



This document has been prepared in accordance with the Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI) G3.1, application level A+.

This report is supplemented by other documents which may be viewed online: www.a2a.eu.

Shared ideas: the dialog for growth





2013

Letter to stakeholders	6	3 Economic responsibility	49
		3.1 The Group's 2013 results	5
		3.2 Formation of Value Added	5
Introduction	8	3.3 Distribution of Net Global Value Added	5
The A2A Group's Sustainability Report	8	3.4 Capital Expenditure	5.
Methodology	8	3.5 Shareholders and Investors	54
Determining scope	9	Composition of share capital	54
Materiality	11	A2A in the stock market indices	5
		A ₂ A in the sustainability rating	56
		Relations with shareholders and investors	5
1 The A2A Group	15	3.6 The numbers	58
Business areas and structure of the Group	16		
Size of the organization and markets served	19		
Significant changes in the corporate structure	20	4 Environmental responsibility	6
Companies outside the scope of consolidation	20	4.1 Environmental management	6:
		Environmental policy	6
		Environmental management system	6
2 Strategies and policies for sustainability	25	Management of environmental emergencies	6
2.1 Mission and Vision	26	Environmental accounting	6
2.2 Business Plan 2013-2015	26	Research and innovation for the environment	66
2.3 Sustainability Plan 2013-2015	29	Biodiversity and the countryside	68
2.4 Partnerships and awards for sustainability	33	Effects connected with transport	7:
2.5 Corporate Governance	34	Greenhouse gas emissions	7:
Corporate Governance Bodies	34	Removal of asbestos and polychlorinated biphenyls	7.
Corporate Governance Tools	40	4.2 Responsible management of energy production and distribution	74
Regulatory framework	42	Efficiency in energy production	7:
2.6 Chart of stakeholders and engagement initiatives	42	Management of environmental aspects in energy production	8

	4 a Dagnangible waste management	•	The systemars and public served	156
	4.3 Responsible waste management	92	5.2 The customers and public served	156
	Integrated waste cycle	93	Selling electricity and gas	157
	Efficiency in the integrated waste management service	96	District heating and heat management	173
	Managing environmental aspects of the integrated waste cycle	100	Integrated water service	177
	4.4 Responsible management of the Integrated Water Service	102	Environmental services	181
	The Integrated Water Service	103	Management of complaints and disputes	186
	Managing environmental aspects of the integrated water service	104	Tables: customer numbers	189
	4.5 Tables: environmental numbers	106	5.3 Suppliers	200
	Activity data	106	Tender procedures	201
	Resources	110	Supplier validation	202
	Air and climate	114	Sustainable supply chain management and certification requirements	204
	Biodiversity	120	5.4 Institutions and local communities	206
	Discharges and emissions into water	121	Dialogue with Institutions	207
	Waste produced by the Group	122	Actions on behalf of local communities	210
		•	Environmental education	218
		•	Media Relations	220
5	Social responsibility	125	A ₂ A on the web	220
	5.1 A2A people	126		
	Human resources management	127		
	Equal opportunities policy	128	Statement of compliance	222
	Hiring policies and staff turnover	129		
	Remuneration and incentives	130		
	Worker health and safety	131	Statement of the level of compliance with GRI guidelines	224
	Industrial relations	134		
	Development and training	135		
	Internal Communications	138		
	Other initiatives benefiting employees	139		
	Tables: A2A people numbers	141		
		•		

Letter to stakeholders

We are pleased to present the A2A Group's 6th annual Sustainability Report. The facts and figures that it contains evidence our commitment to environmental, economic, and social responsibility.

For the first time, the Report includes the activities of Edipower, which became part of the Group in 2013, making A2A the country's second largest electricity provider. Edipower can lay claim to a decade of commitment to sustainability reporting, based on the same principles and values that inform A2A in terms of transparency and responsibility to stakeholders.

The organizational integration of Edipower and the formation of A2A Ambiente, which brings together all of the Group's activities and assets in the environmental sector, are among the most significant events of 2013. It was a year that, despite the persistent difficulties in the economic system at both the global and national level, still brought positive results for the Group, thus confirming the validity of its business model. A2A succeeded in maintaining its ability to create and deliver value to shareholders and all stakeholders, reaching important medium-term objectives in the very first year of the 2013-2015 Business Plan.

At a time when such issues as employment, health, and the environment have often become essential for the reference communities, A2A is also committed to honing its ability to grasp and interpret the expectations of its stakeholders. To this end, we launched a process designed to consistently improve the way we identify "core" issues, i.e. the aspects considered to be most relevant from the standpoint of sustainability. The results of this analysis culminated in a materiality matrix, which is found for the first time in this Report.

Looking at the year's results in terms of economic responsibility, A2A generated gross global value added of nearly 1.6 billion euro during a year marked by severe recession.

This amount was allocated to staff compensation (32%), remuneration of risk capital (6%) and of lending capital (10%), and transfers to the public administration (16%) and to local communities (6%), as well as to depreciation, amortization, and company reserves (30%). Equally important is the contribution made by the Group's business to the economy at the national and local level, involving several thousand suppliers who, in 2013, received more than 8,800 orders totaling 693 million euro, of which 97% went to Italian companies and 65% to Lombardy companies. In addition, A2A made investments during the year totaling 280 million euro, of which 59 million euro went toward initiatives aimed at improving environmental management.

With regard to environmental responsibility, a new Quality, Environment, and Safety Policy was launched. Also, a new Organizational Model for Health, Safety, and the Environment was adopted, which expanded the role of corporate structures, under the coordination of the parent company, in developing Environmental Management Systems. These already cover all hydroelectric and thermoelectric production facilities and waste treatment plants, with the number of plants with EMAS environmental certification increasing from 13 to 18.

Thanks in part to the contribution made by Edipower's hydroelectric complexes in 2013, the share of electric power produced from renewable sources increased considerably from 36% to 42%, compared with a national average of 27% (in 2012). In terms of the production of thermal energy, A2A has proceeded to diversify its sources and develop high-efficiency cogeneration, with 47.4% of the Group's total production coming from thermal energy produced from waste. The use of green technologies – hydroelectric, cogeneration, recovery of energy from waste – has a sizeable environmental benefit: more than 3 million metric tons of CO2 were avoided in 2013 through the fossil fuel savings and lower landfill use.

With regard to air quality, 2013 saw an appreciable improvement in the average CO2 emission factor per kilowatt hour (-4%). In addition, the total amount of dioxins emitted by the Group's plants fell by 27% to just one one-hundredth of gram, due to fume concentrations being maintained well below legal limits.

In the environmental sector, where A2A Ambiente is a national leader, almost all collected municipal waste (1.2 million metric tons) was recovered as materials (50%) or energy (495), with just a minor share of 1% being sent to landfills. The most significant increases in the rate of differentiated collection were registered in Milan (+6%), Bergamo (+7%), and Varese (+3%). On the whole, A2A Ambiente treated 2.5 million metric tons of waste at its plants.

In terms of management of water services, A2A increased the level of attention paid to the monitoring of water quality, with up to 3,224 parameters being analyzed per million cubic meters supplied (\pm 30% over 2012).

