly controlled through corporate governance systems and procedures (management, organisational and control Model, Code of Ethics, Transactions with Related Parties procedures, Independent Directors). All these tools found their application in all the sectors where case of conflict of interests may rise: in relationships between major and minor shareholders, between Acea and Related Parties, between Acea and Public Administration.
Corporate identity pages 36 et seq.
- 4.7 Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees, including any consideration of gender and other indicators of diversity.**
 Determination and appointment of the members of Acea's Board of Directors, being listed on the stock exchange, takes place in compliance with the procedures provided by the law in force, the Articles of Association, and in conformity with provisions of the Corporate Governance Code. The Appointment and Remuneration Committee performs proposal and advisory functions towards those professional positions whose presence is deemed suitable in the BoD.
 Furthermore, in Italy the law 12th July 2011, n. 120 has been approved, referring to equity of access to control and administrative bodies of quoted companies in regulated markets, providing, since 2012, the statutory presence of women in Boards of Directors of quoted companies, by one fifth of their composition and by one third, as of 2015.
 In 2013 this law found its implementation within Acea, firstly through the amendment of the Articles of Association, later through the appointment of new members. The Board of Directors is made up of 9 members, 2 of which are women, the Board of Statutory Auditors is composed of 3 members, among which 1 is a woman; gender quotas are hence consistent with the law.
Corporate identity pages 37, 39; Socio-economic relationships with the stakeholders page 106
- 4.8 Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.**
Corporate identity pages 26 et seq., 36 et seq.

- 4.9** Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.
Communicating sustainability: method notes page 6; Corporate Identity pages 36 et seq.
- 4.10** Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.
The Appointment and Remuneration Committee submits proposals on remuneration to the executive Directors, and sets the performance goals determining the variation in the said remuneration; it is also bound to monitor the application of decisions taken by the Board, verifying the effective achievement of performance goals. Non-executive Directors receive a fixed remuneration, whose amount is determined at the Shareholders' Meeting, with respect to the function performed.
Moreover, the President is entrusted with the verification of all company processes related to CSR. (see *The Report on corporate governance and the structure of ownership*).

Commitment in external ventures

- 4.11** Explanation of whether and how the precautionary approach or principle is addressed by the organization.
Corporate identity page 43; Environmental issues page 163
- 4.12 (*)** Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.
Communicating sustainability: method notes page 6, Corporate identity pages 28, 36, 42 et seq.; Socio-economic relationships with the stakeholders pages 91, 106, 108, 124 et seq., 127; Environmental issues page 135
- 4.13** Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization has positions in governance bodies; participates in projects or committees; provides substantive funding beyond routine membership dues; or views membership as strategic.
Socio-economic relationships with the stakeholders pages 123, 125

Involvement of the stakeholders

- 4.14** List of stakeholder groups engaged by the organization.
Corporate identity pages 28 et seq., 44 et seq.
- 4.15** Basis for identification and selection of stakeholders with whom to engage.
Communicating sustainability: method notes page 6; Corporate Identity pages 44 et seq.
- 4.16** Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.
Corporate identity pages 44 et seq.; Socio-economic relationships with the stakeholders pages 51-56, 73, 77, 82 et seq., 96 et seq., 103 et seq., 110, 114 et seq., 118 et seq., 121 et seq., 123
- 4.17** Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.
Corporate identity pages 44 et seq.; Socio-economic relationships with the stakeholders pages 51-56, 77, 83, 97 et seq., 121 et seq., 123, 126 et seq.

5. MANAGEMENT APPROACH

- 5** Disclosure on the management methods of the organization (Management Approach) with reference to the aspects defined under each category of performance indicators.
Corporate identity pages 22 et seq., 26, 40-43; Socio-economic relationships with the stakeholders pages 51, 57, 76 et seq., 82 et seq., 90 et seq., 94 et seq., 99, 107 et seq., 110, 113 et seq., 117 et seq., 120, 126 et seq.; Environmental issues pages 134, 159, 183
- EU1** Installed capacity, broken down by primary energy source and by regulatory regime.
Environmental issues page 145
- EU2** Net energy output broken down by primary energy source and by regulatory regime.
Environmental issues page 141
- EU3** Number of residential, industrial, institutional and commercial customer accounts.
Socio-economic relationships with the stakeholders page 50
- EU4** Length of above and underground transmission and distribution lines by regulatory regime.
Environmental issues page 147
- EU5** Allocation of CO₂ emissions or equivalent, broken down by carbon trading framework.
Environmental issues page 164

(*) For the standard element 4.12 internal translation of the original English version of the GRI-G3 Guidelines was preferred, as follows: "Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses".

GRI-63.1 ECONOMIC AND SOCIAL INDICATORS (CORE E ADDITIONAL) AND SECTOR SUPPLEMENT INDICATORS (EU)**Economic performance**

- EC1 (Core)** Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.
Corporate identity pages 22 et seq., 46; *Socio-economic relationships with the stakeholders* pages 110 et seq., 120, 123 et seq.
- EC2 (Core)** Financial implications and other risks and opportunities for the organization's activities due to climate change.
Corporate identity pages 22 et seq.; *Environmental issues* pages 134, 148 et seq.
- EC3 (Core)** Coverage of the organization's defined benefit plan obligations.
Socio-economic relationships with the stakeholders page 112
- EC4 (Core)** Significant financial assistance received from government.
Corporate identity page 46 note 22

Presence on the market

- EC5 (Additional)** Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation.
Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation. The salaries of new recruits are disciplined by the Collective National Labour Agreements for the sector (electricity, gas and water).
Socio-economic relationships with the stakeholders pages 110 et seq.
- EC6 (Core)** Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.
A specific preferential strategy for locally-based suppliers does not yet exist, although, for work procurement, selection of local suppliers takes place almost naturally.
Socio-economic relationships with the stakeholders pages 93 e et seq.
- EC7 (Core)** Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.
Procedures for hiring of human resources in Acea do not require any particular criteria linked to geographical residence, since deemed potentially discriminatory and non-functional for the Group's spirit.

Indirect economic impacts

- EC8 (Core)** Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.
Socio-economic relationships with the stakeholders pages 59, 83, 84 et seq., 86 et seq.
- EC9 (Additional)** Understanding and describing significant indirect economic impacts, including the extent of impacts.
Socio-economic relationships with the stakeholders pages 59, 67, 68, 72, 77, 84 et seq., 86 et seq., 91, 93; *Environmental issues* page 149

Availability and reliability

- EU6 (Core)** Management approach to ensure short and long-term electricity availability and reliability.
Acea Energia Holding is equipped with the Energy Management Unit, whose aim is to ensure electricity availability (in addition to gas and other fuels) for customers inside the Group, so that the balance and the optimisation of the energy portfolio, both material and financial, is guaranteed. This Unit continually controls the internal processes and the adequacy of equipment (both in terms of operations and risk monitoring), caring, as well, for commercial relations with the main domestic and international suppliers of electricity and gas, and with the most important financial institutions, in order to constantly meet the energy requirements of Acea Energia – the company that sells electricity and gas to external and internal end users.
Socio-economic relationships with the stakeholders pages 57, 58 et seq., 74, 90, 92 note 75, 123, 127; *Environmental issues* page 147
- EU10 (Core)** Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime.
Environmental issues page 145

Demand-side management

- EU7 (Core)** Demand-side management programs including residential, commercial, institutional and industrial programs.
Socio-economic relationships with the stakeholders pages 57, 58, 74; *Environmental issues* page 147

Research and development

- EU8 (Core)** Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development.
Socio-economic relationships with the stakeholders pages 57, 58, 127; *Environmental issues* pages 166 et seq.

Plant decommissioning

- EU9 (Core)** Provisions for decommissioning of nuclear power sites.
There are no nuclear plants owned by Acea.

System efficiency

- EU11 (Core)** Average generation efficiency of thermal plants by energy source and by regulatory regime.
Environmental issues page 142
- EU12 (Core)** Transmission and distribution losses as a percentage of total energy.
Environmental issues page 147

LABOR PRACTICES & DECENT WORK

Employment

- LA1 (Core)** **Total workforce by employment type, employment contract, and region, broken down by gender.**
Socio-economic relationships with the stakeholders pages 99-101, 103 et seq.
- LA2 (Core)** **Total number and rate of new employee hires and employee turnover by age group, gender, and region.**
Socio-economic relationships with the stakeholders pages 99-101
- LA3 (Additional)** **Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major significant locations of operation.**
Socio-economic relationships with the stakeholders pages 111 et seq.
- LA15 (Core)** **Return to work and retention rates after parental leave, by gender.**
 Acea operates with respect to the Consolidated Act of provisions related to maternity and paternity protection and support (Legislative Decree 151/2001 and subsequent modifications and additions), that regulates parental leaves, time off and pay for workers concerned with maternity and paternity of natural, adopted and foster children.
 The legislation forbids any discriminatory actions for gender, or rather any less fair regard due to pregnancy, maternity or paternity status; it sets the Statutory Maternity Leave for a period starting two months before the expected week of childbirth (antenatal care) and three months after the birth date and gives the employees the right to their job and prevents them from dismissal; employees shall return to their old job or similar, assigning penalties in case of breach from the employers. Therefore, 100% of employees eligible to these kinds of benefits, has the right to his/her old job and to return to work.
- EU14 (Core)** **Programs and processes to ensure the availability of a skilled workforce.**
Socio-economic relationships with the stakeholders page 115
- EU15 (Core)** **Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region.**
 With regard to the Group's companies operating in the electricity sector (Acea Distribuzione, Acea Reti e Servizi Energetici, Acea Energia and Acea Produzione, located chiefly in the region of Latium) employees eligible to retire, **within the next 5 years**, amount to 3.2% of the total workforce of companies included in the reporting boundary of paragraph Composition and turnover, and divided as follows: 0% of directors, 0% of managers, 2.8% of employees and 0.4% of workers; **within the next 10 years**, 16.9% of the workforce will be eligible to retire, divided in: 0.2% of directors, 0% of managers, 12.8% of employees and 3.9% of workers.
- EU17 (Core)** **Days worked by contractor and subcontractor employees involved in construction, operation & maintenance activities.**
 Project Management of companies dealing within the energy sector monitors the working days of contractors and subcontractors by means of workers' timesheets but not all the companies are equipped with an IT tool to manage workers' attendance. At present only data relating to the company Acea Produzione can be reported, which, in 2013, with an overall workforce of 78 individuals, for a total of about 140,000 day/man, resorted to 2,600 day/man worked by the contractors' personnel for the realisation of works.

Industrial Relations

- LA4 (Core)** **Percentage of employees covered by collective bargaining agreements.**
 100% of employees is covered by collective bargaining agreements. With regard to the supply chain, percentage of contractors' personnel covered by CBA is not available, although all companies contracting services and works are compelled to undersign the Code of Ethics of the Group, where issues related to promotion and protection of freedom of association are specifically treated, through the establishment of proper industrial relation control units as well (art.15.4).
Socio-economic relationships with the stakeholders pages 103 et seq.
- LA5 (Core)** **Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements.**
Socio-economic relationships with the stakeholders pages 103 et seq.

Occupational Health and Safety

- LA6 (Additional)** **Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.**
 Acea complies with the provisions required by the Legislative Decree n. 81/2008 on occupational health and safety.
Socio-economic relationships with the stakeholders pages 95 et seq., 108
- LA7 (Core)** **Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities by region and by gender.**
Socio-economic relationships with the stakeholders pages 108 et seq.
- LA8 (Core)** **Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.**
Socio-economic relationships with the stakeholders page 109
- LA9 (Additional)** **Health and safety topics covered in formal agreements with trade unions.**
Socio-economic relationships with the stakeholders page 109
- EU16 (Core)** **Policies and requirements regarding health and safety of employees and employees of contractors and subcontractors.**
 Company policies on provisions set the statutory signing by contractors of the *Code of Ethics of the Group* (2012 edition), which adopted and integrated the principles of the previous Code of Ethics for Tenders, and requires the adherence to occupational health and safety (art.16.2). Furthermore Acea availed itself of specific means like the *Quality, Environment, Safety and Energy Policy*, the occupational health and safety management Systems consistent with OHSAS 1800 and the Protocol on water procurements, in order to prevent irregular work and enhance safety on sites. With regard to the energy area, suppliers also undersign the occupational health and safety Policy, in force within Acea Distribuzione, in order to participate in work, goods and service procurement procedures, and since 2008, establishment of a Vendor Rating system, focused on quality and safety parameters.
 The Safety and Protection Function of Acea SpA, within the Vendor Rating project, periodically carries out audits on suppliers registered on the Systems for the Qualification for electric and water/electro-mechanical works; in 2013, 70 audits have been performed resulting in (with respect to **safety**): 18% of economic operators were deemed "reliable", 64% were deemed "suitable", 18% achieved a "partially suitable" result, to which improving aspects have been outlined, subject to further verification in subsequent audits.
Corporate identity pages 41, 43; *Socio-economic relationships with the stakeholders* pages 90, 95, 97, 98, 108

EU18 (Core) **Percentage of contractor and subcontractor employees that have undergone relevant health and safety training.**
 Datum on percentage of contractors and subcontractors' employees that have undergone relevant safety training is not available, since it is not yet monitored. However, in 2013, the Safety and Protection Function of Acea SpA undertook, within the Vendor Rating project, 70 audits on suppliers registered to the Systems for the Qualification for electric and water/electro-mechanical works. With regard to **safety training**, results from audits show: 19% of suppliers achieved a "good" result, 69% achieved "not bad" and 13% achieved a "sufficient" result.

Training and Education

LA10 (Core) **Average hours of training per year per employee by gender, and by employee category.**
Socio-economic relationships with the stakeholders pages 115, 116

LA11 (Additional) **Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.**
Socio-economic relationships with the stakeholders pages 110, 113-116

LA12 (Additional) **Percentage of employees receiving regular performance and career development reviews, by gender.**
 In 2013, in relation to the introduction of the Management System for People in continuity with last year, directors and managers of the Group have received regular reviews, corresponding to 10% of the overall workforce.
Socio-economic relationships with the stakeholders page 113

Diversity and Equal Opportunity

LA13 (Core) **Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity.**
Socio-economic relationships with the stakeholders pages 102, 105 et seq., 119

Equal remuneration for women and men

LA14 (Core) **Ratio of basic salary and remuneration women to men by employee category, by significant locations of operation.**
 According to the CBA (National Collective Bargaining Agreement) in force, the basic salary for men is identical to that of women, as per employee category. However, the variable component of one's salary can lead to certain differences.
Socio-economic relationships with the stakeholders page 111

HUMAN RIGHTS

Investment and Procurement Practices

HR1 (Core) **Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening.**
 All entities operating on behalf of Acea in the management of businesses are compelled to conform to the Code of Ethics of the Group, which, as said in the Preface, clearly recalls the respect of the Universal Declaration of Human Rights, the Conventions of the ILO and the 10 principles of Global Compact. This guarantees the safeguard of human rights even in case of investment and/or supply agreements.
Socio-economic relationships with the stakeholders page 94 et seq.

HR2 (Core) **Percentage of significant suppliers, contractors and other business partners that have undergone human rights screening, and actions taken.**
 Despite the lack of the percentage datum, Acea applies Systems for the Qualification of suppliers that shall fit specific prerequisites, like technical, environmental and safety reliability; in order to participate in calls for tenders suppliers are also bound to sign and respect the *Code of Ethics of the Group*, and comply with the national regulations relating to occupational health, safety and industrial hygiene, payment of remuneration, payment of social security and assurance contributions. Systems for the Qualification are annually updated and the meeting of the requirements requested are subject to a new verification. In case of violation of the principles contained in the Code of Ethics – duly pointed out to the Ethics Committee of Acea SpA – upon investigation, exclusion from the procedure or suspension of the award is called for.
Socio-economic relationships with the stakeholders pages 90 et seq., 94 et seq.

HR3 (Core) **Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.**
 In 2013 the total hours of employee training on policies and procedures concerning aspects of human rights, amount to 1,010 equal to 39% of trained employees out of the overall number of employees (4,776 by reporting boundary).
Socio-economic relationships with the stakeholders pages 114 et seq.

Non-discrimination

HR4 (Core) **Total number of incidents of discrimination and corrective actions taken.**
 There are no incidents of discrimination has occurred. For policies concerning prevention of such incidents, as in the Code of Ethics of the Group and diversity and equal opportunities, see *Corporate Identity* page 26 and *The socio-economic relationships with the stakeholders* pages 105 et seq., 119

Freedom of Association and Collective Bargaining

HR5 (Core) **Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights.**
 There are no operations in which freedom of association and collective bargaining are at risk. Refer to chapter *Personnel*, in particular to paragraphs *Industrial Relations* and *Social Activities* (in which further company associations like GRC, NACDI, Medaglie d'oro Association, are described). Furthermore Acea participates in the Sustainable Supply Chain Working Group, within the Global Compact Network Italia, focused on actions to support companies which maintain sustainable performance and encourage the adoption of best practices by suppliers, in terms of respect of human rights, labour rights, environmental responsibility and business ethics (see *Corporate Identity*, paragraph *Sharing the corporate responsibility matters*).