From a social standpoint, the Group continued its commitment to the community by providing support for social, cultural, environmental, and sporting efforts in the regions where it operates. It distributed more than 5 million euro in the form of donations, sponsorships, and contributions to the Group's two foundations. There is also an abundance of dialogue and collaboration initiatives involving consumer and environmental associations, such as roundtables for drafting charters of services, joint efforts to battle unfair business practices, and participation in the working group AEEGSI in creating the new conciliation service for energy customers.

With respect to customer relations, as in past years, A2A Energia again registered high levels of customer satisfaction for services relating to the sale of electricity and gas, as was earlier confirmed by the national survey carried out by the Databank-Cerved Group for the domestic target. Amsa, Aprica, and A2A Ciclo Idrico also scored very well in surveys on the quality of provided services. Thanks to an intense promotional campaign in areas served by district heating about its environmental benefits, A2A Calore&Servizi increased connected building volume by 4%.

As always, A2A opened its doors to let the public experience firsthand its constant commitment to bolstering the protection of the environment. In 2013 some 24,000 people visited the 35 sites open to the public, including more than 19,000 students, a testimony to the privileged relationship that has existed for decades between A2A and the scholastic world.

A2A has continued to invest in the professional development of the nearly 10,000 people who work for the Group (98.4% with a permanent employment contract) by implementing plans for performance management, job postings, managerial training, and continuing education. During the year, 220,000 hours of training were provided, for an average of more than 22 hours per person (+59%). As a result of training in health and safety and the spreading of OHSAS 18001 certifications, the average rate of accidents in the Group decreased from 40.0 to 37.8.

In summary, the year saw the embedding of important changes, in a positive sense, for the A2A Group, with a decisive strengthening in terms of economics, finances, and assets and further progress with regard to the company's role and commitments on issues of social and environmental responsibility.

Although A2A is satisfied with these results, we are already setting new goals for the future in order to ensure that economic growth, social concerns, and environmental protection are in the right balance, including through a positive relationship with stakeholders.

A well-deserved thank you goes out to everyone at A2A, who made all of these things possible in a year in which commitment and the unanimous, timely response to outside challenges were of fundamental importance.

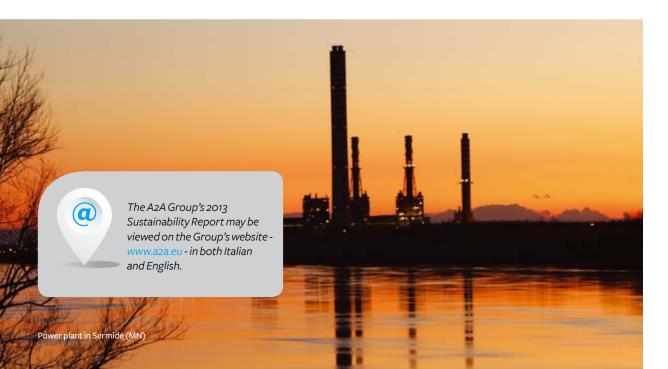
Chairman of the Supervisory Board Pippo Ranci Ortigosa Chairman of the Management Board Graziano Tarantini

Introduction

The A2A Group's Sustainability Report

The Sustainability Report, now in its sixth year, is used throughout the A2A Group as a **tool for communication and management**. A2A uses it to let stakeholders know about the economic, environmental, and social results achieved in 2013 and the efforts made to manage these issues with a view to sustainable development.

In addition to being an essential means by which the Group can communicate with our stakeholders, the Sustainability Report is also used annually as a planning and management tool by A2A management to assess the results achieved and to focus on the new targets to be reached.



This report refers to the period from January 1 to December 31, 2013.

Methodology

The Sustainability Report has been prepared in accordance with the standards of the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines (version 3.1), together with the Electric Utilities Sector Supplement (RG Version 3.1/EUSS Final Version).

The collection of the information contained in this report was coordinated internally by the A2A Group's Corporate Identity and Social Responsibility function – Department of Communications and External Relations – and by the Environment function – Department of Environment, Health, and Safety.

The process involved all companies and functions concerned, which were required to fill out a series of schedules designed for collecting data and information and prepared specifically for sustainability reporting. Data relating to social and economic responsibility were collected using Excel spreadsheets, whereas data about environmental responsibility were collected using Environmental Management System (EMS) software, which tracks, checks, and approves all requested data. In 2013, the EMS system was enhanced with a new feature for tracking data origin (usage bills, meters, processing of SME data, etc.), along with the ability to attach the source document.

The report has been subjected to independent external assurance procedures performed in accordance with the principles and recommendations included in the International Standard on Assurance Engagements (ISAE) 3000, the international standard for the performance of assurance engagements other than audits or reviews of historical financial information, prepared by the International Auditing and Assurance Standards Board (IAASB), a body forming direct part of the International Federation of Accountants (IFAC).

Determining scope

The companies that fall within the scope of this report vary from one section to another. For **Economic Responsibility**, the scope is the same as that used for the consolidated financial statements of the A2A Group.

For **Environmental and Social Responsibility**, the companies in which A2A has a holding of more than 50% and which are part of the Group

for the entire year are included in the scope of the report (as a result, any companies that are acquired/sold/wound up during the year are not considered). The concept of materiality by impact in environmental or social terms is then applied to these companies in the following way:

- for environmental aspects: companies having industrial activities;
- for social aspects: for PERSONNEL, companies having at least one employee; for CUSTOMERS, companies having commercial activities; for SUPPLIERS, companies that do not hold financial investments exclusively.

In the case of companies included within the scope of this report, which in turn hold equity investments, the latter are evaluated using the same reasoning described above. Owned or leased plants are fully consolidated if they appear as the fixed assets of consolidated companies. In the opposite case, if they are material (e.g. the Acerra waste-to-energy plant), they are dealt with by using specific captions.

Companies in which an interest equal to or less than 50% is held or that are not part of the Group for the whole year but are material from an environmental and/or social standpoint may be dealt with by using summarized captions and/or specific sections and/or qualitative information (for example, the Montenegrin company EPCG).

Plants in which A2A has a joint holding of less than 50% but that are material are consolidated on a proportionate basis. According to this principle, the Mincio Thermoelectric Power Station has been consolidated on a proportionate basis at 45%, as far as its environmental data are concerned.

The following table provides a summary of the means by which the various Group companies forming part of the consolidation are accounted for in this report.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

Statement of compliance

Scope of consolidation of A2A group companies for the 2013 Sustainability Report

Company 2013	Environmental importance	Personnel importance	Customer importance	Supplier importance
A2A S.p.A.	Х	х	-	Х
A2A Reti Gas S.p.A.	Х	х	Х	Х
A2A Reti Elettriche S.p.A.	х	х	Х	Х
A2A Calore & Servizi S.r.l.	х	х	Х	X
Selene S.p.A.	-	х	Х	X
A2A Servizi alla Distribuzione S.p.A.	х	х	Х	X
A2A Energia S.p.A.	-	х	Х	X
A2A Trading S.r.l.	Caption*	х	Caption*	Х
A2A Logistica S.p.A.	Caption*	х	-	Х
A2A Ciclo Idrico S.p.A.	Х	X	Х	Х
A2A Ambiente S.r.l.**	Х	X	Х	Х
Aspem Energia S.r.l.	-	X	Х	Х
Abruzzoenergia S.p.A.	х	X	-	Х
Retragas S.r.l.	х	х	Caption*	X
Aspem S.p.A.	х	х	Х	Х
Varese Risorse S.p.A.	х	х	Х	Х
Camuna Energia S.r.l.	Х	Х	Х	Х
Edipower S.p.A.	X	Х	-	Х

^{*}The subject may be dealt with in a text included in a separate caption.

The following are therefore not included in the scope of consolidation for environmental and social responsibility:

Assoene	rgia	Sin	Α.
• / \330CIIC	Siu	J.P	٠, ،.

• Ostros Energia S.r.l.

• Plurigas S.p.A.

in liquidation

• A2A Montenegro d.o.o.

A2A Alfa S.r.l.

• Delmi S.p.A.

financial investment

• Montichiariambiente S.p.A.

• Proaris S.r.l.

• Mincio Trasmissione S.r.l

SEASM S.r.l.

• COSMO Società Consortile a Responsabilità limitata

• A3A S.r.l.

immaterial operations

Compared with the scope of the companies consolidated in the 2012 Sustainability Report, the 2013 report includes Edipower, whereas, compared with scope of companies consolidated in the Group's consolidated financial statements, EPCG (holding of less than 50%) and its subsidiaries are not included.

^{**} Includes the subsidiaries Amsa, Aprica, Ecodeco Hellas, Ecolombardia 18, Ecolombardia 4, Sicura, Sistema Ecodeco UK, A.S.R.A.B., Nicosia Ambiente, Ecoair, Bioase.

Materiality

"materiality" means the significance of an issue for an organization and its stakeholders. In 2013, A2A further developed the process of defining "material" issues. Material issues were identified through a first phase of documentary analysis and a second phase of interviews with key internal representatives.

Analyzed during the first phase were issues that emerged from:

- GRI G4 guidelines, as recently defined;
- in-depth GRI document that identifies issues that are potentially material and specific to the utility sector (Sustainability Topics for Sectors: what do stakeholders want to know?);
- media search aimed at gathering news from the Factiva portal relating to the A2A Group (media perception of economic, environmental, and social performance);
- web monitor operated by the A2A Press Office;
- key stakeholder engagement surveys conducted by the Group in 2013;
- sector benchmarks (which examined companies operating at the national and international level);
- requests coming from key ethical indexes and from socially responsible investors.

Roughly 150 issues were identified in this first analysis.

During the second phase, evaluations were undertaken with representatives from the departments that interface with various stakeholders of the Group in order to map stakeholder engagement efforts that were made in 2013 and the main findings and issues that emerged.

The issues that emerged from the two phases of analysis were then evaluated for materiality by the representatives by means of interviews and four successive workshops involving some 60 operational managers in specific areas, such as production plants, environmental sanitation services, customers, and networks (gas, electric, water).

The representatives were asked to evaluate each identified issue from two perspectives: the materiality of the issue for the A2A Group (materiality of the issue for the organization in terms of economic, environmental, and social impact), and the materiality for stakeholders (i.e., in terms of the influence on evaluations and decisions made by stakeholders). Thus, for 2013, the materiality of the issues concerning internal and external stakeholders of the A2A Group was defined on the basis of the perceptions of the internal representatives.

This process culminated in the placement of 35 issues (identified as being the most material for A2A and/or our stakeholders) in a materiality matrix, with the horizontal axis depicting the materiality of the issue for A2A and the vertical axis showing the materiality for stakeholders.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

Statement of compliance

The resulting matrix is represented here by this process.

It should be noted that the following areas were identified as being the preconditions underlying the process of defining material issues and as such highly material for both A2A and stakeholders:

- creation/allocation of sustainable value over time;
- structure of a transparent, efficient governance model to support business;
- constant attention to issues of legal compliance when doing business.

Materiality matrix

- Switch to Secondary Solid Fuel (SSF)
- 2 Expiration and renewal of licenses (hydroelectric, gas networks ..)
- 3 Assurance of purchasing performance through effective, efficient suppliers
- Efficient management of energy resources and development of renewable ones
- Safeguarding of biodiversity, habitats, and the landscape
- 6 Protection of soil and subsoil and management of waste water
- 7 Sources for the capture and efficient use of water resources
- 8 Air quality and GHG emissions
- Assessment of the impact on the region of new plants/services

- 10 Effective, efficient management of the waste sector
- External communication to stakeholders
- 12) Stakeholder engagement
- (13) Quality of provided services and attention to customers
- Enhancement of rates and regulated components
- 15 Legibility of bills/contracts
- 16 Fairness and transparency of business practices
- 17) Handling of disputes with customers
- (18) Conciliation practices with customers
- (19) Management of categories of vulnerable clients
- 20 Employment
- 21 Processes for selecting personnel and attracting talented workers
- 22 Professional enhancement, training, and development of skills
- 23 Attention to the development of specific employee skills in order to facilitate repositioning on the job market
- 24) Systems for enhancing staff performance

- 25) Pay and staff incentives
- 26 Equitable treatment of employees from the standpoint of contracts and territories
- 27 Equal opportunity/diversity and inclusion
- (28) Internal communication
- 29 Integration of personnel in other acquired companies/company reorganization
- Work/life/benefit reconciliation and company welfare
- 31 Employee health and safety at the workplace
- Health and safety of contractors and subcontractors
- 33) Effective management of roadworks for digging and pipe-laying
- 34 Selection of suppliers by taking into account (in relation to the area of activity) environmental and safety aspects
- 35 Enhancement of suppliers in the region and/or of the categories of suppliers most disadvantaged
- 36 Support for initiatives and projects in the region
- 37 Environmental education programs and initiatives







The A2A Group

1.1 Business areas and structure of the Group

The A2A Group is a leader in all business areas in which we operate: **energy, networks, heating, environment**. Following the acquisition of Edipower, the company is today the second largest national power producer, with approximately 10 GW installed and a production mix oriented toward renewable sources, with hydroelectric representing 42% of generated power.

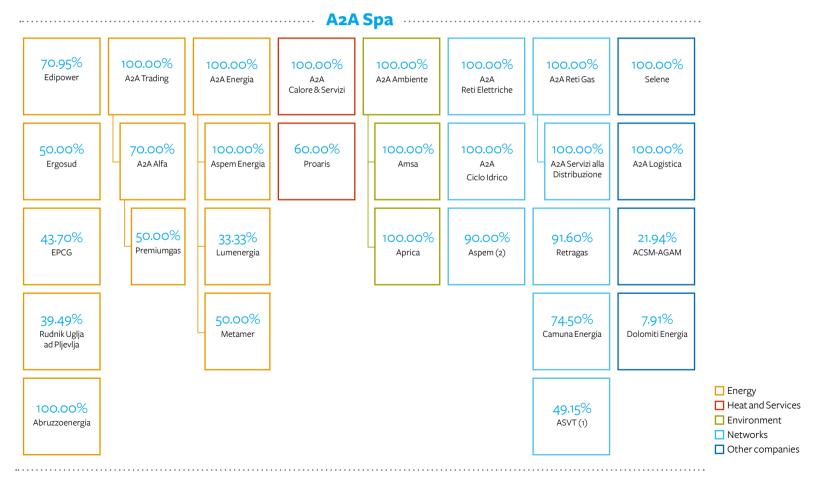


The Italian leader in environmental services and district heating, the A2A Group is also the second largest operator of electricity distribution networks and one of the top providers of gas and integrated water-cycle networks.