Child Labor

HR6 (Core)	Operations and significant suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor. Acea, in its relations with its employees and partners, applies the National Collective Bargaining Contracts and other contracts provided by the regulation in force. With regard to the lack of incidents of child labour in the supply chain, the company binds any potential supplier to respect the <i>Code of Ethics of the Group</i> , that prevents its employees from all forms of violation (see chapters <i>Personnel</i> and <i>Suppliers</i> within <i>Socio-economic relationships with the stakeholders</i>). Acea participates in the Sustainable Supply Chain Working Group, within the Global Compact Network Italia, focused on actions to support companies which maintain sustainable performance and encourage the adoption of best practices by suppliers, in terms of respect of human rights, labour rights, environmental responsibility and business ethics (see <i>Corporate Identity</i> , paragraph <i>Sharing the corporate responsibility matters</i>).
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Forced and Compulsory Labor

HR7 (Core)	Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures taken to contribute to the elimination of all forms of forced or compulsory labor. Acea, applies the National Collective Bargaining Contracts and other contracts provided by the regulation in force in relations with its employees and partners. With regard to the lack of incidents of forced labour in the supply chain, the company binds any potential supplier to respect the Code of Ethics of the Group, that prevents its employees from all forms of violation (see chapters <i>Personnel</i> and <i>Suppliers</i> within <i>Socio-economic relationships with the stakeholders</i>). Acea participates in the Sustainable Supply Chain Working Group, within the Global Compact Network Italia, focused on actions to support companies which maintain sustainable performance and encourage the adoption of best practices by suppliers, in terms of respect of human rights, labour rights, environmental responsibility and business ethics (see <i>Corporate Identity</i> , paragraph <i>Sharing the corporate responsibility matters</i>).
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Security Practices

HR8 (Additional)	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations. Security operations are assigned to an external company which provides security service. Behavioural rules of security personnel comply with existing regulations of the National security forces.
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Indigenous Rights

HR9 (Additional)	Total number of incidents of violations involving rights of indigenous people and actions taken. No incident of violation involving rights of indigenous people has been filed. For actions taken by Acea to benefit local communities, refer to initiatives to support more needy population groups, described in <i>Socio-economic relationships with the stakeholders</i> , chapter <i>Customers</i> and the <i>Community</i> and chapter <i>Activities abroad</i> .
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Assessment

HR10 (Core)	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments. The <i>Code of Ethics of the Group</i> , which points all business operations, explicitly imposes the respect of human rights. There has been no review of any specific activities.
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Remediation

HR11 (Core)	Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms. No grievances related to human rights have been filed. The adoption of the Code of Ethics of the Group guarantees the proper safeguard of human rights; business partners of the company are bound to rely upon said principles; in case of violation the exclusion from the procurement procedure is envisaged.
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SOCIETY

Local Communities

SO1 (Core)	Percentage of operations with implemented local community engagement, impact assessments, and development programs. <i>Corporate identity</i> pages 40-43; <i>Socio-economic relationships with the stakeholders</i> pages 51-56, 73, 82-89, 90 et seq., 95, 127
SO9 (Core)	Operations with significant potential or actual negative impacts on local communities. <i>Socio-economic relationships with the stakeholders</i> pages 57-73, 86-89; <i>Environmental issues</i> pages 137 et seq.
SO10 (Core)	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities. With regard to projects having a significant environmental impact, due to their nature, size or location, the competent authorities make an environmental impact assessment (EIA) before releasing the relevant authorisation. This assessment estimates short and long-term direct and indirect relevant effects, that the organisation's activity may have on the ecosystem (human beings, fauna and flora, soil, water and air, and interactions with the aforesaid, tangible property and cultural heritage). Furthermore, as for the realisation of power distribution grids and public lighting installations, Acea operates in compliance with existing provisions and related regulations on energy saving and reduction in stray light flux. <i>Socio-economic relationships with the stakeholders</i> page 126
EU19 (Core)	Stakeholder participation in the decision making process related to energy planning and infrastructure development. <i>Socio-economic relationships with the stakeholders</i> page 126
EU20 (Core)	Approach to managing the impacts of displacement. <i>Socio-economic relationships with the stakeholders</i> page 126
EU21 (Core)	Contingency planning measures, disaster/emergency management plan and training programs and recovery/restoration plans. <i>Socio-economic relationships with the stakeholders</i> pages 123 et seq.
EU22 (Core)	Number of people physically or economically displaced and compensation, broken down by type of project. No episodes related to this indicator have occurred.

Corruption

- S02 (Core)** **Percentage and total number of business units analyzed for risks related to corruption.**
With respect to risks related to corruption, Supervisory Boards of Acea SpA and its subsidiaries continually carry out monitoring activities on operations at risk of offence pursuant to provisions of ex Legislative Decree 231/01.
Corporate identity page 39
- S03 (Core)** **Percentage of employees trained in organization's anti-corruption policies and procedures.**
Socio-economic relationships with the stakeholders page 114
- S04 (Core)** **Actions taken in response to incidents of corruption.**
No incidents of corruption have been filed.

Public Policy (approach towards politics and institutions)

- S05 (Core)** **Public policy positions and participation in public policy development and lobbying.**
Socio-economic relationships with the stakeholders pages 123-126
- S06 (Additional)** **Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country..**
Socio-economic relationships with the stakeholders page 123

Anti-Competitive Behavior

- S07 (Additional)** **Total number of legal actions for anticompetitive behavior, anti-trust, and monopoly practices and their outcomes.**
Socio-economic relationships with the stakeholders page 128

Compliance

- S08 (Core)** **Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.**
Socio-economic relationships with the stakeholders page 128; *Environmental issues* page 137

PRODUCT RESPONSIBILITY

Customer Health and Safety

- PR1 (Core)** **Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.**
Corporate identity pages 40-43; *Socio-economic relationships with the stakeholders* pages 71, 95, 97, 127 et seq.
- EU25 (Core)** **Number of injuries and fatalities to the public involving company assets, including legal judgments, settlements and pending legal cases of diseases.**
No episodes related to this indicator have been filed in 2013. Information about two pending legal cases of fatalities linked to public lighting, occurred in the past years, will be disclosed as soon as proceedings come to an end.
- PR2 (Additional)** **Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services, by type of outcomes.**
No incidents of non-compliance have been filed.

Product and Service Labeling

- PR3 (Core)** **Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.**
Socio-economic relationships with the stakeholders pages 59-64
- PR4 (Additional)** **Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.**
Socio-economic relationships with the stakeholders pages 59-64, 66
- PR5 (Additional)** **Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.**
Corporate identity page 54; *Socio-economic relationships with the stakeholders* pages 44 et seq., 51-56

Marketing communication

- PR6 (Core)** **Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.**
The *Code of Ethics of the Group*, subject to review every time it is deemed necessary, sets adherence to principles of equality, neutrality and transparency in interactions with customers, particularly in case of marketing communication, advertising and drafting of contracts (art. 8, 14 CE). Management of sponsorship is regulated by a specific group rule, which sets criteria and responsibilities for selection and management of sponsorship in order to ensure conformity to the principles provided by the *Code of Ethics* and to prevent the risk of offence ex Legislative Decree 231/11.
Socio-economic relationships with the stakeholders page 77
- PR7 (Additional)** **Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes.**
Socio-economic relationships with the stakeholders page 128

Customer Privacy

- PR8 (Additional)** **Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.**
No substantiated complaints regarding breach of customer privacy have been filed.

Compliance

- PR9 (Core)** **Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.**
Socio-economic relationships with the stakeholders page 128; *Environmental issues* page 137

Access

- EU23 (Core)** Programs, including those in partnership with government, to improve or maintain access to electricity and customer support services.
Socio-economic relationships with the stakeholders page 74
- EU26 (Core)** Percentage of population unserved in licensed distribution or service areas.
The whole territory is entirely covered by the distribution grid.
- EU27 (Core)** Number of residential disconnections for non-payment, broken down by duration of disconnection and by regulatory regime.
Only data on reactivation following disconnection for non-payment are available, as provided by the Italian Regulatory Authority for Electricity Gas and Water.
Socio-economic relationships with the stakeholders pages 60 et seq.
- EU28 (Core)** Power outage frequency.
Socio-economic relationships with the stakeholders page 64
- EU29 (Core)** Average power outage duration.
Socio-economic relationships with the stakeholders pages 64, 66 et seq.
- EU30 (Core)** Average plant availability factor by energy source and by regulatory regime.
Environmental issues page 146

Provision of Information

- EU24 (Core)** Practices to address language, cultural, low literacy and disability related barriers to accessing and safely using electricity and customer support services.
There are no specific company programs concerning these issues.

GRI ENVIRONMENTAL PERFORMANCE INDICATORS (CORE E ADDITIONAL) AND SECTOR SUPPLEMENT INDICATORS (EU)

Materials

- EN1 (Core)** Materials used by weight or volume.
With regard to PCBs, in accordance with the Legislative Decree n. 209/99 and Law n. 62/05, Acea had already provided, before 31.12.2009, the disposal of transformers whose level of PCBs exceeded 500 ppm.
The number of transformers with a level of PCBs exceeding 50ppm but lower than 500 ppm were 207 in 2013 (versus 332 of the previous year).
Environmental Report pages 189 et seq.
- EN2 (Core)** Percentage of materials used that are recycle input materials.
The core indicator only partially pertains to Acea's business sectors, since it deals mainly with sales of energy, water distribution and waste treatment. The Group launched a policy of "green purchases", concerning in particular calls for tenders for the assignment of works, but also procurements for the purchase of goods and services; subjects interested in participating in the assignment shall be certified to UNI EN ISO 9001 and, for certain categories of goods, also to UNI EN ISO 14001.
Socio-economic relationships with the stakeholders, Suppliers, page 91

Energy

- EN3 (Core)** Direct energy consumption by primary energy source.
Environmental issues page 159
- EN4 (Core)** Indirect energy consumption by primary source.
Environmental issues pages 159 et seq.
- EN5 (Additional)** Energy saved due to conservation and efficiency improvements.
Environmental issues pages 146 et seq.
- EN6 (Additional)** Initiatives to provide energy-efficient or renewable energy-based products and services, and reductions in energy requirements as a result of these initiatives.
Socio-economic relationships with the stakeholders page 74; *Environmental issues* pages 141, 148
- EN7 (Additional)** Initiatives to reduce indirect energy consumption and reductions achieved.
Environmental issues page 149

Water

- EN8 (Core)** Total water withdrawal by source.
Environmental issues page 160
- EN9 (Additional)** Water sources significantly affected by withdrawal of water.
Environmental issues page 154
- EN10 (Additional)** Percentage and total volume of water recycled and reused.
Environmental issues page 160

Biodiversity

- EN11 (Core)** Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.
Environmental issues pages 135 et seq., 154
- EN12 (Core)** Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.
Environmental issues pages 135 et seq.
- EN13 (Additional)** Biodiversity of offset habitats compared to the biodiversity of the affected areas.
Environmental issues pages 135 et seq.
- EN13 (Additional)** Area of habitats protected or restored.
Environmental issues pages 135 et seq.
- EN14 (Additional)** Strategies, current actions, and future plans for managing impacts on biodiversity.
Environmental issues pages 135 et seq.

EN15 Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk (*).
(Additional) At present this aspect is not monitored, since in the areas affected by the Group's operations there are no species included in the IUCN Red List. However, the Group operates in compliance with criteria of respect and safeguard of natural habitats and flora and fauna of the areas affected by its operations.

Emissions, effluents, and waste

EN16 (Core) Total direct and indirect greenhouse gas emissions by weight (according to the WRI – Greenhouse gas Protocol).
Environmental issues pages 164 et seq.; *Environmental Report* pages 192, 194

EN17 (Core) Other relevant indirect greenhouse gas emissions by weight.
 No relevant emissions to point out.

EN18 Initiatives to reduce greenhouse gas emissions and reductions achieved.
(Additional) *Environmental issues* pages 147 et seq.

EN19 (Core) Emissions of ozone-depleting substances by weight.
Environmental issues page 165

EN20 (Core) NO_x, SO_x and other significant air emissions by type and weight.
Environmental issues page 165; *Environmental Report* pages 192, 194

EN21 (Core) Total water discharge by quality and destination.
 Water utilised by Acea for "domestic/sanitary" use (around 1.4 Mm³ in 2013) undergoes the same standard purification treatment of all urban wastewater. Environmental impact of purified wastewater discharged affecting the receptor water body is moderate.

EN22 (Core) Total weight of waste by type and disposal method.
Environmental issues page 165; more details can be found in the *Environmental Report*

EN23 (Core) Total number and volume of significant spills.
 In 2013 no significant spills of substances deemed hazardous, like mineral oil, fuels or chemicals, have been filed.

EN24 Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.
(Additional) The Group ships to recovery facilities in Germany 3,594 tons of waste deemed hazardous, CER 190111– a minimum part of bottom ash produced by the San Vittore del Lazio (FR) plant.

EN25 Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.
(Additional) No discharges of water significantly affecting habitats and biodiversity have been filed.

Products and services

EN26 (Core) Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.
 Initiatives focus on reduction in emissions due to thermal power and waste-to-energy generation and on energy generation from renewable sources. Environmental impacts are rather attributable to services provided, such as: generation and distribution of electricity; cogeneration; management of the integrated water service; waste management, including waste-to-energy; environmental behaviours of contractors and sub-contractors. The Group is committed to the impact mitigation with regard to any situation.
Environmental issues pages 141, 162

EN27 (Core) Percentage of products sold and their packaging materials that are reclaimed by category.
 Not applicable.

Compliance

EN28 (Core) Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.
Environmental issues pages 128, 137

Transport

EN29 Significant environmental impacts of transporting products and other goods and materials used.
(Additional) *Environmental issues* pages 159 et seq.

General

EN30 Total environmental protection expenditures and investments by type.
(Additional) *Environmental issues* page 139

(*) The IUCN (International Union for the Conservation of Nature) list, to which the EN15 indicator refers, concerns endangered species (www.iucn.org)

INDEX OF CHARTS AND TABLES

CHARTS

n. 1 – The structure of 2013 Sustainability Report	8
n. 2 – Acea group core activities	17
n. 3 – Ownership structure as of 31.12.2013	18
n. 4 – The operational structure as of 31.12.2013	20
n. 5 – Industrial areas contribution to overall ebitda (2012–2013)	23
n. 6 – Acea spa organisational chart as of 31.12.2013	35
n. 7 – Internal rule system	41
n. 8 – Acea and its stakeholders	44
n. 9 – Acea value system towards its stakeholders	45
n. 10 – Overall opinions on the services supplied (2011–2013)	52
n. 11 – Electricity service – Protected market sales: satisfied customers percentage CSI and satisfaction degree CSI and satisfaction degree CSI – Overall and on macro-components (1st and 2nd half of 2013)	53
n. 12 – Electricity service – free market sales satisfied customers percentage CSI and satisfaction degree CSI – Overall and on macro-components (1 st and 2 nd half of 2013)	53
n. 13 – Electricity service – grid: satisfied customers percentage CSI and satisfaction degree CSI – overall and on macro-components (1st and 2nd half of 2013)	54
n. 14 – Water service: satisfied customers percentage CSI and satisfaction degree CSI – overall and on macro-components (1st and 2nd half of 2013)	55
n. 15 – Public lighting service: satisfied customers percentage CSI and satisfaction degree CSI – overall and on macro-components (1st and 2nd half of 2013)	56
n. 16 – Trend in acea's performance in repairing public lighting faults (2009–2013)	67
n. 17 – Types of public lighting fault out of total reports received (2013)	67
n. 18 – Type of measures carried out on the sewage networks in ato 2 – Lazio centrale (Rome and municipalities managed) (2013)	72
n. 19 – Electricity price trend for a typical household consumer (cent €/kwh) (2012–2013)	74
n. 20 – Total telephone traffic of acea toll-free numbers (2012–2013)	79
n. 21 – Percentage-related distribution of telephone traffic received by Acea toll-free numbers (2013)	79
n. 22 – Acea website: main indicators (monthly averages 2011–2013)	83
n. 23 – Value of tenders and incidence of the different entries on the total amount (2011–2013)	92
n. 24 – Division of supply expenses into macroareas (goods, services, works) (2011–2013)	93
n. 25 – Geographical distribution of amounts used for the supply of goods and services Italy and abroad (2011–2013)	94
n. 26 – Geographical distribution of the amounts of works awarded in Italy (2011–2013)	94
n. 27 – Distribution of injuries according to industrial areas (2012–2013)	108
n. 28 – Accidents and frequency, severity indices (2011–2013)	109
n. 29 – Training hour distribution per qualification (2011–2013)	116
n. 30 – Aggregate number of sri funds in europe (2009–2013)	121
n. 31 – Total number of assets under management for sri funds in Europe and Italy (2009–2013)	121
n. 32 – Assets under management for SRI funds per country (2013)	122
n. 33 – Distribution of investments by macroareas (2012–2013)	127
n. 34 – Electricity supply chain	140
n. 35 – Energy saving objectives assigned to Acea Distribuzione and ECCs produced (2010–2013)	148
n. 36 – Water companies: comparison of the consolidated energy consumption (2012–2013)	149

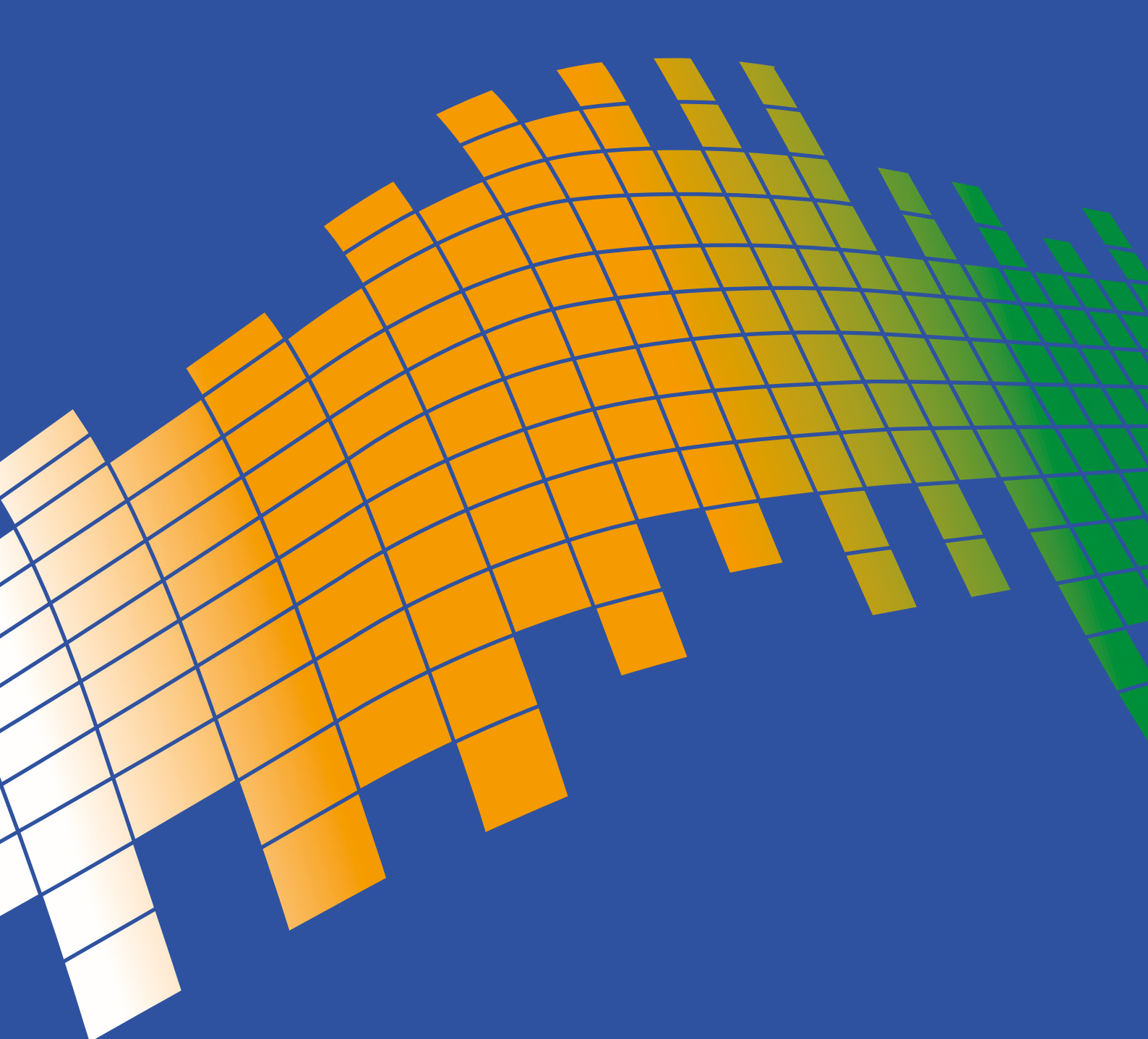
n. 37 – Volume of drinking water introduced in the grid by company (2013)	153
n. 38 – The group's water distribution grid in Italy (2013)	153
n. 39 – Analytical checks on drinking water, total and by company (2013)	155
n. 40 – Analytical checks on wastewater, total and by company (2013)	155
n. 41 – Sewerages, total and by company (2013)	157
n. 42 – Purification plants, by total and by company (2013)	157
n. 43 – Volume of treated wastewater, by total and by company (2013)	158
n. 44 – Water leakages, parameter a15 (Ministerial Decree 99/97)	161
n. 45 – Acea Group's waste production (2012–2013)	165

TABLES

n. 1 – Materiality: mapping of relevance	7
n. 2 – The application levels of GRI–G3.1 guidelines	7
n. 3 – Global compact– GRI connections	10
n. 4 – Acea Group in figures (2013)	18
n. 5 – Consolidation area as of 31.12.2013	19
n. 6 – Main economic and equity data of Acea Group (2012–2013)	22
n. 7 – Equity data and net financial position of Acea Group (2012–2013)	23
n. 8 – Profitability main indicators (2011–2013)	24
n. 9 – Acea tools for sustainable development and social responsibility	26
n. 10 – Economic value directly generated and distributed (2012–2013)	46
n. 11 – Distribution of added value by stakeholder (2012–2013)	46
n. 12 – Electricity and gas sales: Acea Group customers by market type (2011–2013)	50
n. 13 – Customers and inhabitants served in Italy by the main Acea Group water companies (2012–2013)	51
n. 14 – Overall opinion on the electricity service (2012–2013)	52
n. 15 – Overall opinion on the water supply service in Rome (2012–2013)	54
n. 16 – Overall opinion on the public lighting service in Rome (2012–2013)	56
n. 17 – “Specific” levels of commercial quality and performance achieved by Acea Distribuzione	60
n. 18 – Automatic compensation for customers in the event of failed observance of the “specific” quality levels (2013)	61
n. 19 – “Specific” levels of commercial quality : promptness of the distributor in communicating technical data to the seller (2012–2013)	61
n. 20 – “Specific” levels of commercial quality and performance achieved by Acea Energia – protected market (2012–2013)	62
n. 21 – “Specific” levels of commercial quality and performance achieved by Acea Energia – free market (2012–2013)	62
n. 22 – “General” levels of commercial quality and performance achieved by Acea Distribuzione (2012–2013)	62
n. 23 – “General” levels of commercial quality and performance achieved by Acea Energia – protected market (2012–2013)	63
n. 24 – “General” levels of commercial quality and performance achieved by 24 Acea Energia – free market (– 2012–2013)	63
n. 25 – Electricity service continuity indicators for Iv customers: blackout duration and improvement percentages (2011–2013)	64
n. 26 – Electricity service continuity indicators for Iv customers: average number of blackouts and improvement percentages(2011–2013)	64
n. 27 – Public lighting in Rome: figures (2013)	65
n. 28 – Main public lighting measures on lighting sources (2013)	66
n. 29 – Scheduled and extraordinary public lighting repairs and maintenance (2013)	66
n. 30 – Faulty repair public lighting: fines, standards and Acea services (2012–2013)	66
n. 31 – The main artistic monumental lighting measures (2013)	68

n. 32 – Main measures on the aqueduct system and drinking water checks in ATO 2 – Lazio centrale (2013)	71	n. 74 – The main protected sources in ATO 2 – Lazio Centrale	154
n. 33 – Number, type and duration of water supply stoppages in ATO 2 (2011–2013)	71	n. 75 – Analytical checks on drinking water, total and by company (2011–2013)	154
n. 34 – Main measures on the purification and sewerage system and wastewater checks in ATO 2 – Lazio centrale (2013)	73	n. 76 – Analytical checks on wastewater, total and by company (2011–2013)	155
n. 35 – Average water tariffs applied by the Acea Group companies (2013)	75	n. 77 – Analytical determinations carried out by laboratori – ATO 2 – Lazio Centrale (2011–2013)	155
n. 36 – Main performance indicators of the Acea toll-free numbers (2012–2013)	80	n. 78 – Analytical determinations carried out by laboratori on drinking water – historic grid of Rome (2011–2013)	156
n. 37 – Help desk performance at headquarters (2011–2013)	81	n. 79 – Average chemical and microbiological characteristics of the drinking water distributed in Rome and parameters of the legislative decree 31/01 (2013)	156
n. 38 – Evolution of the Group's employees in accordance with macroareas (2011–2013)	99	n. 80 – Percent coverage of sewerage and purification services with respect to the total number of customers of acea group's main water companies (2012–2013)	157
n. 39 – Geographical location of employees (2012–2013)	99	n. 81 – Parameters of water leaving the main wastewater treatment plants managed by Acea Ato 2 SpA – Comune di Roma (2013)	158
n. 40 – Acea employees: composition of the personnel (2011–2013)	100	n. 82 – Acea Group's direct energy consumption (2011–2013)	159
n. 41 – Acea employees: entering and leaving personnel (2011–2013)	100	n. 83 – Consumption of Acea's car fleet (2011–2013)	159
n. 42 – Acea employees: duration of the employment relationship (2013)	101	n. 84 – Acea Group's indirect energy consumption (2011–2013)	160
n. 43 – Companies of the energy chain: duration of the employment relationship (2013)	101	n. 85 – Acea Group's water consumption (2011–2013)	160
n. 44 – Acea employees: contract type (2011–2013)	101	n. 86 – Emissions in the atmosphere produced by the waste-to-energy plants of San Vittore del Lazio (2011–2013) and Terni (2013)	162
n. 45 – Turnover rates, entries and exits (2011–2013)	101	n. 87 – Acea Group's carbon dioxide emissions (2013)	164
n. 46 – Acea employees: average age of the personnel (2011–2013)	102	n. 88 – CO ₂ emission quotas provided for by the National Allocation Plan (NAP) and actual emissions by plant (2011–2013)	164
n. 47 – Acea employees: average length of service of the personnel (2011–2013)	102	n. 89 – Total emissions of pollutants in the atmosphere produced by Acea Group's plants (2011–2013)	165
n. 48 – Acea employees: age groups (2013)	102	n. 90 – Emissions of pollutants in the atmosphere produced by Acea's car fleet (2011–2013)	165
n. 49 – Acea employees: level of schooling (2011–2013)	102	n. 91 – Acea Group's total amount of waste (2012–2013)	165
n. 50 – Women in Acea (2011–2013)	106	n. 92 – Main research activities undertaken by Laboratorio and Acea Ato 2	167
n. 51 – Acea employees: worked hours (2011–2013)	107		
n. 52 – Acea employees: days of absence (2011–2013)	107		
n. 53 – Per-capita average gross wages by qualification (2012–2013)	111		
n. 54 – Acea Pegaso employees: gender and age group (2013)	112		
n. 55 – Acea Pegaso employees: position (2013)	112		
n. 56 – Return of the shares' value of the pegaso branches and the TFR (on 31.12.2013)	112		
n. 57 – Traditional and experience training courses and fees (2012–2013)	115		
n. 58 – Courses and fees for training supplied through the Pianetacea e-learning platform (2012–2013)	116		
n. 59 – Members benefiting from CRA services (2011–2013)	118		
n. 60 – Share index and Acea shares' performance (2013)	120		
n. 61 – 2013 Rating	120		
n. 62 – SF ₆ gas in Acea Distribuzione's plants (2012–2013)	138		
n. 63 – Dielectric oil in Acea Distribuzione's plants (2012–2013)	138		
n. 64 – Environmental expenditures of the main operating companies (2011–2013)	139		
n. 65 – Produced electricity, divided by primary energy source (2011–2013)	141		
n. 66 – Potential electricity, divided by primary energy source (2011–2013)	142		
n. 67 – Average efficiency of electricity producing plants (2011–2013)	142		
n. 68 – Acea Produzione's power plants	143		
n. 69 – Installed electrical power of the Group divided by energy source (2011–2013)	145		
n. 70 – Availability indices of Acea Produzione's plants (2011–2013)	146		
n. 71 – The consistency of plants and overhead and underground distribution lines (2011–2013)	147		
n. 72 – The San Vittore del Lazio waste-to-energy plant: operating data (2011–2013)	151		
n. 73 – The Terni waste-to-energy plant: operating data (2013)	151		





2013

**ENVIRONMENTAL
REPORT**

Product systems

The products

The resources used

Emissions and waste

Key environmental performance indicators (KPI)

Explanatory notes

ENVIRONMENTAL REPORT

BOUNDARIES

The 2013 boundaries include Acea SpA, Acea Distribuzione, Acea Reti e Servizi Energetici, Acea Produzione, Acea Energia, Local Unit 3 of San Vittore del Lazio and Local Unit 1 of Terni, both of A.R.I.A, the company SAO, controlled by A.R.I.A, Acquaser, Laboratori, Acea Ato 2, Acea Ato 5, Acque, Gori, Acquedotto del Fiora, Publiacqua and Umbra Acque.

Since 2011 the electricity generation plants, using traditional and renewable sources, have been wholly-owned by Acea SpA, via the companies Acea Produzione, Acea Reti e Servizi Energetici and A.R.I.A.

With regard to the **water sector**, besides the information relating to the “historic” company Acea Ato 2, the account items relating to the other companies indicated above are also provided, as highlighted in the tables, as and when appropriate.




Note that the water figures are considered **globally**, irrespective of the holding of the parent company, because Acea represents the **industrial entity responsible for the management activities** within each of the companies considered.

The Environmental Report, an integral part of the Sustainability Report, bring together and systematically present the information and data on Acea Group’s environmental performance in an in-depth manner.

Figures are separated into “product systems” for the energy, environment and water sectors according to the Life Cycle Assessment approach¹ (ISO standard 14040 series), which assesses the entire life cycle of the systems.

Additional information is provided in the *Explanatory Notes* concerning the quality of the figures presented herein, especially when such are measured, estimated or calculated, and the items of the Environmental Report (indicated in the tables and in the text by a number in brackets) are accompanied by a brief illustrative description.

PRODUCT SYSTEMS

 <h3 style="text-align: center; margin-top: 10px;">ENERGY</h3> <ul style="list-style-type: none"> • Energy generation (thermoelectric + hydroelectric + photovoltaic + waste to energy) • Electricity distribution • Heat production and distribution • Public lighting • Tests and Inspections 	 <h3 style="text-align: center; margin-top: 10px;">ENVIRONMENT</h3> <ul style="list-style-type: none"> • Disposed MSW (Municipal Solid Waste) • Compost production • Analysis and measurements 	 <h3 style="text-align: center; margin-top: 10px;">WATER</h3> <ul style="list-style-type: none"> • Drinking water supply • Non-drinking water supply • Water distribution • Waste water transportation/ treatment • Analysis and measurements
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The figures are provided for the three-year period 2011-2013 and are grouped together in three similar categories:

- **the product supplied;**
- **the resources used;**
- **the waste produced.**

The performance indicators and the key environmental performance indicators are illustrated for each sector below.

1. LCA is a method used to analyze a series of interactions that a product or service has with the environment, considering its entire life cycle, which includes pre-production (therefore material extraction and production), production, distribution, use (therefore reuse and maintenance), recycling and final disposal.

THE PRODUCTS - ENERGY

Electricity generation figures refer to Acea Produzione (AP) (100% Acea SpA), A.R.I.A. (100% Acea SpA) and Acea Reti e Servizi Energetici (100% Acea SpA).

ELECTRICITY – GENERATION	unit of measurement	2011	2012	2013	Δ% 2013/2012
Summarized figures					
Total gross electricity produced (1) = (3+11+16)	GWh	544.35	651.77	785.69	20.5
Total net electricity produced (2) = (10+15+18)	GWh	504.19	604.60	734.98	21.6
From fossil sources (thermoelectric) (5+0,52x12 _{San Vittore} +0,61x13 _{Terni})	GWh	95.66 17.6% di (1)	119.23 18.3% di (1)	152.00 19.3% di (1)	27.5
From renewable sources (hydroelectric, solar, biodegradable fraction of waste) (4+0,48x12 _{San Vittore} +0,39x13 _{Terni} +16)	GWh	448.69 82.4% di (1)	532.54 81.7% di (1)	633.69 80.7% di (1)	19.0
Acea Produzione (100% Acea)					
Total gross electricity produced (3) = (4+5)	GWh	343.36	373.10	508.28	36.2
Total gross hydroelectric energy (4)	GWh	320.92	360.80	496.73	37.7
A. Volta Castel Madama	GWh	23.48	15.55	30.38	95.4
G. Ferraris Mandela	GWh	15.31	10.26	23.05	124.7
G. Marconi Orte	GWh	67.24	48.07	80.91	68.3
Sant'Angelo	GWh	153.72	108.77	179.15	64.7
Salisano	GWh	58.24	175.94	180.95	2.8
Other minor plants	GWh	2.93	2.21	2.29	3.6
Total gross thermoelectric energy (5)	GWh	22.44	12.30	11.55	-6.1
From gas oil					
Montemartini Plant (*)	GWh	4.68	1.94	1.28	-34.0
From natural gas	GWh	17.76	10.35	10.27	-0.8
Tor di Valle combined cycle	GWh	9.71	1.09	0.00	-100.0
Tor di Valle co-generation plant	GWh	8.05	9.26	10.27	10.9
Total electricity losses (6) = (7+8+9)	GWh	16.34	13.29	14.22	7.0
Internal consumption - hydroelectric plants (7)	GWh	2.17	2.49	2.54	2.0
Internal consumption - heat plants (Tor di Valle, Montemartini) (8)	GWh	7.51	6.04	5.45	-9.8
Initial transformation losses (9)	GWh	6.66	4.76	6.22	30.7
Total net electricity produced by Acea Produzione (10) = (3-6)	GWh	327.01	359.80	494.06	37.3
A.R.I.A. (waste to energy) (100% Acea)					
Total gross energy produced (11) = (12)+(13)	GWh	149.43	218.24	260.09	19.2
San Vittore del Lazio plant (12)	GWh	149.43	218.24	202.23	-7.3
Terni plant (13) (**)	GWh	n.a.	n.a.	57.86	-
Total electricity losses (14)	GWh	21.34	29.59	35.98	21.6
San Vittore del Lazio internal consumption	GWh	21.34	29.59	28.94	-2.2
Terni internal consumption	GWh	n.a.	n.a.	7.04	-
Total net electricity produced (15) = (11-14)	GWh	128.09	188.65	224.11	18.8
Acea Reti e Servizi Energetici (100% Acea)					
Gross photovoltaic energy (16)	GWh	51.56	60.43	17.33	-71.3
Total electricity losses (17)	GWh	2.46	4.29	0.52	-87.9
Net photovoltaic energy (18) = (16-17)	GWh	49.10	56.14	16.81	-70.1

(*) The Montemartini plant remains operational but only as a standby.

(**) As from August 9th 2010, until the end of 2012, the Terni plant was shutdown for revamping work.

THERMAL ENERGY – GENERATION	unit of measurement	2011	2012	2013	Δ% 2013/2012
Acea Produzione (100% Acea)					
Gross thermal energy produced Tor di Valle plant (19)	GWh_t	84.64	87.96	99.33	12.9
Total thermal electricity losses (20)	GWh _t	16.40	11.62	22.76	96.2
<i>distribution losses</i>	GWh _t	13.90	9.35	19.69	110.6
<i>production losses</i>	GWh _t	2.50	2.27	3.07	35.2
Net thermal energy sold (21) = (19-20)	GWh_t	68.24	76.34	76.57	0.3

ELECTRICITY – TRANSPORT AND SALE	unit of measurement	2011	2012	2013	Δ% 2013/2012
to Rome and Formello - Summarized figures					
Supply from Acea Group (22)	GWh	2.93	2.18	1.96	-10.1
Electricity from the market (23)	GWh	11,869.00	11,861.09	11,383.35	-4.0
<i>from Sole Buyer</i>	GWh	3,493.75	3,327.25	3,107.76	-6.6
<i>from imports</i>	GWh	432.38	433.56	431.50	-0.5
<i>from third party producers interconnected to the Acea Distribuzione network (*)</i>	GWh	20.14	0.00	0.00	-
<i>from wholesalers + other producers</i>	GWh	7,922.74	8,100.28	7,844.09	-3.2
Electricity demand on the network (24) = (22+23) = (25+26+27+28+29)	GWh	11,871.93	11,863.27	11,385.31	-4.0
Distribution, transport and commercial losses (25)	GWh	733.10 6.18% of (24)	757.12 6.38% of (24)	701.72 6.16% of (24)	-7.3
Internal transmission and distribution (26)	GWh	27.90	30.61	30.43	-0.6
Net electricity sold to third parties (27)	GWh	2.86	2.54	2.15	-15.4
Net electricity conveyed by Acea to free market customers (28)	GWh	7,461.57	7,636.13	7,416.84	-2.9
<i>Net electricity sold by Acea Elettricità to free market customers on Acea Distribuzione network</i>	GWh	3,974.33	4,627.90	4,982.27	7.7
<i>Net electricity sold by Other Sellers to free market customers on Acea Distribuzione network</i>	GWh	3,487.24	3,008.23	2,434.57	-19.1
electricity sold to protected customers (29)	GWh	3,646.50	3,436.87	3,234.19	-5.9
Sale in Italy - Summarized figures					
Net electricity sold by Acea on the free market - including sale on Rome (30)	GWh	12,891	9,960	9,381.9	-5.8
<i>Acea Elettricità</i>	GWh	10,139	9,050	8,600.6	-5.0
<i>Other investee companies</i>	GWh	2,752	910	781.3	-14.1
Net electricity sold by Acea in Italy (free market + protected customers) (29+30)	GWh	16,537	13,397	12,616	-6.2

(*) In 2012 a thermoelectric production plant located at Malagrotta was temporarily suspended. In 2011 it produced 20.14 GWh.

PUBLIC LIGHTING	unit of measurement	2011	2012	2013	Δ% 2013/2012
Lighting flux in Rome (31)	Mlumen	3,057	3,148	3,275	3.9

MONITORING AND GAUGING	u. m.	2011	2012	2013	Δ% 2013/2012
Monitoring and gauging activities (32)	No.	339	488	392	-19.7
<i>Electromagnetic field measures</i>	No.	7	42	40	-4.8
<i>Noise monitoring</i>	No.	3	39	12	-69.2
<i>Chemical analysis of PCB</i>	No.	103	151	55	-63.6
<i>Waste classification</i>	No.	13	16	45	181.3
<i>Transformer diagnostics</i>	No.	196	213	190	-10.8
<i>Other</i>	No.	17	27	50	85.2

THE PRODUCTS - ENVIRONMENT

Data refer to the companies Kyklos and Solemme, both in Aquaser Srl (100% Acea SpA) and to the company SAO srl, controlled by A.R.I.A. (100% Acea SpA).