With more than 12,000 employees, **A2A's business extends beyond Italy** to include, in particular, the main European markets for electricity and gas. We produce and distribute electrical power in the Balkans, and in some European countries we are active in the environmental sector by building waste-treatment plants.

A2A is listed on the Milan Stock Exchange and has registered offices at Via Lamarmora 230 in Brescia and administrative headquarters at Corso di Porta Vittoria 4 in Milan.

O2 Structure of the A2A Group



⁽¹⁾ Of which 0.38% is held through A2A Reti Gas.

Introduction

The A2A Group

Business areas and structure of the Group

Size of the organization and markets served

Significant changes in the corporate structure

Companies outside the scope of consolidation

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

Statement of compliance

 $^{(2) \} There \ are \ put \ options \ on \ an \ additional \ interest \ in \ the \ share \ capital \ of \ these \ companies.$

The A2A Group operates mainly in the production, sale, and distribution of electric power, the sale and distribution of gas, and the production and distribution of heat through district-heating networks, as well as in the environmental and integrated water-cycle sectors.



The Group's structure and our diversification enable us to provide a vast range of services and meet the various needs of our (private and corporate) customers.

O3 Sectors of the A2A Group

OTHER SERVICES **HEAT & SERVICES** & CORPORATE Thermo-and Collection and Electricity networks Cogeneration plants Other services hydroelectric plants sweeping District heating Disposal and energy Energy management Gas networks Corporate services networks recovery Sale of electricity Sale of heat and other Treatment Integrated water cycle & gas services A description of the sectors and the related quantitative and economic data may be found in the 2013 Report on Operations published at www.a2a.eu







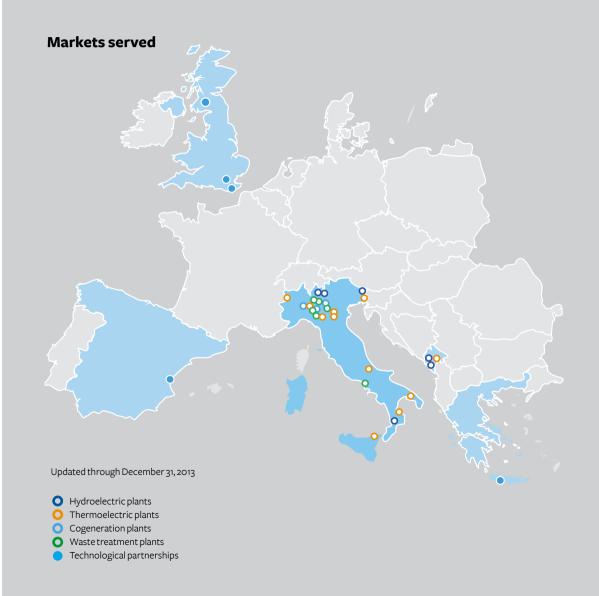
1.2 Size of the organization and markets served

The information reported in the following table and in the following image refers to the scope of consolidation in the consolidated financial statements of the A2A Group.

O4 Size of the organization*

	2011	2012	2013
Revenues (M€)	6,130	6,480	5,604
Gross operating income (M€)	924	1,068	1,133
Net income (M€)**	-423	260	62
Net financial debt (M€)	4,021	4,372	3,874
Equity of the Group and third parties (M€)	3,593	3,697	3,348
Dividend (€ per share)	0.013	0.026	0.033
Average market capitalization (M€)	3,058	1,574	1,990
A2A workforce	11,886	12,563	12,392
Installed capacity (GWh)	6.6	12.0	10.3
Electric power produced (GWh)	14,391	16,107	16,267
Heat distributed through district heating (GWht)	2,078	2,217	2,382
Waste treated (kt)	2,626	2,457	2,517
Electric power distributed (GWh)	13,957	14,053	13,628
Gas distributed (Mm3)	2,011	2,010	2,076
Water distributed (Mm3)	69	69	63

^{*} Includes EPCG.



^{**} Includes the effect of asset write-downs equal to 118 million euro, of which 94 million euro relates to the results of from the impairment testing of the "EPCG" cash-generating unit in 2011, 2 million euro in 2012, and 250 million euro, of which 237 million euro relates to the results of from the impairment testing of the "Electricity" cash-generating unit, in 2013.

1.3 Significant changes in the corporate structure

In 2013, in keeping with the guidelines contained in the business plan that was presented to the financial community in November 2012, the Group finalized two major corporate reorganizations in the areas of electric power generation and the environment:

- **Edipower.** On January 1, 2013, the merger of Delmi S.p.A. into Edipower S.p.A. became effective. In June 2013, the shareholders of Edipower approved the spin-off, effective November 1, of a number of operations to Iren Energia, consisting primarily of the thermoelectric plant in Turbigo (Milan) and the hydroelectric complex in Tusciano (Salerno). The transaction, which resulted in the shareholding of A2A S.p.A. in Edipower rising to 71%, enabled the Group to entirely transport the installed capacity of the subsidiary's plants, thus optimizing management of the generation portfolio. At the same time, initiatives were put into place to increase operational efficiency through closer coordination between A2A and Edipower.
- A2A Ambiente. On July 1, 2013, the company A2A Ambiente S.r.l. was formed. It was assigned all of the A2A Group's activities in the waste-treatment and landfill sector, as well as the holdings in the waste-collection companies Amsa and Aprica, which were previously controlled by the parent company A2A. Effective December 31, 2013, Partenope Ambiente was also merged by incorporation into A2A Ambiente. The new company brings together under one roof a unique group of plants in Italy. This also lays the groundwork for a major path of rationalization and optimization in the environmental area by achieving economies of scale through the integration of overlapping activities and improvement in the planning of waste flows.

In parallel with these key transactions, A2A also continued in 2013 to implement a strategy of rationalizing our employed capital and improving our financial position by selling our non-strategic operations. In this regard, the most significant transaction was the sale of Chi.na.co S.r.l, owner of five small hydroelectric and flowing-water

plants in the province of Brescia, to the Swiss BKW Group for approximately 38 million euro.

1.4 Companies outside the scope of consolidation

As described in the introduction, the Montenegrin company EPCG was not consolidated in the 2013 Sustainability Report since A2A's holding was less than 50%. However, in that EPCG is material from both an environmental and social standpoint, the following summary information is provided.