NON-HAZARDOUS WASTE, DISPOSED OF AND RECOVERED - SAO	unit of measurement	2011	2012	2013	Δ% 2013/2012
Incoming waste to plant (33)	t	135,052	143,384	120,059	-16.3
Landfilled waste (34)	t	110,473	122,770	99,953	-18.6
Recovered waste (35)	t	1,277	488	260	-46.7
Compost (36)	t	281	658	439	-33.3
Reduction for stabilisation (37) = (33-34-35-36)	t	23,021	19,468	19,407	-0.3

PRODUCTION OF COMPOST	unit of measurement	2011	2012	2013	Δ% 2013/2012
Total incoming organic waste = (38+39+40)	t	59,351.80	59,510.75	63,271.43	6.3
Incoming sludges (38)	t	14,369.46	16,249.88	15,491.54	-4.7
Kyklos	t	11,817.80	12,151.68	10,322.30	-15.1
Solemme	t	2,551.66	4,098.20	5,169.24	26.1
Incoming Green (39)	t	7,696.28	6,236.96	6,923.14	11.0
Kyklos	t	5,468.26	4,522.86	3,416.40	-24.5
Solemme	t	2,228.02	1,714.10	3,506.74	104.6
Incoming organic fraction from waste collection system (40)	t	37,286.06	37,023.91	40,856.75	10.4
Kyklos	t	37,286.06	37,023.91	40,856.75	10.4
High Quality compost produced (41)	t	19,473.92	11,652.66	18,389.10	57.8
Kyklos	t	16,438.22	9,295.66	14,370.00	54.6
Solemme	t	3,035.70	2,357.00	4,019.10	70.5
Non-compostable material to disposal (42)	t	3,422.92	3,784.88	4,671.95	23.4
Kyklos	t	3,422.92	3,784.88	4,671.95	23.4
Solemme	t	0.00	0.00	0.00	-
Reduction for stabilisation = (38+39+40-41-42)	t	36,454.96	44,073.21	40,210.38	-8.8

ANALYTICAL CONTROLS ON WASTE AND ON HIGH QUALITY COMPOST	unit of measurement	2011	2012	2013	Δ% 2013/2012
Total analytical controls (43)	No.	95	100	110	10.0
Analytical controls on compost - SAO	No.	8	8	10	25.0
Analytical controls on compost - Solemme and Kyklos	No.	37	42	50	19.0
Analytical controls on waste - SAO	No.	50	50	50	0.0

THE PRODUCTS - WATER

Summarized water figures include the main water companies in the Acea Group - Acea Ato 2, Acea Ato 5, Gori, Acque, Publiacqua, Acquedotto del Fiora and Umbra Acque, calculated at 100%. This in consideration of the role of industrial entity responsible for management, covered by Acea in the shareholding structures of the service providers.

GROUP WATER BALANCE IN ITALY	unit of measurement	2011	2012	2013	Δ% 2013/2012
Summarized figures					
Total drinking water withdrawn from the environment or from other systems (44)	Mm ³	1,401.5	1,399.1	1,421.2	1.6
Total drinking water introduced onto the network (45)	Mm ³	1,254.6	1,263.0	1,271.3	0.7
Total drinking water supplied (46)	Mm ³	668.7	655.7	645.7	-1.5

WATER BALANCE OF THE COMPANIES OPERATING IN THE REGIONS OF LAZIO AND CAMPANIA

Acea Ato 2 for Rome historic network

	unit of measurement	2011	2012	2013	Δ% 2013/2012
Drinking water withdrawn from the environment (47)	Mm ³	612.8	609.8	618.5	1.4
<i>from Lake Bracciano, treated</i>	Mm ³	13.9	21.9	7.3	-66.7
<i>from wells</i>	Mm ³	16.2	27.2	16.9	-37.9
<i>from springs</i>	Mm ³	582.6	560.7	594.3	6.0
Drinking water sold to municipal retailers (48)	Mm ³	89.8	92.4	96.1	4.0
Drinking water introduced onto non-drinking water network (49)	Mm ³	14.8	16.1	15.9	-1.2
Drinking water returned to the environment /technical operating volumes (50)	Mm ³	37.4	28.5	33.4	17.2
Drinking water introduced onto the Rome historic network (51) = (47)-(48+49+50)	Mm ³	470.8	472.7	473.1	0.1
Drinking water supplied via the Rome historic network (52)	Mm ³	300.3	298.0	295.0	-1.0

Assessment of losses according to Italian Ministerial Decree No. 99/97

Overall losses (parameter A17 MD 99/97) (53)	Mm ³	155.1	159.3	162.8	2.2
Effective losses (parameter A15 MD 99/97) (54)	Mm ³	117.5 (25.0% of 51)	122.1 (25.8% of 51)	125.9 (26.6% of 51)	3.1

Water balance - Rome non-drinking water network

Non-drinking water withdrawn from the environment (55)	Mm ³	23.7	29.7	25.6	-13.8
<i>from the River Tiber, treated (Grottarossa plant)</i>	Mm ³	0.0	4.7	2.2	-53.2
<i>from springs</i>	Mm ³	8.9	8.9	7.5	-15.7
<i>drinking water introduced onto non-drinking network</i>	Mm ³	14.8	16.1	15.9	-1.2
Non-drinking water supplied to the Municipality of Rome (56)	Mm ³	13.8	14.1	14.3	1.4
Non-drinking water supplied to other Municipalities (57)	Mm ³	0.03	0.03	0.03	0.0

Acea Ato 2 for ATO 2 – Central Lazio (Rome + 73 municipalities acquired as of 31 Dec. 2012)

Drinking water withdrawn from the environment (58)	Mm ³	718.1	715.4	728.5	1.8
<i>from Lake Bracciano, treated</i>	Mm ³	13.9	21.9	7.3	-66.7
<i>from wells</i>	Mm ³	76.9	89.6	76.2	-15.0
<i>from springs</i>	Mm ³	625.6	602.3	642.4	6.7
<i>from other aqueduct systems</i>	Mm ³	1.6	1.6	2.6	62.5
Drinking water sold to municipal retailers (59)	Mm ³	64.5	68.2	74.5	4.1
Drinking water introduced onto non-drinking water network (60)	Mm ³	14.8	16.1	15.9	-1.2
Drinking water returned to the environment /technical operating volumes (61)	Mm ³	40.1	28.50	33.4	17.2
Drinking water introduced onto the ATO 2 network (62) = (58)-(59+60+61)	Mm ³	598.7	602.5	604.6	0.3
Total drinking water supplied to the ATO 2 network (63)	Mm ³	359.6	349.7	346.4	-0.9

Assessment of losses according to Italian Ministerial Decree No. 99/97

Overall losses (parameter A17 MD 99/97) (64)	Mm ³	216.6	230.5	235.9	2.3
Effective losses (parameter A15 MD 99/97) (65)	Mm ³	161.2 (26.9% of 62)	177.6 (29.5% of 62)	183.4 (30.3% of 62)	3.3

WATER BALANCE OF THE COMPANIES OPERATING IN THE REGIONS OF LAZIO AND CAMPANIA	unit of measurement	2011	2012	2013	Δ% 2013/2012
Acea Ato 5 for ATO 5 –Southern Lazio - Frosinone (85 municipalities)					
Drinking water withdrawn from the environment (66)	Mm³	103.9	98.8	110.6	11.9
<i>from lakes/rivers</i>	<i>Mm³</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>-</i>
<i>from wells</i>	<i>Mm³</i>	<i>73.8</i>	<i>68.6</i>	<i>80.5</i>	<i>17.3</i>
<i>from springs</i>	<i>Mm³</i>	<i>30.1</i>	<i>30.2</i>	<i>30.1</i>	<i>-0.3</i>
Drinking water introduced onto network (67)	Mm³	93.5	93.7	105.3	12.4
Drinking water supplied (68)	Mm³	20.4	20.7	21.0	1.4
Assessment of losses according to Italian Ministerial Decree No. 99/97					
Overall losses (parameter A17 MD 99/97) (69)	Mm ³	70.50	70.41	81.56	15.8
Effective losses (parameter A15 MD 99/97) (70)	Mm ³	56.80 (60.7% of 67)	56.60 (60.4% of 67)	66.30 (63.0% of 67)	17.1
Gori for ATO 3 - Sarnese Vesuviano (76 municipalities)					
Drinking water withdrawn from the environment (71)	Mm³	41.17	38.83	38.84	0.0
<i>from lakes/rivers</i>	<i>Mm³</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>-</i>
<i>from wells</i>	<i>Mm³</i>	<i>38.56</i>	<i>36.19</i>	<i>36.27</i>	<i>0.2</i>
<i>from springs</i>	<i>Mm³</i>	<i>2.61</i>	<i>2.64</i>	<i>2.57</i>	<i>-2.7</i>
Water withdrawn from other aqueduct systems (72)	Mm³	170.4	175.8	176.2	0.2
Drinking water introduced onto the network (73) = (71) + (72)	Mm³	211.6	214.6	215.0	0.2
Drinking water supplied (74)	Mm ³	91.1	91.1	87.6	-3.8
Assessment of losses according to Italian Ministerial Decree No. 99/97					
Overall losses (parameter A17 MD 99/97) (75)	Mm ³	119.3	123.5	126.4	2.3
Effective losses (parameter A15 MD 99/97) (76)	Mm ³	94.6 (44.7% of 73)	94.6 (44.1% of 73)	95.1 (44.2% of 73)	0.5

WATER BALANCE OF THE COMPANIES OPERATING IN THE REGIONS OF TUSCANY AND UMBRIA	unit of measurement	2011	2012	2013	Δ% 2013/2012
Publiacqua for ATO 3 – Medio Valdarno (52 municipalities)					
Drinking water withdrawn from the environment (77)	Mm³	163.6	167.6	166.3	-0.8
<i>from lakes/rivers</i>	<i>Mm³</i>	<i>108.1</i>	<i>110.7</i>	<i>110.9</i>	<i>0.2</i>
<i>from wells</i>	<i>Mm³</i>	<i>43.6</i>	<i>44.6</i>	<i>43.2</i>	<i>-3.1</i>
<i>from springs</i>	<i>Mm³</i>	<i>11.9</i>	<i>12.2</i>	<i>12.2</i>	<i>0.0</i>
Drinking water introduced onto the network (78)	Mm³	148.8	151.6	150.6	-0.7
Drinking water supplied (79)	Mm³	86.0	86.0	86.0	0.0
Assessment of losses according to Italian Ministerial Decree No. 99/97					
Overall losses (parameter A17 MD 99/97) (80)	Mm ³	55.0	57.4	55.5	-3.3
Effective losses (parameter A15 MD 99/97) (81)	Mm ³	44.5 (29.9% of 78)	46.5 (30.7% of 78)	44.6 (29.6 of 78)	-4.1
Acque for ATO 2 – Basso Valdarno (57 municipalities)					
Drinking water withdrawn from the environment (82)	Mm³	76.98	74.55	72.89	-2.2
<i>from lakes/rivers</i>	<i>Mm³</i>	<i>3.32</i>	<i>3.63</i>	<i>3.28</i>	<i>-9.6</i>
<i>from wells</i>	<i>Mm³</i>	<i>66.90</i>	<i>65.53</i>	<i>62.85</i>	<i>-4.1</i>
<i>from springs</i>	<i>Mm³</i>	<i>6.76</i>	<i>5.39</i>	<i>6.75</i>	<i>25.2</i>
Water withdrawn from other aqueduct systems (83)	Mm³	5.98	6.09	6.00	-1.5
Drinking water introduced onto the network (84)	Mm³	82.96	80.63	78.89	-2.2
Drinking water supplied (85)	Mm³	49.48	45.70	44.87	-1.8
Assessment of losses according to Italian Ministerial Decree No. 99/97					
Overall losses (parameter A17 MD 99/97) (86)	Mm ³	27.55	26.61	25.71	-3.4
Effective losses (parameter A15 MD 99/97) (87)	Mm ³	18.79 (22.6% of 84)	18.08 (22.4% of 84)	16.98 (21.5% of 84)	-6.1

WATER BALANCE OF THE COMPANIES OPERATING IN THE REGIONS OF TUSCANY AND UMBRIA	unit of measurement	2011	2012	2013	Δ% 2013/2012
Acquedotto del Fiora for ATO 6 – Ombrone (56 municipalities)					
Drinking water withdrawn from the environment (88)	Mm³	62.43	62.75	64.80	3.3
<i>from lakes/rivers</i>	<i>Mm³</i>	<i>0.85</i>	<i>n.d.</i>	<i>n.d.</i>	-
<i>from wells</i>	<i>Mm³</i>	<i>21.97</i>	<i>n.d.</i>	<i>n.d.</i>	-
<i>from springs</i>	<i>Mm³</i>	<i>39.04</i>	<i>n.d.</i>	<i>n.d.</i>	-
Drinking water introduced onto the network (89)	Mm³	60.33	60.93	60.10	-1.4
Drinking water supplied (90)	Mm³	31.45	31.4	31.4	-
Assessment of losses according to Italian Ministerial Decree No. 99/97					
Overall losses (parameter A17 MD 99/97) (91)	Mm³	28.18	n.d.	n.d.	-
Effective losses (parameter A15 MD 99/97) (92)	Mm³	22.85 (37.8% of 78)	n.d.	n.d.	-
Umbra Acque for ATOs 1 and 2 – Umbria (38 municipalities)					
Drinking water withdrawn from the environment (93)	Mm³	58.96	59.30	57.05	-3.8
<i>from lakes/rivers</i>	<i>Mm³</i>	<i>0.98</i>	<i>1.18</i>	<i>0.92</i>	<i>-22.0</i>
<i>from wells</i>	<i>Mm³</i>	<i>44.62</i>	<i>45.27</i>	<i>39.33</i>	<i>-13.1</i>
<i>from springs</i>	<i>Mm³</i>	<i>13.36</i>	<i>12.85</i>	<i>16.80</i>	<i>30.7</i>
Drinking water introduced onto the network (94)	Mm³	58.72	59.07	56.80	-3.8
Drinking water supplied (95)	Mm³	30.63	31.09	28.45	-8.5
Assessment of losses according to Italian Ministerial Decree No. 99/97					
Overall losses (parameter A17 MD 99/97) (96)	Mm³	23.90	23.50	24.17	2.9
Effective losses (parameter A15 MD 99/97) (97)	Mm³	22.30 (37.9% of 94)	21.90 (37.1% of 94)	22.69 (40.0% of 94)	3.6
TOTAL WASTE WATER TREATED BY THE GROUP COMPANIES, IN ITALY					
Waste water treated in main purification plants of the Group companies in Italy (98)	Mm³	935.6	851.9	916.4	7.6
WASTE WATER TREATED BY ACEA ATO 2					
Waste water treated in main purification plants (99)	Mm³	598.6	522.1	562.3	7.7
<i>Rome South</i>	<i>Mm³</i>	<i>353.3</i>	<i>300.2</i>	<i>331.8</i>	<i>10.5</i>
<i>Rome North</i>	<i>Mm³</i>	<i>104.7</i>	<i>96.7</i>	<i>96.2</i>	<i>0.5</i>
<i>Rome East</i>	<i>Mm³</i>	<i>100.2</i>	<i>87.8</i>	<i>94.0</i>	<i>7.1</i>
<i>Rome Ostia</i>	<i>Mm³</i>	<i>26.7</i>	<i>24.5</i>	<i>26.8</i>	<i>9.4</i>
<i>CoBIS</i>	<i>Mm³</i>	<i>7.9</i>	<i>7.4</i>	<i>7.3</i>	<i>-1.4</i>
<i>Fregene</i>	<i>Mm³</i>	<i>5.8</i>	<i>5.5</i>	<i>4.1</i>	<i>-25.5</i>
Other – municipality of Rome	Mm³	13.4	14.4	14.1	-2.1
Other – outside Municipality of Rome	Mm³	60.8	63.0	65.3	3.7
Total waste water treated by Acea Ato 2 (100)	Mm³	672.8	599.5	639.6	6.7
ANALYTICAL CONTROLS ON DRINKING WATER AND WASTE WATER FOR ACEA GROUP IN ITALY					
DGroup total analytical checks on drinking water (101) (*)	No.	1,102,737	1,169,201	1,200,924	2.7
<i>Acea Ato 2</i>	<i>No.</i>	<i>337,529</i>	<i>328,202</i>	<i>339,229</i>	<i>3.4</i>
<i>Acea Ato 5</i>	<i>No.</i>	<i>94,327</i>	<i>79,953</i>	<i>78,830</i>	<i>-1.4</i>
<i>Gori</i>	<i>No.</i>	<i>82,193</i>	<i>70,488</i>	<i>71,409</i>	<i>1.3</i>
<i>Acque</i>	<i>No.</i>	<i>254,297</i>	<i>330,569</i>	<i>355,380</i>	<i>7.5</i>
<i>Publiacqua</i>	<i>No.</i>	<i>189,508</i>	<i>192,653</i>	<i>185,399</i>	<i>-3.8</i>
<i>Acquedotto del Fiora</i>	<i>No.</i>	<i>65,007</i>	<i>87,079</i>	<i>90,472</i>	<i>3.9</i>
<i>Umbra Acque</i>	<i>No.</i>	<i>79,876</i>	<i>80,257</i>	<i>80,205</i>	<i>-0.1</i>
Group total analytical checks on waste water (102)	No.	358,320	412,461	468,182	13.5
<i>Acea Ato 2</i>	<i>No.</i>	<i>95,527</i>	<i>122,231</i>	<i>178,262</i>	<i>45.8</i>
<i>Acea Ato 5</i>	<i>No.</i>	<i>17,786</i>	<i>23,816</i>	<i>24,820</i>	<i>4.2</i>
<i>Gori</i>	<i>No.</i>	<i>14,986</i>	<i>9,821</i>	<i>13,333</i>	<i>35.8</i>
<i>Acque</i>	<i>No.</i>	<i>105,076</i>	<i>125,546</i>	<i>119,192</i>	<i>-5.1</i>
<i>Publiacqua</i>	<i>No.</i>	<i>34,405</i>	<i>37,664</i>	<i>38,869</i>	<i>3.2</i>
<i>Acquedotto del Fiora</i>	<i>No.</i>	<i>42,902</i>	<i>48,259</i>	<i>48,774</i>	<i>1.1</i>
<i>Umbra Acque</i>	<i>No.</i>	<i>47,638</i>	<i>45,124</i>	<i>44,932</i>	<i>-0.4</i>

(*) the number includes the controls carried out independently by each Company, and those carried out by Laboratorio in-house.