Main investments with respect to the **EPCG** Group in 2013:

- unscheduled maintenance at the **thermoelectric power station in Pljevlja**, which improved the plant's efficiency and ensured its reliability. Work continued on the construction and burial of the exhaust manifold, as well as activities related to the feasibility of building a second generation group. In addition, the electrostatic precipitator definitively came on line, in full compliance with emission limits;
- completion of modernization work at the hydroelectric power station in Piva, including refurbishment of the electric station, the perimeter, and the power station's auxiliary systems;
- performance of maintenance and improvement work at the hydroelectric station in Perućica, which enabled full recovery of nominal power of 305 MW. In addition, work continued on construction of the new Pelton wheels for Group 5, and a request for tender was issued for those for Group 6.

With regard to other new investments, the company examined and defined the options for improving the management of Perućica using the branch of the river Zeta and connection to the tank system at Liverovići. Hydrological and geological studies were completed for

the site at Komarnica and for the preliminary project for the potential use of water from Bileća Lake that is attributable to the State of Montenegro, and preliminary checks were made about the potential plant at Kruševo.

In terms of power distribution, a variety of maintenance work was performed on the network, with the overhaul of 46 35-kV lines and on current infrastructure.

EPCG power production plants

		Hydroe plar			Thermoelectric plants
	Piva	Perucica	Small hydro plants*	Total Hydro	Pljevlja
Installed power (MW)	342	307	2.47	651	218.5
Energy produced (GWh)	1,134	1,334	6.13	2,474	1,311

^{*} The small hydro plants include those of Glava Zete and Slap Zete, which are owned by Zeta Energy. EPCG holds a capital stake in Zeta Energy of 57.86%.

Summarized below are the main data relating to EPCG's social responsibility.

of EPCG personnel by category and type of contract

		2011		2012		2013			
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Senior managers		1	33	30	1	31	29	1	30
Middle managers	78	27	105	37	13	50	42	18	60
White-collar workers	707	474	1,181	771	456	1,227	726	458	1,184
Blue-collar workers	1,420	15	1,435	1,285	30	1,315	1,131	14	1,145
Permanent workers	1,911	471	2,382	1,891	458	2,349	1,878	461	2,339
Fixed-term contract workers	326	46	372	232	42	274	50	30	80
Total	2,237	517	2,754	2,123	500	2,623	1,928	491	2,419
of which part-time workers	52	11	63	38	44	82	22	12	34

Introduction

The A2A Group

Business areas and structure of the Group

Size of the organization and markets served

Significant changes in the corporate structure

Companies outside the scope of consolidation

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

Statement of compliance

2013

O7 Hiring during the past three years by category

		2011 2012		2013					
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Permanent workers	10	2	12	5	0	5	8	2	10
Fixed-term contract workers	115	10	125	35	12	47	43	25	68
Total	125	12	137	40	12	52	51	27	78

O8 Customers served by EPCG

Supply points for electricity service	2011	2012	2013
Domestic	331,235	337,495	344,589
Other consumers by voltage level			
35kV	24	25	24
10kV	485	499	517
o.4kV - Stage 1	1,463	1,566	1,350
o.4kV - Stage 2	29,937	30,367	31,589
Total	363,144	369,952	378,069





O9 EPCG providers

		2011		2012	1	2013	}
Company function	Type of contract	Number of contracts	Value of orders (€)	Number of contracts	Value of orders (€)	Number of contracts	Value of orders (€)
	Supplies	76	3,795,245	65	1,521,312	74	2,067,732
Generation	Services	42	1,734,355	58	2,711,575	63	2,377,417
	Works	63	2,518,904	31	1,142,214	26	5,368,269
	Supplies	72	7,232,208	39	5,711,999	44	6,101,907
Distribution	Services	13	1,151,985	4	202,159	14	585,380
	Works	28	2,763,781	18	3,713,421	82	4,079,180
	Supplies	28	229,792	20	582,216	28	1,138,489
Ch.	Services	12	3,308,569	9	1,298,970	1	277,200
Supply	Works	2	40,640	0	0	1	36,266
	Total	336	22,775,479	244	16,883,866	333	22,031,840

The Montenegrin subsidiary, EPCG, is participating in a program launched by the **Clinton Global Initiative**, which sees Podgorica as a city involved in the **"Smart Meters" project** for the sustainable consumption of electricity. When the project commenced in 2012, the target was to install 150,000 "smart" meters, but that target was already surpassed in 2013. The results achieved with these installations confirm the benefits that were expected in terms of improving the quality of readings, increasing the effectiveness of disconnections, boosting collections, reducing network losses, and eliminating manual readings.

In 2013 EPCG supported regional initiatives for a total of **more than 300 thousand euro**.

Introduction

The A2A Group

Business areas and structure of the Group

Size of the organization and markets served

Significant changes in the corporate structure

Companies outside the scope of consolidation

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

Statement of compliance





Strategies and policies for sustainability

2.1 Mission and Vision

Quality service, sustainability, respect for the environment, innovation and technological development, and efficiency and synergy between the different business sectors – these are A2A's strong points. As Italy's leading multi-utility company, the Group intends to pursue our path of excellence, leveraging our strong connection to the local territory and developing new geographic and business areas to ensure continued added value for our customers, suppliers, employees, shareholders, community members, and institutions.

2.2 Business Plan 2013-2015

The implementation of the **business plan** approved in November 2012 led to following results in 2013:



The main consolidation targets of the 2013-2015 Business plan were attained in 2013. For 2014, A2A commits to continue the consolidation effort and launch a growth phase through the following:

- a renewed focus on the efficiency plan in order to address the ongoing challenges of the current economic environment;
- developing new initiatives in several core business areas in alignment with the established guidelines of efficiency, synergy between business value chains, and strategic manufacturing/financial partnerships.



Equity control of Edipower

Starting November 1, 2013, equity control jumped to 71%. This facilitated an accelerated integration of operational activities, thereby reinforcing A2A Group's position as the second leading electricity operator in Italy.

On the environmental sector of the environmental sector of A2A Ambiente, Italy's leading company for waste treatment, disposal, and energy recovery.

Introduction

The A2A Group

Strategies and policies for sustainability

Mission and Vision

Business Plan 2013-2015

Sustainability Plan 2013-2015

Partnerships and awards for sustainability

Corporate Governance

Chart of stakeholders and engagement initiatives

Economic responsibility

Environmental responsibility

Social responsibility

Statement of compliance

2013

Growth targets have been identified across 11 strategic projects featuring diversified time horizons:

Sector		Projects	Short term	Medium term
		Rebuilding the combined-cycle thermoelectric plant portfolio		
ENERGY		Growing sales profitability		
	#	Conversion of certain production systems		
		Development of high-margin segments of the environmental value chain (remediation and treatment of organics) as well as through mergers and acquisitions	•	
ENVIRONMEN	П	Expansion of the city-cleaning business in Northern Italy		
	•	Expansion of waste treatment and disposal business in Southern Italy and abroad		•
HEAT AND		Further development of cogeneration and district heating as well as additional integration with the incinerator network	•	
SERVICES	M	Development of the transportation network from the Cassano d'Adda plant and the extension of the Milan district heating network		•
		Development of energy efficiency projects (public lighting, etc.)	•	
NETWORKS		Gas distribution calls for tenders		
		Geographic consolidation of water services		
OTHER		Cost containment	•	•

2.3 Sustainability Plan 2013-2015

The Group's new sustainability plan was updated in 2012 and includes the goals, commitments and activities for 2013-2015.

The following table sets out the commitments of the sustainability plan and provides details on the state of activities in 2013.

TOPIC/STAKEHOLDERS

GOVERNANCE				
Commitment	Indicator	2012	2013	Activities/results 2013
Develop stakeholder engagement.				For the first time, a structured reporting system was created using a database to identify stakeholder engagement and input.
Define a Group sustainability policy.				To prepare for defining the policy, the most relevant sustainability issues raised in the 2013 materiality analysis were analyzed.
Review the Quality, Environment and Safety Policy.				The new QES policy was enacted in October 2013.

ECONOMIC RESPONSIBILITY					
Commitment	Indicator	2012	2013	Activities/results 2013	
Sustain economic development in the local area in which the Group operates through direct employment and the spin-off work generated by our activities.				Hired 528 employees of whom 52% on a permanent basis. Group companies operating in Italy issued more than 8,800 orders, for a total of over 693 million euro gross.	
Distribute value to stakeholders.	Gross global value added distributed (€).	1,727	1,591	See details in section 3.3.	
Make investments in production capacity.	Capital expenditure (€).	353	280	See details in section 3.4.	

ntroduction

The A2A Group

Strategies and policies for sustainability

Mission and Vision

Business Plan 2013-2015
Sustainability Plan 2013-2015

Partnerships and awards for sustainability

Corporate Governance

Chart of stakeholders and engagement initiatives

Economic responsibility

Environmental responsibility

Social responsibility

Statement of compliance

ENVIRONMENTAL RESPONSIBILITY					
Commitment	Indicator	2012	2013	Activities/results 2013	
Minimize direct emissions of greenhouse gases.	CO ₂ eq (t).	5.4	6.9	90% of emissions come from thermoelectric sector. This increase is due to the expanding industrial park with the addition of Edipower among consolidated companies.	
	Average CO ₂ emissions factor (g/kWh).	403	385	The average emissions factor decreased by 4% compared to 2012.	
Minimize indirect emission of greenhouse gases.	CO ₂ eq (t).	0.10	0.17	The increase is also due to the change in consolidated companies.	
Keep the proportion of energy produced from renewable sources high.	Production of renewable energy as a proportion of total energy (%).	35.9%	41.8%	The improvement is due to the inclusion of the Edipower hydroelectric plants within the scope of consolidation.	
Minimize the consumption of water used in producing energy.	Water consumption (thousands of m³).	8,616	10,324	The increase in total consumption for the prevalent industrial well water is due to the change in consolidated companies .	

EMPLOYEES	EMPLOYEES				
Commitment	Indicator	2012	2013	Activities/results 2013	
Develop systems of systematic listening.	Employees involved in employee satisfaction surveys (%).	100%	-	There were no employee satisfaction surveys conducted in 2013.	
Use sustainability parameters in appraising performance.	Employees appraised using CSR parameters in the performance appraisal system as a percentage of the total (%).	47%	42%	All senior managers, middle managers, and white-collar workers (except for those working for Camuna Energia and Edipower) are appraised for their sustainability skills in terms of "care in the use of resources and respect for the rules". The decrease is due to the fact that, in 2013, Edipower employees were not included in A2A's performance management system.	
Limit fixed-term employment contracts.	Employees having fixed-term contracts as a percentage of the total (%).	1.5%	1.6%	98.4% of employees are hired with a permanent employment contract. This confirms A2A's use of a stable contractual formula and marginal use of flexibility tools for specific emergency situations (extraordinary and temporary peaks of work, seasonality, and substitution of workers who are temporarily absent).	
Reduce the frequency of accidents through the use of a training and prevention plan.	Accident frequency index (Group average total).	40.0	37.8	In 2013, work continued on OHSAS 18001 certification as well as on updating the guidelines and procedures to identify significant workplace health and safety roles to achieve improved organizational uniformity in these areas and facilitate the activation of the Safety Management System.	

CUSTOMERS				
Commitment	Indicator	2012	2013	Activities/results 2013
Develop methods of systematic listening.				In 2013, Amsa, A2A Ciclo Idrico and A2A Energia conducted customer satisfaction surveys. The results are reported in section 5.2.
Maintain customer satisfaction levels (A2A Energia).	A2A Energia customer satisfaction index.	95.1% (first half year 2012)	92.5% (first half year 2013)	The customer satisfaction index is 2.9 percentage points above the national average.
Develop web and mobile service.	Number of customers who have registered at bollett@mail.	154,988	196,000	A web service for customer meter reading was launched The Chiara2a app was created for A2A Energia customers to provide access to the world of Chiara2a benefits.
Extend loyalty programs.	Number of customers with loyalty program memberships (Chiara2a).	59,719	119,219	As of December 31, 2013, membership had doubled over the previous year.
Extend the application of the joint settlement procedure.				Starting in 2012, offered to all energy seller companies.
Carry out multilingual and audio language campaigns.				The "Guide to reading your energy bill" is available in 6 languages: English, French, Spanish, Arabic, Chinese, and Romanian. In 2013, 530,000 copies were distributed. The AMSA site is available in 10 languages: Italian, English, Spanish, French, Chinese, Arabic, Ukrainian, Romanian, Tagalog, and Sinhala. There is also an audio section for the visually impaired.

Introductio

The A2A Group

Strategies and policies for sustainability

Mission and Vision

Business Plan 2013-2015

Sustainability Plan 2013-2015

Partnerships and awards for sustainability

Corporate Governance

Chart of stakeholders and engagement initiatives

Economic responsibility

Environmental responsibility

Social responsibility

Statement of compliance

SUPPLIERS					
Commitment	Indicator	2012	2013	Activities/results 2013	
Spread a work safety culture among suppliers.				In 2013, 20 workplace accidents were reported among contracting company employees, for a frequency index of 10.42 and severity index of 0.83 Also in 2013, a questionnaire was created to assess supplier sustainability performance as part of the prequalification process. The questionnaire covers all 10 Global Impact principles, including security.	
Encourage the use of suppliers with QES certification.	Value of orders to certified suppliers as a percentage of the total value of orders (%).	>50%	60%	More than 2,100 qualified suppliers have at least one certification: 2,115 are ISO9001 certified, 618 are ISO14001 certified, and 327 are OHSAS18001 certified.	

COMMUNITIES	H-WARE			
Commitment	Indicator	2012	2013	Activities/results 2013
Carry out/encourage environmental education activities.	Number of people visiting Group plants.	19,245	24,331	Numerous environmental education activities have been carried out for local communities in the areas in which the Group operates. These are addressed to adults, young people, and children, with a specific focus on students (see the section "Environmental education" under "Institutions and Local Communities").
Collaborate with environmental and consumer associations.	Number of projects started up on the basis of meetings with residents/associations.	8	12	In 2013, A2A put is commitment into practice by monitoring, listening to, and involving consumers and environmentalists (see also the section "Dialogue with Institutions" under "Institutions and Local Communities").