THE RESOURCES USED - ENERGY

The figures of the resources used refer to Acea Produzione (AP) (100% Acea SpA), A.R.I.A. (100% Acea SpA) and Acea Distribuzione (100% Acea SpA)

GENERATION, TRANSPORT AND SALE OF ELECTRICITY, HEAT AND PUBLIC LIGHTING	unit of measurement	2011	2012	2013	Δ% 2013/2012
Natural gas					
Electricity and heat generation (103) = (104+105)	Nm³x1,000	15,336	14,249	19,155	34.4
Thermoelectric and heat production AP (104)	Nm³x1,000	12,664	11,352	14,113	24.3
<i>Tor di Valle reserve boilers - for district heating</i>	<i>Nm³x1,000</i>	<i>7,419</i>	<i>7,615</i>	<i>10,071</i>	<i>32.3</i>
<i>Tor di Valle co-generation plant</i>	<i>Nm³x1,000</i>	<i>2,956</i>	<i>3,328</i>	<i>4,042</i>	<i>21.5</i>
<i>Tor di Valle combined cycle</i>	<i>Nm³x1,000</i>	<i>2,289</i>	<i>408</i>	<i>0</i>	<i>-100.0</i>
Waste to energy (105)	Nm³x1,000	2,572	2,897	5,042	74.0
<i>San Vittore del Lazio waste to energy plant</i>	<i>Nm³x1,000</i>	<i>2,572</i>	<i>2,897</i>	<i>3,460</i>	<i>19.4</i>
<i>Terni waste to energy plant (*)</i>	<i>Nm³x1,000</i>	<i>n. a.</i>	<i>n.a.</i>	<i>1,582</i>	<i>-</i>
Gas oil for thermoelectric generation					
Montemartini plant (106)	lx1,000	1,815	758	512	-32.5
Refuse Derived Fuel (RDF) burnt					
San Vittore del Lazio waste to energy plant (107)	tx1,000	158.451	218.256	224.220	2.7
Pulper from paper industry waste burnt					
Impianto di termovalorizzazione di Terni (108) (*)	tx1,000	n. a.	n.a.	69.417	-
Water					
Cooling of thermoelectric plants AP (109) = (167)	Mm³	6.69	0.80	0.00	-
Offtake for hydroelectric production (110)	Mm³	3,400.50	2,740.50	4,436.62	61.9
Process water (111)	Mm³	0.1549	0.1380	0.1604	16.2
Domestic/sanitary uses (112)	Mm³	0.2609	0.3776	0.2796	-27.9
Sundry materials					
Dielectric mineral oil in operation (113)	t	4,564	4,587	9,462	-
<i>Dielectric mineral oil - oil loss make-up</i>	<i>t</i>	<i>28.0</i>	<i>24.2</i>	<i>76.6</i>	<i>-</i>
SF₆ in operation (114)	t	n.d.	29.15	29.68	1.8
<i>SF₆ - gas loss make-up</i>	<i>t</i>	<i>0.62</i>	<i>0.44</i>	<i>0.73</i>	<i>65.9</i>
Coolants (HCFC type) loss replacement/make-up (115)	t	0.215	0.017	0.040	135.3
Sundry chemicals (116)	kg	3,611,579	4,765,055	6,807,934	41.7
<i>Acidity corrector</i>	<i>kg</i>	<i>7,200</i>	<i>2,340</i>	<i>780</i>	<i>-66.7</i>
<i>Deoxygenating substances</i>	<i>kg</i>	<i>660</i>	<i>0.0</i>	<i>0.0</i>	<i>-</i>
<i>Stabilizers and bio-dispersing agents</i>	<i>kg</i>	<i>2,700</i>	<i>1,300</i>	<i>0.0</i>	<i>-</i>
<i>Sodium chloride</i>	<i>kg</i>	<i>76,500</i>	<i>78,000</i>	<i>72,000</i>	<i>-7.7</i>
<i>Caustic soda</i>	<i>kg</i>	<i>109,080</i>	<i>71,990</i>	<i>98,630</i>	<i>37.0</i>
<i>Sodium hypochlorite</i>	<i>kg</i>	<i>4,800</i>	<i>3,390</i>	<i>620</i>	<i>-81.7</i>
<i>Sodium bicarbonate</i>	<i>kg</i>	<i>2,910,380</i>	<i>3,982,720</i>	<i>5,983,440</i>	<i>50.2</i>
<i>Hydrochloric acid</i>	<i>kg</i>	<i>119,320</i>	<i>68,675</i>	<i>101,759</i>	<i>32.5</i>
<i>Ammoniacal solution</i>	<i>kg</i>	<i>380,939</i>	<i>556,640</i>	<i>550,705</i>	<i>-1.1</i>
Oil and greases / lubricants (117)	kg	10,576	4,986	5,125	2.8
Electricity					
Consumed for electricity distribution (118) = (25)	GWh	733.10	757.12	701.72	-7.3
Consumed for electricity generation (119) = (1)-(2)	GWh	40.16	47.17	50.71	7.5
Consumed for offices (50% of the electricity consumed by the Parent Company) (120)	GWh	5.21	5.20	5.77	10.9
Other internal uses (121)	GWh	27.90	30.61	30.43	-0.6
Total (122) = (118+119+120+121)	GWh	806.37	840.10	788.41	-6.2
Illuminazione pubblica					
Consumption for public lighting (123)	GWh	161.66	162.16	161.66	-0.3

(*) Terni plant was shutdown for revamping work from August 2010 to the end of 2012.

THE RESOURCES USED - ENVIRONMENT

The figures of the resources used refer to Kyklos and Solemme both of Aquaser Srl (100% Acea SpA) and to SAO, controlled by A.R.I.A.

LANDFILL WASTE DISPOSAL - SAO	unit of measurement	2011	2012	2013	Δ% 2013/2012
Process water (124)	m³	2,712	1,532	1,208	-21.1
Sundry chemicals (125)	l	7,000	7,000	7,000	0.0
Electricity (126)	GWh	1.695	1.574	1.605	1.9
Gasolio (127)	l	435,440	352,189	295,753	-16.0
Domestic/sanitary water uses	Mm³	0.0012	0.0011	0.0015	34.4
PRODUCTION OF COMPOST	unit of measurement	2011	2012	2013	Δ% 2013/2012
Process water (Kyklos, Solemme) (128)	m³	0.00	0.00	0.00	-
Sundry chemicals (Kyklos, Solemme) (129)	t	0.00	139.39	265.32	90.3
<i>Sodium hydroxide</i>	<i>t</i>	<i>0.00</i>	<i>12.89</i>	<i>14.83</i>	<i>15.1</i>
<i>Sulphuric acid</i>	<i>t</i>	<i>100.8</i>	<i>126.50</i>	<i>250.49</i>	<i>98.0</i>
Electricity (130) (Kyklos, Solemme)	GWh	2.603	2.971	3.492	17.6
Fuels (131) (Kyklos, Solemme)	t	128.80	136.90	128.30	-6.3
<i>Gas oil</i>	<i>t</i>	<i>128.80</i>	<i>136.90</i>	<i>128.30</i>	<i>-6.3</i>

THE RESOURCES USED - WATER

The figures of the resources used refer to the main Group water companies: Acea Ato 2, Acea Ato 5, Gori, Acque, Publiacqua, Acquedotto del Fiora and Umbra Acque.

COLLECTION, TRANSPORTATION AND DISTRIBUTION OF DRINKING AND NON-DRINKING WATER	unit of measurement	2011	2012	2013	Δ% 2013/2012
Sundry materials and natural resources					
Reagents for purification and disinfection (132)	t	11,213.7	12,616.67	12,310.40	-2.4
Reagents used in chemical analyses (133)	t	1.30	1.30	1.40	7.7
Gas used in chemical analyses (134)	MNm ³	3.11	3.13	4.06	29.7
Coolants (HCFC type) replacement/make-up (135)	t	0.215	0.017	0.040	135.3
Electricity					
Water pumping plants (136)	GWh	481.17	489.07	443.42	-9.3
Offices /internal use (50% of energy consumed by the Parent Company) (137) = (120)	GWh	5.21	5.20	5.77	10.9
Chemical laboratory (138)	GWh	1.14	1.25	1.25	-
Total electricity consumed (139) = (136+137+138)	GWh	487.52	495.52	450.44	-9.1
Drinking water					
Domestic/sanitary uses (140)	Mm ³	0.87	1.36	0.99	-27.2
Offices (50% of drinking water consumed by Parent Company) (141)	Mm ³	0.17	0.21	0.15	-28.6
Total drinking water consumed (142) = (140+141)	Mm³	1.02	1.57	1.15	-26.7
WASTE WATER TREATMENT					
Materiali vari e risorse naturali					
Reagents used in waste water treatment (143)	t	8,430	9,897	10,366	4.7
<i>Polyelectrolytes used to dehydrate sludge</i>	t	1,692	1,781	1,815	1.9
<i>Sodium hypochlorite for final disinfection</i>	t	3,794	3,201	3,341	4.4
<i>Ferric chloride used to dehydrate sludge</i>	t	571	1,040	1,119	7.6
<i>Lime, Formic acid, aluminium polychloride</i>	t	338	1,889	2,231	18.1
<i>Peracetic acid</i>	t	1,720	1,739	1,604	-7.8
<i>Others (anti-foaming agents, etc.)</i>	t	315	248	256	3.3
Mineral oil and grease (144)	t	2.05	1.1	4.75	331.8
Electricity					
Sewage and purification systems (145)	GWh	296.3	297.0	304.3	2.5

FUELS USED BY THE GROUP COMPANIES FOR AUTOMOTIVE AND HEATING PURPOSES

The figures concerning the Vehicle Pool refer to the main Group companies: Acea Ato 2, Acea Ato 5, Acea Distribuzione, Acea SpA, Laboratori, Acea Reti e Servizi Energetici.

The figures concerning heating purposes refer to Acea SpA, Acea Ato 2, Acea Distribuzione and Acea Produzione.

FUEL TYPE	unit of measurement	2011	2012	2013	Δ% 2013/2012
Automotive (Group Vehicle Pool)					
Gasoline (146)	lx1,000	639.2	831.6	643.9	-22.6
Diesel (147)	lx1,000	566.1	848.3	697.7	-17.8
Heating					
Gas oil (148)	lx1,000	6.5	8.7	4.4	-49.4
Natural gas (149)	Nm ³ x1,000	690.3	690.3	386.0	-44.1
GPL (150)	lx1,000	23.2	24.5	24.9	1.9

EMISSIONS AND WASTE - ENERGY

The figures concerning emissions and waste refer to Acea Produzione (AP) (100% Acea SpA) and A.R.I.A. (100% Acea SpA)

EMISSIONS INTO THE ATMOSPHERE	unit of measurement	2011	2012	2013	Δ% 2013/2012
CO₂ (151) = (152+153)	t	30,851	126,364	225,404	43.9
<i>Acea Produzione (152)</i>	<i>t</i>	<i>30,851</i>	<i>25,364</i>	<i>30,404</i>	<i>19.9</i>
<i>A.R.I.A. (153)</i>	<i>t</i>	<i>n.a.</i>	<i>101,000</i>	<i>195,000</i>	<i>93.1</i>
NO_x (154) = (155+156)	t	95.79	96.76	155.03	60.2
<i>Acea Produzione (155)</i>	<i>t</i>	<i>62.26</i>	<i>51.34</i>	<i>48.04</i>	<i>-6.4</i>
<i>A.R.I.A. (156)</i>	<i>t</i>	<i>33.53</i>	<i>45.42</i>	<i>106.99</i>	<i>135.6</i>
CO (157) = (158+159)	t	6.74	10.12	9.94	-1.8
<i>Acea Produzione (158)</i>	<i>t</i>	<i>3.23</i>	<i>4.16</i>	<i>2.76</i>	<i>-33.7</i>
<i>A.R.I.A. (159)</i>	<i>t</i>	<i>3.51</i>	<i>5.96</i>	<i>7.18</i>	<i>20.5</i>
SO₂ (160) = (161+162)	t	0.69	0.04	0.23	-
<i>Acea Produzione (161)</i>	<i>t</i>	<i>0.07</i>	<i>0.03</i>	<i>0.02</i>	<i>-33.3</i>
<i>A.R.I.A. (162)</i>	<i>t</i>	<i>0.64</i>	<i>0.01</i>	<i>0.21</i>	<i>-</i>
Dust (163) = (164+165)	t	0.32	0.05	0.46	-
<i>Acea Produzione (164)</i>	<i>t</i>	<i>0.09</i>	<i>0.04</i>	<i>0.03</i>	<i>-25.0</i>
<i>A.R.I.A. (165)</i>	<i>t</i>	<i>0.23</i>	<i>0.01</i>	<i>0.43</i>	<i>-</i>

OTHER EMISSIONS AND WASTE	unit of measurement	2011	2012	2013	Δ% 2013/2012
Waste water treated (166)	Mm³	0.0007	0.0001	0.0007	600.0
Acqua per raffreddamento restituita (167) = (109)	Mm³	6.694	0.803	0.000	-
50 Hz electric fields	kV	Monitored			
		Commitment to keep within the legal limits			
50 Hz magnetic fields	μT	Monitored			
		Commitment to keep within the legal limits			
Noise	dB	Monitored			
		Commitment to keep within the legal limits			
Dispersed luminous flux	Mlumen	Commitment to design the plants in order to limit to the maximum the percentage of emissions dispersed towards the sky			

WASTE (ITALIAN LEGISLATIVE DECREE NO. 152/06)	unit of measurement	2011	2012	2013	Δ% 2013/2012
Hazardous waste excluding waste to energy sector and Aquaser's waste (168)	t	604.30	665.60	849.98	27.7
<i>Energy sector production</i>	<i>t</i>	<i>598.0</i>	<i>663.50</i>	<i>847.97</i>	<i>27.8</i>
<i>Portion deriving from activities carried out by Parent Company (*)</i>	<i>t</i>	<i>6.30</i>	<i>2.10</i>	<i>2.01</i>	<i>-4.3</i>
Hazardous waste of A.R.I.A. (169)	t	23,122.5	39,354.0	44,561.7	13.2
Non-hazardous waste excluding waste to energy sector and Aquaser's waste (170)	t	1,071.9	1,316.5	993.1	-24.6
<i>Energy sector production</i>	<i>t</i>	<i>1,062.2</i>	<i>1,303.3</i>	<i>966.4</i>	<i>-25.8</i>
<i>Portion deriving from activities carried out by Parent Company (*)</i>	<i>t</i>	<i>9.7</i>	<i>13.2</i>	<i>26.7</i>	<i>102.3</i>
Non-hazardous waste of A.R.I.A. (171)	t	2,814.2	1,684.9	10,408.7	517.8

(*) 50% of waste produced by Parent Company.

EMISSIONS AND WASTE - ENVIRONMENT

The figures refer to Kyklos and Solemme both of Aquaser Srl (100% Acea SpA) and to SAO, controlled by Aquaser.

WASTE (ITALIAN LEGISLATIVE DECREE NO. 152/06)	unit of measurement	2011	2012	2013	Δ% 2013/2012
Hazardous waste of Kyklos + Solemme (172)	t	1.5	1.6	1.79	10.1
Non-hazardous waste of Kyklos + Solemme (173) excluding the leachate	t	3,457.15	3,832.37	4,790.98	20.0
Hazardous waste of SAO (174)	t	1.1	1.2	0.7	-71.4
Leachate (175)	t	30,194.50	29,564.19	31,290.70	5.5
<i>Kyklos</i>	t	9,557.8	11,316.5	10,289.1	-10.0
<i>Solemme</i>	t	485.70	55.72	351.56	84.2
<i>SAO</i>	t	20,151	18,192	20,650	11.9

EMISSIONS INTO THE ATMOSPHERE	unit of measurement	2011	2012	2013	Limite
Dust (176)	t	5.725	8.564	6.300	-35.9
Total Organic Compound (177)	t	4.681	4.513	6.152	26.6
Ammonia (178)	t	0.771	1.570	1.741	9.8
Volatile inorganic acids (179)	t	2.376	1.149	1.910	39.8

EMISSIONS AND WASTE - WATER

The figures refer to the main water companies in the Acea Group: Acea Ato 2, Acea Ato 5, Gori, Acque, Publiacqua, Acquedotto del Fiora and Umbra Acque.

ACEA ATO 2	unit of measurement	2011	2012	2013	Δ% 2013/2012
Specific waste from waste water treatment					
Treatment sludge (180)	t	140,880	136,831	136,305	-0.4
Sand and sediment from treatment (181)	t	10,008	9,332	10,442	10.6
Waste (Italian Legislative Decree No. 152/06)					
Hazardous waste (182)	t	55.5	55.6	196.3	250.1
<i>own production in water sector</i>	<i>t</i>	<i>49.2</i>	<i>53.5</i>	<i>194.3</i>	<i>263.2</i>
<i>portion deriving from activities carried out by Parent Company (*)</i>	<i>t</i>	<i>6.3</i>	<i>2.1</i>	<i>2.0</i>	<i>-4.8</i>
Non-hazardous waste (183)	t	1,674.9	1,046.0	489.2	-53.2
<i>own production in water sector</i>	<i>t</i>	<i>1,188.3</i>	<i>325.1</i>	<i>251.4</i>	<i>-22.7</i>
<i>portion deriving from activities carried out by Parent Company (*)</i>	<i>t</i>	<i>9.7</i>	<i>13.2</i>	<i>26.7</i>	<i>102.6</i>
<i>inert material</i>	<i>t</i>	<i>477.0</i>	<i>707.7</i>	<i>211.0</i>	<i>-70.2</i>
Other emissions and waste					
Noise	dB	Monitored Commitment to keep within the legal limits			
Smells		Monitored Commitment to keep within the limit of perception in areas nearby treatment plants			

(*) 50% of waste produced by Parent Company.

OTHER WATER COMPANIES (*)	unit of measurement	2011	2012	2013	Δ% 2013/2012
Specific waste from waste water treatment					
Treatment sludge (184)	t	129,337	144,047	142,765	-0.9
Sand and sediment (185)	t	6,652	6,835	7,573	10.8
Waste (Italian Legislative Decree No. 152/06)					
Hazardous waste (186)	t	247.9	100.6	72.0	-28.4
Non-hazardous waste (187)	t	48,538.4	77,426.3	28,197.7	-63.6

(*) 2012 waste figures are estimated. Data from previous years are annually confirmed or rectified.

EMISSIONS FROM VEHICLES AND AIR-CONDITIONING

The figures concerning the Car Pool refer to the main companies of the Group: Acea Ato 2, Acea Ato 5, Acea Distribuzione, Acea Spa, Laboratori, Acea Reti e Servizi Energetici.

The figures concerning heating purposes refer to Acea SpA, Acea Ato 2, Acea Distribuzione and Acea Produzione.