2.4 Partnerships and awards for sustainability

A2A is a member of the **Global Compact**, the United Nations initiative for promoting the culture of business citizenship, which encourages companies throughout the world to create an economic, social and environmental framework for realizing a healthy and sustainable world economy which is able to guarantee everyone the opportunity of sharing its benefits.



The A2A Group observes and promotes these universal principles in the four areas in which the Global Compact is involved:

- **Human rights.** A2A fully observes the current legislation of the European Union and the countries in which our employees work (Italy and Spain). In 2013, the group did not encounter any situations which might be considered possible violations of the human rights of employees, customers, or national and local communities; it was not subject to any legal action regarding violations of this kind and was not in any way involved in episodes of child or other forced labor. Regarding respect for human rights in the supply chain, it should be noted that only 0.2% of the value of orders made in 2013 involved non-EU suppliers, mainly located in the USA, a country where basic human rights are respected.
- **Labor rights.** A2A guarantees our employees all employment rights: collective bargaining, freedom of association, equal opportunities and health and safety policies (further details on these matters can be found in the section "A2A People" of this report).
- **Environment.** Minimizing the environmental impact of our activities to the utmost is one of A2A's main objectives, affirmed in the Group's Quality, Environment and Safety Policy, which regards all the important environmental aspects that concern or involve A2A, such as the efficient use of resources, containing emissions and the impact of activities on biodiversity and the countryside, the fight against climate change, sustainable waste management (the activities carried out by the Group and our performance in 2013 in this area are presented in the section "Environmental Responsibility" of this report).

• The fight against corruption. A2A implements the Organization, Management and Control Model pursuant to Legislative Decree no. 231/01, which is applicable to all Group companies (the way in which the model is applied is discussed in the section "Corporate Governance Tools" below).

In 2013, A2A took active part in human rights and sustainable supply chain workgroups set up by the Italian network of the Global Compact (for the sustainable supply chain workgroup see chapter 5.3 "Suppliers").



Introduction

The A2A Group

Strategies and policies for sustainability

Mission and Vision

Business Plan 2013-2015

Sustainability Plan 2013-2015

Partnerships and awards for sustainability

Corporate Governance
Chart of stakeholders and engagement initiatives

Economic responsibility

Environmental responsibility

Social responsibility

Statement of compliance

"Edipower human rights guidelines"

2013

Human rights are the inalienable rights of all individuals, without distinction, by virtue of belonging to the human race. They are based on the recognition of the dignity, freedom, and equality of human beings and have been recognized by the United Nations in the Universal Declaration of Human Rights as "the foundation of liberty, justice, and peace in the world."

Edipower decided to formalize this commitment with its June 2013 **publication** aimed at promoting respect for and protection of Human Rights within its business activities. It also encourages all stakeholders, both internal and external to the organization, to act in accordance with these principals and maintain the highest standards of protection for human rights in their businesses.



In 2013, A2A was selected by Unioncamere Lombardia for "Best Business **Practices"** and given the "Best Practices Make Big Companies" award for our demonstrated commitment in projects related to environmental sustainability, work quality, and employee relationships, as well as our community and territory focused initiatives. A2A has joined the Lombardy directory of best business practices to set an example and encourage more companies to follow suit.



2.5 Corporate Governance

2.5.1 Corporate Governance Bodies

The Group has adopted the dual-board system of management and control pursuant to articles 2409-octies and according to the Italian civil code. The chart below sets out our main corporate bodies.



Internal Control Committee

This committee has the duties assigned to it by law, the Corporate Governance Code for listed companies, and the corporate bylaws, as well as any duties specifically assigned by company regulations and/or by virtue of resolutions of the SB. In addition, the committee has the following duties:

- to assist the SB in assessing the internal control system, with particular regard to the control of risks, the information and accounting systems, and the working of the internal audit function; in particular, the committee supports the SB in performing the supervisory and control functions specified by law and by the Company's bylaws;
- to assist the SB in reviewing and approving the separate and consolidated financial statements, the half-yearly financial report, and any interim management reports issued by the Management Board.

Body of Shareholders

- Appoints and removes members of the Supervisory Board
- Establishes the compensation of members of the Supervisory Board
- Establishes the responsibilities of members of the Supervisory Board
- Approves the distribution of earnings
- Appoints the independent auditors

 $Meetings\,are\,convened\,at\,least\,once\,a\,year\,to\,approve\,dividends.$



Supervisory Board (SB)

- CHAIRMAN: Pippo Ranci Ortigosa
- TERM: 3 years (the current board was appointed on May 29, 2012)
- NUMBER OF MEMBERS: 15
- MAIN ROLES: to appoint the MB, determine the compensation of the members of the MB, approve the annual financial statements, and authorize the decisions of the MB regarding the Group's strategic guidelines and extraordinary operations.



Management Board (MB)

- CHAIRMAN: Graziano Tarantini
- TERM: 3 years (the current board was appointed on June 11, 2012)
- NUMBER OF MEMBERS: 8
- MAIN ROLES: to manage the Group, appoint general managers (who may also be members of the MB), and appoint and remove the manager in charge of preparing the Company's accounting documents.

Remuneration Committee

This committee has the duty of assisting the SR in:

- defining remuneration for the members of the MB and SB vested with special powers and responsibilities;
- expressing opinions on the incentives and loyalty programs for members of the MB, for the Group's senior management, and for other employees or groups of employees.

Committee for the Territory

This committee has the duty of assisting the SB in:

- defining the guidelines for cultural and charitable initiatives and promoting the image of the Company and the Group;
- monitoring the impact of A2A's activities in the local areas in which it operates and drawing up proposals regarding the exercising of corporate social and environmental responsibility.

Appointments Committee

This committee has the duty of assisting the SB in:

 performing the activities specified in the Company's bylaws in connection with the appointments made to the management and control bodies.

Corporate & Markets Area General Management

Responsible for:

- direct management of planning processes and activities, investment control and assessment, regulatory
 policies and relations with sector authorities, finance, treasury and risk management, investor relations,
 administration, accounting, financial statements and tax matters, procurement, personnel, organization
 and quality, general services, legal services, acquisitions, mergers and disposals, and information systems;
- management of fuel procurement, planning, plant scheduling and dispatch, portfolio optimization and trading on domestic, international and environment markets, marketing, commercial planning and sales of all the energy vectors, customer relations and commercial channel management, and billing and commercial back-office.

Technical/Operations Area General Management

Responsible for:

- development and management of the electricity and gas distribution businesses, environmental
 services, cogeneration, district heating, heat management and the integrated water cycle; rationalizing
 activities and seeking improvements, presiding over the activities of engineering, and project
 management and the construction of plant and infrastructure;
- setting of group safety and environment policies and ensuring they are implemented and followed;
- ensuring that the Group develops and implements skills in key technologies for the sector.