GROUP COMPANIES	unit of measurement	2011	2012	2013	Δ% 2013/2012
Vehicles					
CO₂ (188)	t	2,699	3,993	3,166.6	-20.7
NO_x (189)	t	4.8	7.9	6.4	-19.0
CO (190)	t	28.0	39.5	30.7	-22.3
SO₂ (191)	t	n.d.	n.d.	n.d.	-
Heating					
CO₂ (192)	t	1,758	1,766	1,003	-43.2

ENVIRONMENTAL SUSTAINABILITY PERFORMANCE – ENERGY

Key environmental performance indicators (Key Performance Indicators)

INDICATOR	u. m.	2011	2012	2013
Energy used in processes				
A Consumption for electricity distribution	TJoules (GWh)	1,692.4 (470.1)	1,377.2 (382.6)	1,512.7 (420.2)
B Consumption for electricity production (item 119)	TJoules (GWh)	144.7 (40.2)	169.8 (47.17)	182.6 (50.71)
C Heat loss on district heating network (item 20)	TJoules (GWh)	59.0 (16.4)	41.8 (11.6)	82.1 (22.8)
D Consumption for public lighting (item 123)	TJoules (GWh)	582.0 (161.7)	583.9 (162.2)	582.1 (161.7)
E Consumption for Environment (126+130)	TJoules (GWh)	-	-	18.4 (5.1)
F Water distribution (139-137)	TJoules (GWh)	1,736.3 (482.3)	1,765.1 (490.3)	1,600.9 (444.7)
G Waste water treatment (item 145)	TJoules (GWh)	1,066.7 (296.3)	1,069.2 (297.0)	1,095.5 (304.3)
H Electricity for offices (item 120+137)	TJoules (GWh)	37.4 (10.4)	37.4 (10.4)	41.4 (11.5)
I Consumption for office heating	TJoules (GWh)	24.5 (6.8)	24.6 (6.8)	14.0 (3.9)
L Vehicles (item 146+147)	TJoules (GWh)	40.4 (11.2)	56.5 (15.7)	45.2 (12.6)
Indirect consumption + consumption from vehicles + heating	TJoules (GWh)	5,383.4 (1,495.4)	5,125.60 (1,423.8)	5,174.9 (1,437.5)
M - Energy losses when converting from primary sources to electricity	TJoules (GWh)	2,237.15 (621.43)	2,884.6 (801.3)	4,185.0 (1,162.5)
Total energy use (Sum A:M)	TJoules (GWh)	7,620.5 (2,116.8)	8,010.1 (2,225.1)	9,359.9 (2,600.0)

EMISSIONS, EFFLUENT, AND WASTE

Greenhouse gas emissions (CO₂) (dato 151+188+192)	t	35,308	132,123	229,574
Emissions of SO₂ NO_x and other significant gases by type				
NO_x (item 154+189)	t	100.59	104.66	161.43
CO (item 157+190)	t	34.73	49.62	40.64
SO₂ (item 160+191)	t	0.71	0.04	0.23

Acea Produzione emission/production indicators (*)

NO_x/thermoelectric production	g/kWh	2.78	n.a	n.a
CO/thermoelectric production	g/kWh	0.14	n.a	n.a
CO₂/thermoelectric production	g/kWh	1,375	n.a	n.a
CO₂/thermoelectric production	g/kWh	90	n.a	n.a
SO₂/thermoelectric production	g/kWh	0.00312	n.a	n.a

Acea (Acea Produzione and A.R.I.A.) emission/production indicators

NO_x/thermoelectric production	g/kWh	0.99	0.80	1.02
CO₂/thermoelectric production	g/kWh	180	548	830
CO₂/total gross production	g/kWh	56.7	193.9	286.9
SO₂/thermoelectric production	g/kWh	0.0	0.0	0.0

(*) having registered a very low level of thermoelectric production in both years 2012 and 2013 at Tor Di Valle combined cycle plant, the emission indicators are not sufficiently representative.

INDICATOR	unit of measurement	2011	2012	2013
PRODUCTS AND SERVICES: ELECTRICITY				
Electricity production process efficiency - Acea Produzione figures (*)				
Gross average efficiency of thermoelectric production (calculation 1)	%	30.8	26.3	24.1
Tor di Valle plant (combined cycle)	%	40.69	25.2	0.0
Tor di Valle plant (co-generation – solely electricity efficiency)	%	25.9	26.5	24.0
Montemartini plant	%	26.1	26.0	25.4
Gross average efficiency of thermoelectric production including recovered thermal energy (calculation 2)	%	46.1	55.3	57.4
Gross average efficiency of hydroelectric production (calculation 3)	%	84.3	82.7	83.1
Gross average efficiency of total production (calculation 4)	%	80.8	80.8	81.8
Gross average efficiency of total production including recovered heat (calculation 5)	%	82.9	81.8	82.4
Electricity generation process efficiency – Waste to energy plants				
San Vittore del Lazio plant				
Gross efficiency of WTE conversion in electricity (calculation 6)	kWh /kg RDF	0.94	1.00	0.90
Electric net efficiency (calculation 7)	%	18.6	20.1	17.9
Terni plant				
Gross efficiency of Pulper conversion in electricity (calculation 8)	kWh /kg pulper	n.a.	n.a.	0.83
Electric net efficiency (calculation 9)	%	n.a.	n.a.	16.4
Electricity generation process efficiency – photovoltaic plants				
Average efficiency of photovoltaic units	%	14.0	14.0	14.0
Other indicators (surroundings, public lighting, controls, water leaks)				
Specific production of waste	g/kWh	0.46	0.58	0.57
Protection of the surrounding areas	%	39.31	39.31	42.93
total length of HV lines in cables / (length of HV overhead and in cable lines)x100				
Public lighting flux efficiency (item 31 / item 123)	Lumen/kWh	18.9	19.4	20.3
Average efficiency of installed lamps (item 31 / wattage)	Lumen/W installed power	79.8 (38,300 kW)	80.5 (39,020 kW)	82.7 (39,590 kW)
Specific consumption per lighting unit (item 111 / No. of lighting units)	kWh/lighting unit (No. lighting units x year)	888.3 (181,991)	870.7 (186,238)	853.7 (189,361)
Percentage of illuminated roads (**)	% (km of lighted roads / km of total roads)	n.d.	n.d.	84.8 (6,032/7,110)
No. of operating and laboratory checks /GWh net electricity sold (item 32 / item 29)	no./GWh	0.09	0.14	0.12
Total electricity losses (item 25) / (item 24) (***)	% of required energy	6.2	6.4	6.2

(*) The thermoelectricity generation efficiencies, calculated using computation as described before the explanatory notes at the end of the document, are strongly affected by the low level of production recorded in 2013 at the combined cycle power plant of Tor di Valle. Such calculations therefore have to be evaluated cautiously because not complying with typical values of the plant technologies used.

(**) This is an estimate.

(***) The total electricity losses include: initial transformation loss, transport loss, internal consumptions and technical and commercial losses, these due to incorrect measurements and fraud.

ENVIRONMENTAL SUSTAINABILITY PERFORMANCE – WATER

key environmental performance indicators (Key Performance Indicators)

INDICATOR	unit of measurement	2011	2012	2013
Carbon footprint				
WATER SERVICE IN ITALY				
Total CO ₂ /m ³ of water supplied (integrated water service) (*)	kgCO ₂ /m ³	0.61	0.63	0.61
CO ₂ /m ³ of water supplied (distribution process)	kgCO ₂ /m ³	0.38	0.39	0.37
CO ₂ /m ³ of treated water (treatment process)	kgCO ₂ /m ³	0.16	0.18	0.17
DRINKING WATER SERVICE (Assessment parameters as per Italian Ministerial Decree No. 99/97)				
Rete di Acea Ato 2				
Primary efficiency (R1): (item 63) / (item 62)	%	60.1	58.0	57.3
Efficiency at consumption level (R2): (item 63+A11) / (item 62) A 11 = 2.0% of (item 63)	%	61.4	59.2	58.4
Net efficiency (R3): (item 63+A11+A12) / (item 62) A 12 = 2.0% of (item 62)	%	63.8	61.5	60.4
"Historic" network (Rome + Fiumicino)				
Primary efficiency (R1) "historic" network: (item 52) / (item 51)	%	63.8	63.0	62.4
Efficiency at consumption level (R2): (item 52 + A 11) / (item 51) A 11 = 2.0% of (item 52)	%	65.1	64.3	63.6
Net efficiency (R3): (item 52 + A 11 + A 12) / (item 51) A 12 = around 2.0% of (item 51)	%	67.1	66.3	65.6
PRODUCT: DRINKING WATER				
Acea Ato 2 network				
Linear index of overall drinking water losses (as per MD No. 99/97) (item 64) / (km network) (**)	Mm ³ (1,000)/km	20.7 (10,444.9)	21.8 (10,508.5)	22.3 (10,568.9)
Linear index of effective distribution losses (as per MD No. 99/97) Ato 2 network (item 65) / (km network) (**)	Mm ³ (1,000)/km	15.4 (10,444.9)	16.9 (10,508.5)	17.4 (10,568.9)
Specific electricity consumption for water network (Ato 2 energy network consumption) / (item 62)	kWh/m ³	0.221	0.259	0.226
No. of checks on drinking water distributed (item 102- drinking water Ato 2) / (item 62)	n./Mm ³	564	545	559
Indice di additivazione acqua potabile (dato 132 - solo rete di Acea Ato2) / (item 62)	g/m ³	1.9	2.8	3.0
"Historic" network (Rome + Fiumicino)				
Linear index of overall drinking water losses (as per MD No. 99/97: A 17 / km network) (item 53) / (km network) (**)	Mm ³ (1,000)/km	21.7 (7,161.7)	22.1 (7,207.3)	22.4 (7,258.7)
Indice lineare delle perdite reali acqua potabile (as per MD No. 99/97: A15 / km network) (item 54) / (km network) (**)	Mm ³ (1,000)/km	16.4 (7,161.7)	16.9 (7,207.3)	17.3 (7,258.7)
SERVICE: WASTE WATER TREATMENT				
Total sludge disposed of (item 180)	t	140,880	136,831	136,305
Sand and sediment removed (item 181)	t	10,008	9,332	10,442
COD removed	t	149,055	133,210	124,339
Total Suspended Solids (TSS) removed	t	86,202	69,657	77,428
Additive process index	g/m ³	9.81	10.44	9.89
Specific electricity consumption for treatment process	kWh/m ³	0.237	0.273	0.257
Intensity of checks on waste water	n./Mm ³	140.5	195.9	256.7
COMPLIANCE				
Penalty paid for non-compliance with environmental regulations/agreements	euro	473,731	544,132	167,934

(*) "Scope 2" emissions, arising from electricity consumption of the Group.

(**) These are the kilometres of distribution and transportation network.

ENVIRONMENTAL SUSTAINABILITY PERFORMANCE – ENVIRONMENT

key environmental performance indicators (Key Performance Indicators)

INDICATOR	unit of measurement	2011	2012	2013
Non-hazardous waste disposed in landfill / t total waste entered at plan (item 34) / (item 33)	t/t	0.82	0.86	0.83
Waste disposed in landfill / energy consumed (item 34) / (item 126)	t/kWh	0.07	0.08	0.06
Waste disposed in landfill / energy consumed net of photovoltaic production	t/kWh	0.09	0.10	0.08
Compost/ incoming waste (item 41) / (item 38+ item 39+ item 40)	t/t	0.33	0.20	0.29
Compost produced/electricity consumed (item 41) / (item 130)	t/kWh	0.007	0.004	0.005

DESCRIPTION OF THE CALCULATIONS USED TO DETERMINE ELECTRICITY GENERATION EFFICIENCY

CALCULATION 1

$$\text{efficiency (thermoelectric)} = \frac{\text{Energy}_{\text{thermoelectric}} \text{ (kWh)}}{\text{Energy}_{\text{diesel oil}} \text{ (kWh)} + \text{Energy}_{\text{natural gas}} \text{ (kWh)}}$$

where:

$\text{Energy}_{\text{thermoelectric}}$ = gross electricity produced using thermoelectric cycle

$$\text{Energy}_{\text{diesel oil}} \text{ (kWh)} = \frac{\text{diesel oil (l)} \times 0.835 \times \text{NCV}_d \text{ (kCal/kg)}}{860 \text{ (kCal/kWh)}} \quad \text{Energy equivalent to diesel oil consumed (106)}$$

$$\text{Energy}_{\text{natural gas}} \text{ (kWh)} = \frac{\text{natural gas (Nm}^3\text{)} \times \text{NCV}_m \text{ (kCal/Nm}^3\text{)}}{860 \text{ (kCal/kWh)}} \quad \text{Energy equivalent to natural gas consumed (104)}$$

NCV_m = 8,500 kCal/Nm³ (net calorific value of natural gas)

NCV_d = 10,000 kCal/kg (net calorific value of diesel oil)

860 = energy conversion factor from kCal to kWh

0.835 = specific weight of diesel oil (kg/l)

NB: between 2011-2013, the calorific values used for Acea Produzione were the effective ones taken from the gaugings of the natural gas and diesel oil suppliers

CALCULATION 2

$$\text{efficiency (thermoelectric)} = \frac{\text{Energy}_{\text{thermoelectric}} \text{ (kWh)} + \text{Energy}_{\text{thermal}} \text{ (kWh)}}{\text{Energy}_{\text{diesel oil}} \text{ (kWh)} + \text{Energy}_{\text{natural gas}} \text{ (kWh)}}$$

where:

$\text{Energy}_{\text{thermal}}$ = Gross thermal energy produced

$\text{Energia}_{\text{thermoelectric}}$ = Gross thermoelectric energy produced

$$\text{Energia}_{\text{diesel oil}} \text{ (kWh)} = \frac{\text{diesel oil (l)} \times 0.835 \cdot \text{NCV}_d \text{ (kCal/kg)}}{860 \text{ (kCal/kWh)}} \quad \text{Energy equivalent to diesel oil consumed (106)}$$

$$\text{Energia}_{\text{natural gas}} \text{ (kWh)} = \frac{\text{natural gas (Nm}^3\text{)} \times \text{NCV}_m \text{ (kCal/Nm}^3\text{)}}{860 \text{ (kCal/kWh)}} \quad \text{Energy equivalent to natural gas consumed (104)}$$

NCV_m = 8,500 kCal/Nm³ (net calorific value of natural gas)

NCV_d = 10,000 kCal/kg (net calorific value of diesel oil)

860 = energy conversion factor from kCal to kWh

0.835 = specific weight of diesel oil (kg/l)

NB: the calorific value used for Acea Produzione were the effective ones taken from the gaugings of the gas and diesel oil suppliers

CALCULATION 3

$$\text{efficiency (hydroelectric)} = \frac{\text{Energy}_{\text{hydroelectric}} (\text{MWh}) \times 3.6 \times 10^9}{[m(\text{kg}) \times 9.8(\text{m/s}^2) \cdot h(\text{m})](\text{joule})}$$

where:

- 3.6×10^9 = water energy conversion factor from Joules to MWh
- m = offtake water for hydroelectric production
- 9.8 = gravitation acceleration at sea level
- h = height of water drop (free surface reservoir – turbine)
- $\text{Energy}_{\text{hydroelectric}}$ = energy produced in hydroelectric cycle

CALCULATION 4

$$\frac{(E_i)}{(E_i + E_t)} \cdot \epsilon_{i,t} + \frac{(E_t)}{(E_i + E_t)} \cdot \epsilon_t = \epsilon_{\text{average}}$$

where:

- E_i = total hydroelectricity produced
- E_t = total thermoelectricity produced
- ϵ_i = hydroelectric efficiency
- ϵ_t = thermoelectric efficiency
- $\epsilon_{\text{average}}$ = average production efficiency

CALCULATION 5

$$\frac{(E_i)}{(E_i + E)} \cdot \epsilon_{i,t} + \frac{(E)}{(E_i + E)} \cdot \epsilon = \epsilon_{\text{average}}$$

where:

- E_i = total hydroelectricity produced
- E = sum of total energy (thermoelectric and thermal) produced
- ϵ_i = hydroelectric efficiency
- ϵ = efficiency (thermoelectric and thermal)
- $\epsilon_{\text{average}}$ = average production efficiency

CALCULATION 6

$$\text{recovery efficiency} = \left(\frac{\text{kWh}}{\text{kg}} \right) = \frac{\text{Gross electricity produced (kWh)}}{\text{RDF (kg)}}$$

Gross electricity produced (kWh) = gross electricity produced at S. Vittore = (item 12)

CALCULATION 7

$$\text{electric efficiency (\%)} = \frac{\text{Net electricity produced (kWh)}}{\text{RDF internal energy (kWh)} + \text{Natural gas internal energy (kWh)}}$$

where:

Net electricity produced at S. Vittore (item 12 – internal consumptions)

$$\text{Natural gas internal energy (kWh)} = \frac{\text{Natural gas (Sm}^3\text{)} \times \text{NCV}_n \text{ (kCal/Sm}^3\text{)}}{860 \text{ (kCal/kWh)}}$$

NCV_n
860 = about 8,500 kCal/Sm³ (net calorific value of natural gas)
= energy conversion factor from kCal to kWh

$$\text{RDF internal energy (kWh)} = \frac{\text{RDF (kg)} \times \text{PCI}_w \text{ (kCal/kg)}}{860 \text{ (kCal/kWh)}}$$

NCV_w
860 = 3,583 kCal/kg (15,000 kJ/kg) - RDF average net calorific value
= energy conversion factor from kCal to kWh

CALCULATION 8

$$\text{recovery efficiency} = \left(\frac{\text{kWh}}{\text{kg}} \right) = \frac{\text{Gross electricity produced (kWh) at Terni}}{\text{pulper (kg)}}$$

Gross_{electricity} produced (kWh) at Terni = Gross electricity produced = (item 13)

CALCULATION 9

$$\text{electric efficiency (\%)} = \frac{\text{Net electricity produced (kWh)}}{\text{pulper internal energy (kWh)} + \text{natural gas internal energy (kWh)}}$$

where:

Net electricity produced at Terni (item 13 – internal consumptions)

$$\text{Natural gas internal energy (kWh)} = \frac{\text{Natural gas (Sm}^3\text{)} \times \text{NCV}_n \text{ (kCal/Sm}^3\text{)}}{860 \text{ (kCal/kWh)}}$$

NCV_n
860 = about 8,500 kCal/Sm³ (net calorific value of natural gas)
= energy conversion factor from kCal to kWh

$$\text{Pulper internal energy (kWh)} = \frac{\text{pulper (kg)} \times \text{NCV}_p \text{ (kCal/kg)}}{860 \text{ (kCal/kWh)}}$$

NCV_p
860 = 3,635 kcal/kg 15,216 kJ/kg) - Pulper average net calorific value
= energy conversion factor from kCal to kWh

EXPLANATORY NOTES TO THE *ENVIRONMENTAL REPORT*

The figures presented in the *Environmental Report* have been produced and audited by the pertinent divisions. Responsibility for the correct formation of the figures has been maintained within the individual production units, pending the implementation of a standardized Environmental Management System, capable of coding the procedures for obtaining a regular flow of numeric information. Before final acceptance, however, the official figures have been subject to a validation process which anticipated four control procedures:

1. comparison with the historical data in order to highlight and justify any significant discrepancies;
2. repetition at least twice of the acquisition process;
3. *feedback* to the divisions responsible for the final validation of the figures;
4. sample audit carried out by an auditing firm.

The figures have been divided up into three categories:

- estimated;
- calculated;
- measured.

In the event of estimated data, the greatest of attention was paid to checking the reasonableness of the underlying criteria used, with the aim of resorting as little as possible, in the future, to this form of measurement of the environmental parameters.

When the figures are the result of calculation, the algorithm used has been concisely specified in order to permit the full comprehension of the mathematical result.

When, lastly, the data has been measured, an estimate of the uncertainty to be associated with the number is provided.

ADDITIONAL INFORMATION ON FIGURES PROVIDED IN THE ENVIRONMENTAL REPORT

ENERGY SECTOR PRODUCTS	
Item No	explanation – comment
1	Total gross energy produced by the Group. This figure is calculated.
2	Electricity produced net of losses due to just the production phase. This figure is calculated.
3 = 4+5	Total electricity produced by the Acea Produzione plants, gross of losses. It includes thermoelectric and hydroelectric energy. The production increase registered at the Salisano plant is due to return to operation after repowering work. The figure is measured with uncertainty of less than $\pm 0.5\%$.
6 = 7+8+9	Electricity losses attributable to just the production phase of the Acea Production plants. Includes: internal consumption (thermo and hydro) and initial transformation losses. The figure is measured with uncertainty of less than $\pm 0.5\%$.
10	Electricity produced by the Acea Produzione plants, net of losses. This figure is calculated.
11 = 12+13	Electricity produced by the waste to energy plants: San Vittore del Lazio plant and Terni plant belonging to A.R.I.A. Note that the fuel used by the two plants (RDF -Refuse Derived Fuel - for San Vittore and industry pulper for the Terni plant) comprises both biodegradable organic material, therefore neutral with regard to the CO ₂ balance, and non-biodegradable organic substances (plastic, resins, etc.). The Terni plant was reactivated, after revamping works, at the end of December 2012.
14	Internal consumption of the two waste to energy plants at S. Vittore and Terni. It does not include the energy withdrawn from the network. The figure is measured with uncertainty of less than $\pm 0.5\%$.
15	Electricity produced by the two waste-to-energy plants at S. Vittore and Terni, net of internal consumption. This figure is calculated.
16	Gross energy produced by photovoltaic plants. The figure is measured with uncertainty of less than $\pm 0.5\%$.
17	Total losses in photovoltaic generation phase, due above all else to the Joule effect (dissipation with heating) in the equipment. Estimated figure.
18	Net photovoltaic energy made available by the generation plants. The figure is measured with uncertainty of less than 0.5%.
19	Thermal energy produced at the Tor di Valle co-generation plant, gross of losses. The item is measured with uncertainty of $\pm 2\%$ in correspondence with the delivery pipes of the boilers. The thermal energy is produced by the co-generation plant, comprising a turbogas unit and superheated water regeneration generator powered by the hot exhaust fumes of the turbogas units, with the possibility of integration via Galleri-type auxiliary boilers.
20	Thermal energy losses of the district heating system, due to: heat dispersion, losses on the network, technical emissions due to maintenance work, thermal recoveries of the heat accumulation systems. The item is calculated as the difference between the thermal energy produced and that effectively supplied to the customers (billed).
21	Net thermal energy supplied to end customers. The item, calculated, was obtained from the reading of the billed consumption.
22	Electricity supplied by Acea Produzione to Acea Energy SpA involving infra-Group exchange. The item is marginal due to the decision made by the Acea Group to sell the electricity produced on the electricity exchange or by means of bilateral agreements.
23	Net electricity acquired on the market by: <ul style="list-style-type: none"> • Sole Buyer for 3,107.76 GWh • Imports for 431.50 GWh • Market for 7,844.09 GWh. <p>In 2012 and 2013 the "Colari plant" of Malagrotta (waste Gasifier) didn't work. In 2011 had produced and marketed in the Acea distribution network 20.14 GWh. The item is measured with uncertainty of $\pm 0.5\%$.</p>
24	Energy requested on the Rome and Formello distribution network by all the connected customers (free + protected markets). This item is estimated.
25	Electricity losses which take place during the distribution and transmission phase. These are attributable to: transformation and transport losses, fraud and erroneous measurements. This item is estimated.
26	Internal uses of electricity for the performance of distribution activities. The 2013 item is estimated.
27	Electricity transferred to third parties. This involves exchanges of energy between distribution companies. The item is measured with uncertainty of $\pm 0.5\%$.

ENERGY SECTOR PRODUCTS

Item No	explanation – comment
28	Total net electricity conveyed to customers in free market connected to the Rome and Formello electricity distribution network. This includes both the portion of electricity sold by Acea Energy and that sold by other operators active on the free market. The item is measured with uncertainty of $\pm 5\%$. (CEI 13-4 standard). The considerable increase in the item over the last few years is the direct consequence of the process for deregulating the electricity market underway in Italy since 1999 (Italian Legislative Decree No. 79/99).
29	Net electricity sold to customers in enhanced protection market. The downwards trend is the consequence of the progressive changeover of protected customers to the deregulated market, in other words it is the direct consequence of the process for de-regulating the electricity market underway in Italy since 1999 (Italian Legislative Decree No. 79/99). The item is estimated on the basis of the readings of billed consumption.
30	Net electricity sold by Acea on the free market at Italian national level. The item is measured with uncertainty of $\pm 5\%$. (CEI 13-4 standard). Includes . Includes the sold on Rome and Formello (item 28). Total sales on the free and the protected market is obtained by summing the items (29) and (30). The figure is estimated.
31	Lighting flux supplied by the public lighting system in Rome. The item, calculated, represents the product between the number of lamps installed and the related value of "rated" lighting flux. As a result of the overestimation introduced by: 1. abatement of efficiency due to the ageing of the lamps; 2. shutdown due to faults; 3. shutdown due to maintenance; it is believed that a more realistic supplied lighting flux figure equates to the item provided, decreased by 20%.
32	Total number of gaugings/checks carried out benefiting the energy area. The item is calculated as the sum of the individual calculations made by the pertinent laboratories.

ENVIRONMENT SECTOR PRODUCTS

33	Incoming total waste. These are the amounts arriving at SAO plant: Municipal solid waste, organic fraction, green, non-hazardous industrial waste. This figure is calculated.
34	Landfilled waste, either directly or after processing. The figure is calculated.
35	Recovered waste. This is glass, paper and paperboard, iron and plastic, recycled and not sent to landfills. The figure is calculated.
36	Compost produced at the SAO plant. The data is measured with an uncertainty of $\pm 1\%$.
37	Reduction for stabilisation. Represents the mass loss caused by such as treatments or natural transformation of matter. This figure is calculated.
38	Incoming sludges. This is the amount of incoming sludges at the Acquaser plants: Kyklos and Solemme. The item is measured with uncertainty of $\pm 1\%$.
39	Incoming green. This is the amount of green from the parks, forests and other areas arriving at Acquaser plants, Kyklos (Latina) and Solemme (Grosseto). The data is measured with an uncertainty of $\pm 1\%$.
40	Organic fraction from incoming waste collection. It represents the total quantity of organic fraction resulting from recycling collection. The item is measured with uncertainty of $\pm 1\%$. differenziata. Il dato è misurato con incertezza del $\pm 1\%$.
41	High Quality Compost. It represents the amount of high quality compost produced at the Acquaser plants, Kyklos (Latina) and Solemme (Grosseto). The item is measured with uncertainty of $\pm 1\%$.
42	Non-compostable material to disposal. It is the plastic that is sent to disposal as unfit to be composted. The item is measured with uncertainty of $\pm 1\%$.
43	Total analytical controls. The item represents the total of analytical determinations made at the following plants: SAO, Kyklos e Solemme. Il dato è calcolato

WATER SECTOR PRODUCTS

Item No	explanation – comment
44	Total drinking water withdrawn from the environment or from other systems. This is the sum of the water withdrawn by the Group companies: Acea Ato 2 (Rome), Acea Ato 5 (Frosinone); Gori (Sarnese Vesuviano); Acque (Pisa); Publiacqua (Florence); Acquedotto del Fiora (Grosseto); Umbra Acque (Umbria).
45	Total drinking water delivered to the distribution networks of the companies listed under item 44 net of losses due to the water supply at sources. The figure is estimated.
46	Total drinking water supplied to the respective customers of the companies listed in item 44. The figure represents estimated consumption due to the entire territories served. Includes consumptions due to users, fountains, pipe washing activities, etc. The figure is estimated.
47	Total drinking water withdrawn from the sources except the high drains, by the company Acea Ato 2 and introduced into the aqueduct system of the Rome historic network. It includes the water withdrawn from Lake Bracciano, treated. The item is measured with uncertainty of $\pm 3\%$.
48	Total drinking water sold to Municipalities located along the route of the aqueducts, in turn retailers of the resource, who are not Acea Ato 2 customers. The item is measured and is affected by a systematic error estimated as around - 5%.
49	Drinking water introduced onto non-drinking water network. These are events which take place in the case of maintenance or extraordinary measures which make the dedicated non-drinking water resource insufficient. The item is estimated.
50	Drinking water returned to the environment / technical operating volumes with reference to the Rome "historic" distribution network (Rome + Fiumicino). This figure is calculated.
51	Total drinking water transported to the Rome "historic" distribution network (Rome + Fiumicino), net of the losses due to the water supply at sources. The item is estimated.
52	Total drinking water supplied in the Municipality of Rome on the "historic" network (Rome + Fiumicino). The figure represents estimated consumption due to the entire territory served. It includes the consumption due to users, drinking fountains, pipe washing activities, etc. The item is estimated.
53	Overall distribution losses – Rome "historic" network. This is the parameter A17 of the Italian MD No. 99/97 defined as the quantity of water lost during distribution. $A17 = A9 - (A10+A11+A12) = (A13+A14+A15+A16)$, where: <i>Parameter A9 of MD 99/97</i> – total volume of water introduced onto the network; <i>Parameter A10 of MD 99/97</i> – gauged volume of water supplied to the end user; <i>Parameter A11 of MD 99/97</i> – authorized and unrecorded uses, totaling around 2% of total water supplied to end users; <i>Parameter A12 of MD 99/97</i> – maintenance and cleaning, totaling around 2% of total introduced onto the network; <i>Parameter A13 of MD 99/97</i> – inefficiencies, estimated at 3 million m ³ per year; <i>Parameter A14 of MD 99/97</i> – frauds, totaling 1.0% of total water supplied to end users (item 20) x 1.0/100; <i>Parameter A15 of MD 99/97</i> – volume lost in distribution (effective losses); <i>Parameter A16 of MD 99/97</i> – gauging errors, totaling 10% of total water supplied to end users - (item 41) x 10.0/100; <i>Parameter A17 of MD 99/97</i> – overall distribution losses
54	Effective distribution losses - Rome "historic" network (Rome + Fiumicino). This is the parameter A15 of the Italian MD No. 99/97 and represents the nearest value to the true estimate of the volume of water lost along the distribution network for reasons linked to the state of maintenance of the assets.
55	Total non-drinking water taken from the environment, gross of losses. This item is estimated.
56	Total non-drinking water supplied to Rome and Fiumicino. The item, calculated, corresponds with total water billed.
57	Total non-drinking water supplied to Municipalities other than the Municipality of Rome and Fiumicino. This is a small estimated quantity.
58	Total drinking water withdrawn from the sources except the high drains, by the company Acea Ato 2 and introduced into the Central Lazio Optimum Area of Operations ATO 2 (Rome "historic" network + Municipalities acquired) aqueduct system. The item is measured with uncertainty of $\pm 3\%$.
59	Total drinking water sold to Municipalities located along the route of the aqueducts, in turn retailers of the resource, who are not Acea Ato 2 customers. The item is measured and is affected by a systematic error estimated as around - 5%.
60	Drinking water introduced onto non-drinking water network. These are events which take place in the case of maintenance or extraordinary measures which make the dedicated non-drinking water resource insufficient. This item is estimated.
61	Drinking water returned to the environment / technical operating volumes with reference to the Ato 2 distribution network (Rome and Fiumicino + municipalities acquired as of 31 December 2013). This figure is calculated.
62	Total drinking water transported to the Ato 2 distribution network (Rome and Fiumicino + municipalities acquired as of 31 December 2013). The item is gauged with uncertainty of $\pm 3\%$. This item was estimated for 2013.
63	Total drinking water supplied (i.e. gauged at the metres, where present) to the customers connected to the Ato 2 network (Rome and Fiumicino + municipalities acquired as of 31 December 2013). The figure represents estimated consumption due to the entire territory served. It includes the consumption due to users, drinking fountains, pipe washing activities, etc.

WATER SECTOR PRODUCTS (SEGUE)

Item No	explanation – comment
64	Overall distribution losses – Ato 2 network (Rome and Fiumicino + municipalities acquired as of 31 December 2013). This is the parameter A17 of the Italian MD No. 99/97 defined as the quantity of water lost during distribution. See item 53 for details.
65	Effective distribution losses - Ato 2 network (Rome and Fiumicino + municipalities acquired as of 31 December 2013). This is the parameter A15 of the Italian MD No. 99/97. See item 54.
66, 67, 68	Respectively: quantity of water withdrawn from the environment, introduced onto the distribution network and supplied to its customers by Acea Ato 5 (Frosinone).
69	Overall distribution losses of Acea Ato 5 (Frosinone). This is the parameter A17 of the Italian MD No. 99/97 defined as the quantity of water lost during distribution. See item 53 for details.
70	Effective distribution losses of Acea Ato 5 (Frosinone). This is the parameter A15 of the Italian MD No. 99/97. See item 54.
71, 73, 74	Respectively: quantity of water withdrawn from the environment, introduced onto the distribution network and supplied to its customers by Gori (Sarnese Vesuviano).
72	Water withdrawn from other aqueduct systems to satisfy excess demand; if added to the water withdrawn from the environment (item 71), the quantity introduced onto the network is obtained (item 73).
75	Overall distribution losses of Gori (Sarnese Vesuviano). This is the parameter A17 of the Italian MD No. 99/97 defined as the quantity of water lost during distribution. See item 53 for details.
76	Effective distribution losses of Gori (Sarnese Vesuviano). This is the parameter A15 of the Italian MD No. 99/97. See item 54 for details.
77, 78, 79	Respectively: quantity of water withdrawn from the environment, introduced onto the distribution network and supplied to its customers by Publiacqua (Florence). Estimated figures.
80	Overall distribution losses of Publiacqua (Florence). This is the parameter A17 of the Italian MD No. 99/97 defined as the quantity of water lost during distribution. See item 53 for details.
81	Effective distribution losses of Publiacqua (Florence). This is the parameter A15 of the Italian MD No. 99/97. See item 54.
82, 84, 85	Respectively: quantity of water withdrawn from the environment, introduced onto the distribution network and supplied to its customers by Acque (Pisa). Estimated figures.
83	Water withdrawn from other aqueduct systems to satisfy excess demand; if added to the water withdrawn from the environment (item 82), the quantity introduced onto the network is obtained (item 84).
86	Overall distribution losses of Acque (Pisa). This is the parameter A17 of the Italian MD No. 99/97 defined as the quantity of water lost during distribution. See item 53 for details.
87	Effective distribution losses of Acque (Pisa). This is the parameter A15 of the Italian MD No. 99/97. See item 54.
88, 89, 90	Respectively: quantity of water withdrawn from the environment, introduced onto the distribution network and supplied to its customers by Acquedotto del Fiora (Grosseto). Estimated figures.
91	Overall distribution losses of Acquedotto del Fiora (Grosseto). This is the parameter A17 of the Italian MD No. 99/97 defined as the quantity of water lost during distribution. See item 53 for details.
92	Effective distribution losses of Acquedotto del Fiora (Grosseto). This is the parameter A15 of the Italian MD No. 99/97. See item 54.
93, 94, 95	Respectively: quantity of water withdrawn, introduced and supplied by Umbra Acque (Umbria). Estimated figures.
96	Overall distribution losses of Umbra Acque (Umbria). This is the parameter A17 of the Italian MD No. 99/97 defined as the quantity of water lost during distribution. See item 53 for details.
97	Effective distribution losses of Umbra Acque (Umbria). This is the parameter A15 of the Italian MD No. 99/97. See item 54.
98	Total waste water conveyed to main treatment plants of Acea Ato 2 and treated. For the remarkable change of the item if compared with 2011, see item 88, that represents the most sensitive variation. This figure is calculated.
99	Total waste water conveyed to the main treatment plants of Acea Ato 2 and treated. The reduction amount is mainly due to exchanged flowmeter re-calibration of Roma Sud, decreasing. This figure is calculated.
100	Total waste water conveyed to the treatment plants of Acea Ato 2 and treated, including the quantities treated in the minor plants of the Municipality of Rome and in those outside the Municipality of Rome. This figure is calculated.
101	Overall number of analytical controls carried out on drinking water by the Acea Group. The item includes the analysis carried out by LaboratoRI and the analysis carried out independently by the companies. This figure is calculated.
102	Overall number of analytical controls carried out on waste water by the Acea Group. The item includes the analysis carried out by LaboratoRI and the analysis carried out independently by the companies. This figure is calculated.

RESOURCES USED – ENERGY SECTOR

Item No	explanation – comment
103 = 104 + 105	Total quantity of natural gas used for the generation of electricity and heat at the Acea Produzione and A.R.I.A. production plants. The item, expressed in normal cubic metres (volume at 0°C and 1 Atm), is measured with uncertainty of $\pm 0.5\%$. The figure is estimated.
106	Total quantity of coal used for the generation of electricity at the Acea Produzione Montemartini (turbogas) plant. This item is measured with uncertainty of $\pm 2\%$.
107	Quantity of RDF (Refuse Derived Fuel) sent to the waste to energy process at the San Vittore plant in Lazio. The item is measured with uncertainty of $\pm 1\%$.
108	Quantity of pulper sent to the waste to energy process at the Terni plant. The item is measured with uncertainty of $\pm 1\%$.
109	Total cooling water in the thermoelectric plants. This item is estimated.
110	Total water taken from surface resources and from aqueducts (Salisano hydroelectric plant) for the production of hydroelectricity. This figure is calculated.
111	Total quantity of water used in the industrial processes. The various contributions were due to: - Replenishment of the losses in the thermal cycles at the Acea Produzione plants. This is drinking water; - Replenishment of losses on the district heating network. This is drinking water; - Various uses in the San Vittore and Terni waste to energy plants. This figure is calculated.
112	Quantity of drinking water used by the companies included in the energy sector for civil/sanitary use. The item, calculated, refers to billed consumption.
113	This represents the total quantity of new dielectric mineral oil introduced into the distribution substations (only from 2013 the Acea Distribution data include, in addition to the primary substations, even secondary ones). This item is estimated. The total amount of new dielectric mineral oil entered into the production circuit (transformers, capacitors, storage depots etc.) includes both the figure for Acea Distribuzione and Acea Produzione. This item is estimated.
114	The item represents the total quantity of gaseous insulator (SF_6) in the systems of Acea Distribuzione. The item is estimated. The total quantity of new gaseous insulator (SF_6) added to the production circuit represents the amount of replenishments and substitutions of Acea Distribuzione in primary substations. This item is estimated.
115	Quantity of refrigerating fluids used during maintenance of air-conditioning equipment, when the old gas is recovered and replaced with new gas. Note that the R22 gas, still present as refrigerating fluid, can no longer be purchased (European Regulation No. 2037/2000 concerning hazardous substances for the ozone stratosphere) but is still recycled (until 31 st December 2014); the replenishments are made using a different gas, R422 D. The item is calculated allocating the total gases purveyed by the Parent Company in equal parts (50%) to the energy area and the water area. This item coincides with item 135.
116	Total chemicals used in the electricity and heat generation process at the plants of Acea Produzione and A.R.I.A. (waste to energy plants). This figure is calculated.
117	Amount of oils and lubricating greases used by Acea Produzione. The data is measured with an uncertainty of $\pm 0.5\%$.
118	This item coincides with item 25.
119	Coincides with the difference between the items 1 and 2.
120	Electricity consumed by the processes not directly linked with the production phases (offices). The item is calculated to an extent equating to 50% of the overall electricity consumed by the Parent Company. The remaining portion of 50% is assigned to the water sector as consumption.
121	Other uses of electricity in the energy sector. This figure is calculated.
122	Total electricity consumed by the product systems included in the energy sector. This figure is calculated.
123	Total electricity consumed for public lighting in the Municipality of Rome. This figure is calculated.

RESOURCES USED – ENVIRONMENT

Item No	explanation – comment
SAO	
124	Quantity of water consumed at the plant SAO. It should be noted that the resource comes in part from the marquises (rain water) and partly from the riverbed (river water). The figure is estimated.
125	Total chemicals used at the plant SAO. The figure is calculated.
126	Electricity consumed in SAO. The data is measured with an uncertainty of $\pm 1\%$.
127	Total amount of gas oil consumed at the plant of SAO. The data is measured with an uncertainty of $\pm 2\%$.
Production of compost	
128	Quantity of water consumed at the plants Kyklos and Solemme. The figure is close to zero as at the two plants, almost all of the water used comes from recycling, after purification with reverse osmosis technology. Water consumption not from recycling are negligible.
129	Total chemicals used at the plants Kyklos and Solemme. The figure is calculated.
130	Electricity consumed at Kyklos and Solemme. The data is measured with an uncertainty of $\pm 1\%$.
131	The total amount of fuel consumed at Kyklos and Solemme. The data is measured with an uncertainty of $\pm 2\%$.

RESOURCES USED – WATER SECTOR

Item No	explanation – comment
132	The figure represents the sum of the consumption of reagents for drinking water and disinfection of the water in Group water companies. In detail this includes: sodium hypochlorite - used as a disinfectant upon the request of the Health Authorities -, aluminium polychloride, caustic soda and ozone. This figure is calculated.
133	Total quantity of chemical reagents used by LaboratoRI for the performance of its duties, in other words the performance of analytical checks benefiting Acea Group companies. The item is measured.
134	Total volume of pure gas for analyses used by LaboratoRI. The item is measured.
135	Quantity of refrigerating fluids used during maintenance of air-conditioning equipment, when the old gas is recovered and replaced with new gas. The item is calculated allocating the total gases purveyed by the Parent Company in equal parts (50%) to the energy area and the water area. This item coincides with item 106.
136	Electricity used for the drinking and non-drinking water pumping plants. The item is measured with uncertainty of $\pm 1\%$.
137	Electricity consumed by the processes not directly linked with the production phases (offices). The figure, equal to item 120, is calculated to an extent equating to 50% of the total electricity consumed by the Parent Company.
138	Electricity used by LaboratoRI. It includes all the energy relating to the various fields of activities of LaboratoRI, not only the laboratory analysis activities. This item is measured with uncertainty of $\pm 0.5\%$, with the exclusion of 2011 when consumption was estimated.
139	Total electricity consumed in the water sector. This figure is calculated.
140	Quantity of drinking water used by the companies included in the water sector for civil/sanitary use. The item, calculated, refers to billed consumption.
141	Quantity of water consumed for civil/sanitary uses within the installations not directly linked with the production phases (offices). The item is calculated to an extent equating to 50% of the overall water consumed by the Parent Company.
142	Total drinking water consumed by the companies included in the water sector. The item, calculated, refers to billed consumption.
143	Total quantity of chemicals used in the waste water treatment process. This is obtained from the sum of the consumption registered for the following substances: polyelectrolytes, sodium hypochlorite, ferric chloride, lime. This figure is calculated.
144	Total quantity of lubricant oil and grease used for the apparatus of the water sector (pumps, centrifuges, engines, etc). This figure is calculated.
145	Electricity used for the running of the waste water treatment plants and for the running of the sewage network. The item is measured with uncertainty of $\pm 1\%$.

FUELS USED BY THE GROUP (VEHICLE FLEET AND CONDITIONING)

Item No	explanation – comment
146	Total quantity of petrol used for the Acea Group's vehicle pool. A density value of 0.735 kg/l was used to convert from volume (litres) to mass (kg). This item is measured with uncertainty of $\pm 0.5\%$.
147	Total quantity of diesel used by Acea Group's vehicle fleet. A density value of 0.835 kg/l was used to convert from volume (litres) to mass (kg). This item is measured with uncertainty of $\pm 0.5\%$.
148	Total quantity of gas oil used to heat Acea and Acea Ato 2 workplaces and to power generators. A density value of 0.835 kg/l was used to convert from volume (litres) to mass (kg). This item is measured with uncertainty of $\pm 0.5\%$.
149	Total quantity of natural gas used for heating working environments. In November 2013 (impacting on winter season) the boiler of the piazzale Ostiense has been replaced with a condensing boiler that, thanks to its efficiency, contributed to the reduction of fuel consumption. This item is measured with uncertainty of $\pm 0.5\%$.
150	Total quantity of LPG (liquid petroleum gas) used for heating working environments. A density value of 0.550 kg/l was used to convert from volume (litres) to mass (kg). This item is measured with uncertainty of $\pm 0.5\%$.

SPILLS AND WASTE – ENERGY SECTOR

Item No	explanation – comment
151	Total quantity of carbon dioxide emitted into the atmosphere as a consequence of the generation of thermoelectric energy from fossil fuels and from the waste to energy treatment of RDF and pulper. This is a "physiological" product deriving from combustion. The item is calculated as the sum of the items 152 and 153.
152	Quantity of carbon dioxide emitted into the atmosphere by the Acea Produzione plants. This item is calculated according to current legislation.
153	Quantity of carbon dioxide emitted into the atmosphere by the A.R.I.A. waste to energy plants. The doubling in the amount of 2013 quantities compared to 2012 depends on the restart of the plant in Terni, which wasn't working until December 2012. This figure is calculated.
154	Total quantity of nitric oxides (NO+NO ₂) emitted into the atmosphere as a consequence of the generation of thermoelectric energy from fossil fuels and from the waste to energy treatment of RDF and pulper. Their presence in trace form in the emissions is due to the secondary undesirable reactions which take place at a high temperature between the nitrogen and the oxygen in the air. This figure is calculated.
155	Quantity of nitric oxides (NO+NO ₂) emitted into the atmosphere as a consequence of the generation of thermoelectric energy from fossil fuels in the Acea Produzione plants. This figure is calculated.
156	Quantity of nitric oxides (NO + NO ₂) emitted into the atmosphere by the A.R.I.A. waste-to-energy plants. The considerable increase in 2013 is due to the restart of the plant in Terni, which wasn't working for two years prior to revamping. This figure is calculated.
157	Total quantity of carbon monoxide (CO) emitted into the atmosphere as a consequence of the generation of thermoelectric energy from fossil fuels and waste to energy process. The presence of this pollutant in the emissions is due to incomplete combustion reactions and represents a symptom of decline in the combustion reaction efficiency. This figure is calculated.
158	Total quantity of carbon monoxide (CO) emitted into the atmosphere as a consequence of the generation of thermoelectric energy from fossil fuels in the Acea Produzione plants. This figure is calculated.
159	Quantity of carbon monoxide (CO) emitted into the atmosphere by the A.R.I.A. waste-to-energy plants. This figure is calculated.
160	Total quantity of sulphur dioxide (SO ₂) emitted into the atmosphere as a consequence of the generation of thermoelectric energy from fossil fuels and from the waste to energy treatment of RDF and pulper. However, the substantial increase of 2013 is due to restart of the plant in Terni, that wasn't working for two years, prior to revamping. The use of natural gas and gas oil with a low sulphur content in the plants made it possible to sharply contain this type of emission. This figure is calculated.
161	Quantity of sulphur dioxide (SO ₂) emitted into the atmosphere as a consequence of the generation of thermoelectric energy from fossil fuels in the Acea Produzione plants. This figure is calculated.
162	Quantity of sulphur dioxide (SO ₂) emitted into the atmosphere by the A.R.I.A. waste to energy plants. The substantial increase of 2013 is due to restart of the plant in Terni, that wasn't working for two years, prior to revamping. This figure is calculated.
163	Total quantity of dust (microscopic particles with an average aerodynamic diameter equal to or less than 10 thousandths of a millimetre) emitted into the air as a consequence of the generation of thermoelectric energy using fossil fuels and from the waste to energy treatment of RDF and pulper. This mainly involves unburnt amorphous carbon, with traces of other compounds of a mixed composition obtained as a by-product of the combustion when this does not take place completely.
164	Quantity of dust emitted into the atmosphere as a consequence of the generation of thermoelectric energy from fossil fuels in the Acea Produzione plants. This figure is calculated.

SPILLS AND WASTE – ENERGY SECTOR (SEGUE)

Item No	explanation – comment
165	Quantity of dust emitted into the atmosphere by the A.R.I.A. waste-to-energy plants. This figure is calculated.
166	Total quantity of waste water treated, deriving from thermoelectric production activities. This item is gauged with uncertainty of $\pm 2\%$.
167	This item coincides with item 109.
168	Total quantity of hazardous waste (pursuant to Italian Legislative Decree No. 152/06) disposed of by Acea Group companies with the exclusion of the waste to energy sector. The item is measured with uncertainty of $\pm 2\%$.
169	Hazardous waste (pursuant to Italian Legislative Decree No. 152/06) disposed of from the waste to energy sector. This basically involves light ash and slag deriving from incineration. The considerable increase in 2011 was due to the change in the CER code of the slag following the amendments introduced to the environmental consolidation act, as well as the activation of the two new lines. The item is measured with uncertainty of $\pm 2\%$.
170	Total quantity of non-hazardous waste (pursuant to Italian Legislative Decree 152/06) disposed of by the Acea Group companies with the exclusion of the waste to energy sector. The item is measured with uncertainty of $\pm 2\%$.
171	Non-hazardous waste (pursuant to Italian Legislative Decree No. 152/06) disposed of from the waste to energy sector. This is essentially heavy ash and slag, deriving from incineration. The item is measured with uncertainty of $\pm 2\%$.

SPILLS AND WASTE – ENVIRONMENT

Item No	explanation – comment
172	Hazardous waste (Italian Legislative Decree No. 152/06) disposed from the Kyklos and Solemme plants. The figure is calculated as a sum of contributions from the two plants.
173	Non-hazardous waste (Italian Legislative Decree No. 152/06) disposed from the Kyklos and Solemme plants. The figure is calculated as a sum of contributions from the two plants.
174	Hazardous waste (Italian Legislative Decree No. 152/06) disposed of by the plant of SAO. It is the waste excluded from "Waste product". The data is measured with an uncertainty of $\pm 2\%$.
175	Leachate derived from activities at the composting plants and at SAO. The leachate produced at Kyklos is completely sent to external treatment or retrieved internally for industrial uses, not downloaded on receiving bodies. The data is measured with an uncertainty of $\pm 2\%$.
176, 177, 178, 179	Among the emissions in Environment, the following are described: dust, Volatile Organic Compounds, ammonia, volatile inorganic acids. The data refer only to the plant of Kyklos. In 2013 emissions have increased because the plant has started running a new emission point that means an in-flow biofilter with authorized flow of 60,000 Nm ³ /h, that in the preceding year could not be considered as at start-up.

SPILLS AND WASTE – WATER SECTOR

Item No	explanation – comment
180	Total quantity of sludge disposed of by Acea Ato 2. This sludge is non-hazardous waste. The item is measured with uncertainty of $\pm 2\%$.
181	Total quantity of sand and sediment disposed of by Acea Ato 2. The item is measured with uncertainty of $\pm 2\%$.
182	Total quantity of hazardous waste (pursuant to Italian Legislative Decree No. 152/06) disposed of by Acea Ato 2 plus a portion produced by the Parent Company ascribed in equal parts to the two areas of activities, energy and water. The figure is measured with uncertainty of less than $\pm 2\%$.
183	Total quantity of non-hazardous waste (pursuant to Italian Legislative Decree 152/06) disposed of plus a portion produced by the Parent Company ascribed in equal parts to the two areas of activities, energy and water. The item is measured with uncertainty of $\pm 2\%$.
184	Total quantity of sludge disposed of by all the water companies in the Acea Group, excluding Acea Ato 2. This sludge is non-hazardous waste. This figure is calculated.
185	Total quantity of sand and sediment disposed of by all the water companies in the Acea Group, excluding Acea Ato 2. This figure is calculated.
186	Total quantity of hazardous waste (pursuant to Italian Legislative Decree No. 152/06) disposed of by all the water companies in the Acea Group, excluding Acea Ato 2. This figure is calculated.
187	Total quantity of non-hazardous waste (pursuant to Italian Legislative Decree 152/06) disposed of by all the water companies in the Acea Group, excluding Acea Ato 2. Inert material is also included. This figure is calculated.

ACEA GROUP SPILLS AND WASTE - EMISSIONS FROM VEHICLES

Item No	explanation – comment
188	Total quantity of carbon dioxide emitted by the Acea Group vehicle fleet. The item was calculated, from 2012, using Sinanet emission factors (www.sinanet.isprambiente.it). In previous years the item was calculated using the COPERT IV programme. The increase in 2012 compared with 2011 depends on an expanding perimeter.
189	Total quantity of nitric oxides emitted by the Acea Group vehicle fleet. The item was calculated, from 2012, using Sinanet emission factors (www.sinanet.isprambiente.it). In previous years the item was calculated using the COPERT IV programme. The increase in 2012 compared with 2011 depends on an expanding perimeter.
190	Total quantity of carbon monoxide emitted by the Acea Group vehicle fleet. The item was calculated, from 2012, using Sinanet emission factors (www.sinanet.isprambiente.it). In previous years the item was calculated using the COPERT IV programme. The increase in 2012 compared with 2011 depends on an expanding perimeter.
191	Sulphur dioxide emissions by vehicles were not calculated, as they were extremely small amounts deriving from combustion of modest quantities of sulphur found in latest-generation fuels.
192	Total quantity of carbon dioxide emitted by the air-conditioning systems in the work environments. In 2013 the item decreased due to new condensing boiler that has determined lower natural gas consumption. This item is calculated under the assumption that each toe of fuel used creates 3 tons of CO ₂ .

2013

ACEA SUSTAINABILITY REPORT

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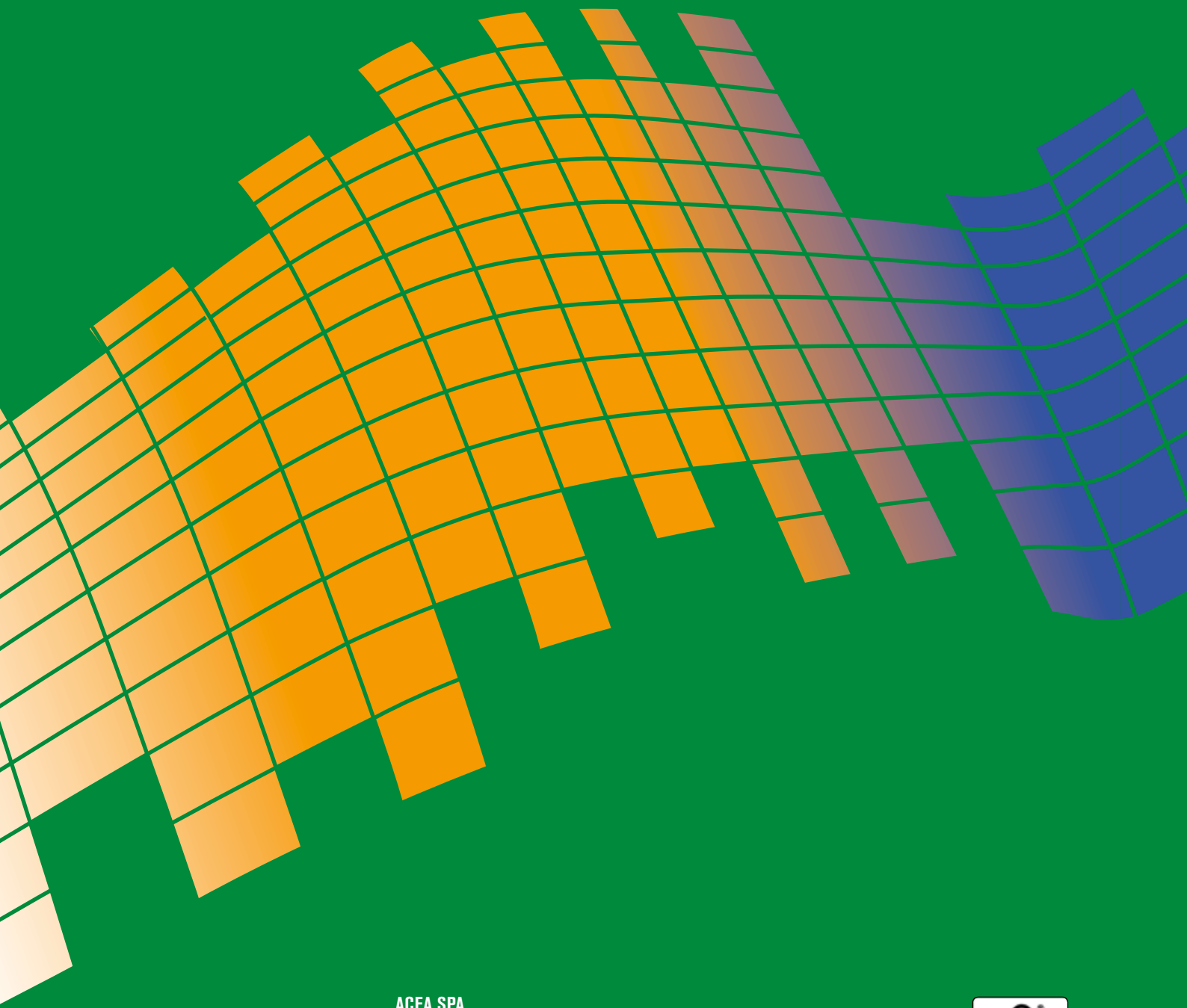
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