Introductio

The A2A Group

Strategies and policies for sustainability

Mission and Vision

Business Plan 2013-2015

Sustainability Plan 2013-2015

Partnerships and awards for sustainability

Corporate Governance

Chart of stakeholders and engagement initiatives

Economic responsibility

Environmental responsibility

Social responsibility

Statement of compliance

2013

10 Composition of the Supervisory Board with an indication of membership of other corporate governance bodies

Position	Member	Independent (1)	Internal Control Committee	Appointments Committee	Remuneration Committee	Committee for the Territory
Chairman	Pippo Ranci Ortigosa	Х	X	X		
Deputy Chairman	Fausto Di Mezza	Х	X	X		
Director	Marco Baga	Х				Х
Director	Alessandro Berdini	Х			X	
Director	Marina Brogi	Х			X	
Director	Michaela Castelli	Х		X		
Director	Mario Cocchi	Х			X	
Director	Marco Manzoli	Х	X			
Director	Enrico Giorgio Mattinzoli	Х				Х
Director	Marco Miccinesi	Х				Х
Director	Andrea Mina	Х		X		
Director	Stefano Pareglio	Х				Х
Director	Massimo Perona	Х			X	
Director	Norberto Rosini	Х	X			
Director	Angelo Teodoro Zanotti	X				X

⁽¹⁾ Per the Italian stock market Corporate Governance Code.

11 Composition of the Management Board

Position	Member	Executive	Non- executive	Independent (1)
Chairman	Graziano Tarantini		X	
Deputy Chairman	Francesco Silva		X	X
Director	Giambattista Brivio		Х	Х
Director	Stefano Cao		Х	Х
Director	Bruno Caparini		Х	Х
Director	Maria Elena Cappello		X	X
Director	Renato Ravanelli	Х		
Director	Paolo Rossetti	Х		

(1) Per the Italian stock market Corporate Governance Code.



The Italian stock market Corporate Governance Code is available on the Borsa Italiana website (www.borsaitaliana.it). A description of the Company's implementation of Corporate Governance Code is available in the Governance section of the Group's website: www.a2a.eu

The **compensation** of members of the Supervisory Board is approved by the shareholders, while that of members of the Management Board and members of the Supervisory Board having specific responsibilities, functions or powers is approved by the Supervisory Board.

All compensation is fixed, except that of the Chairman of the Management Board, which also has a variable portion that is mainly linked to long-term objectives measured on the basis of the business plan.



Further information on the compensation received by the members of the Supervisory Board, the Management Board, and the General Managers for the year ended December 31, 2013, may be found in the 2014 Remuneration Report published on the web site: www.a2a.eu

12 Age of members of the Management and Supervisory Boards as of December 31, 2013

Age range	Management Board	Supervisory Board
Under 30	0	0
From 31 to 40	0	0
From 41 to 50	2	4
Over 50	6	11

Introduction

The A2A Group

Strategies and policies for sustainability

Mission and Vision

Business Plan 2013-2015

Sustainability Plan 2013-2015

Partnerships and awards for sustainability

Corporate Governance

Chart of stakeholders and engagement initiatives

Economic responsibility

Environmental responsibility

Social responsibility

Statement of compliance

The Management Board's responsibilities include the review and prior approval of the transactions of a company in which an executive director of the Management Board or a General Manager of A2A is the holder of an interest on his own behalf or on the behalf of third parties, in accordance with the provisions of the Corporate Governance Code. The same provisions hold for subsidiaries. The Management Board has conducted a **self-assessment** of the composition and functioning of the board, taking into account factors such as the professional characteristics of its members, their experience, including managerial experience, and their specific sector characteristics, including their seniority in the position.

A2A also has a **Supervisory Body** and an **Internal Audit** process to control and monitor the Group. In all Group companies which today have an Organizational, Management and Control Model pursuant to Legislative Decree no. 231/01, a Supervisory Body has been set up which performs its work in conjunction with the parent company's Supervisory Body.

All stakeholders can **file a written, signed report** through the appropriate channels for confidential information of any **violation or suspected violation** of the Supervisory Body Code of Ethics. The report will be examined, taking into consideration the viewpoints of the report's author as well as the individual responsible for the alleged violation. Reports can be submitted in the following ways:

- email: odv@a2a.eu
- mailing address: Supervisory Body A2A S.p.A., Corso di Porta Vittoria 4, 20122 Milan (Italy)



Further information on the Supervisory Body and the Internal Audit process may be found in the Report on Corporate Governance Code and Ownership Structures for the year ended December 31, 2013, in the Governance section of the website: www.aza.eu

Risk management

The A2A group has a risk assessment and reporting process designed to make business risk management an integral and systemic part of management processes. It is based on the Enterprise Risk Management methodology of the Committee of Sponsoring Organizations of the Treadway Commission (CoSO report) that takes its cue from other international frameworks.

The A2A risk model identifies **environmental risk** as the risk profile typical of our business and, as such, subject to management's periodic assessment, specific controls, and particular attention. The environmental management process carried out by A2A is in itself an activity preventing the environmental, economic, and financial risks associated with failure to comply with laws and regulations or the failure of local communities to provide their consent, claims for compensation and the impairment of assets. To cover any residual risk, A2A has taken out insurance to cover against any damage that may arise from accidental and gradual pollution linked to the ownership and/or management of our plants. Coverage also extends to damage relating to protected natural species and habitats and the cost of remediating the area inside and outside the plants.

The impact of **climate change** on the A2A Group includes changes in rainfall that can have repercussions on the ability of the hydroelectric plants to produce energy, as well as changes in temperature that can affect the operations of thermoelectric plants and to a lesser degree the ability to use gas transportation and storage infrastructures. Changes in temperature can also affect the level of demand customers have for the Group's products and services as well as have a detrimental impact on the physical plant itself. These repercussions, which can cause positive or negative effects on the Group's results depending on how they manifest themselves, are taken into due account at the budgeting stage by adopting reference models that are based on historical data sets and verified with the most recent data. As far as the hydroelectric plants are concerned, appropriate policies for managing the reservoirs are set up to mitigate effects connected with rainfall. Suitable cooling systems on the thermoelectric plants minimize the effects of temperature changes on production efficiency.

To avoid mistakes in hedging exposures on the **emission trading market**, which could lead to costs for the Group, the Environmental Markets internal function follows a specific procedure for managing CO2 allowances known as the **"Deal Life Cycle"**. This governs the means and timing of transmitting scenario data with respect to prices and the need for budgeted and actual hedging. This procedure is designed to manage the recording, monitoring, and testing of individual contracts traded on regulated and non-regulated markets, and ensures that there is transparency in managing hedges and optimizing performance.



The management of **health and safety** risk is guaranteed by worker safety management systems in accordance with OHSAS 18001 as well as by training and updating employees in health and safety initiatives and periodic auditing. In summary, the policy of prevention and protection adopted by the Group aims at "zero risk".



Introductio

The A2A Group

Strategies and policies for sustainability

Mission and Vision

Business Plan 2013-2015

Sustainability Plan 2013-2015

Partnerships and awards for sustainability

Corporate Governance

Chart of stakeholders and engagement initiatives

Economic responsibility

Environmental responsibility

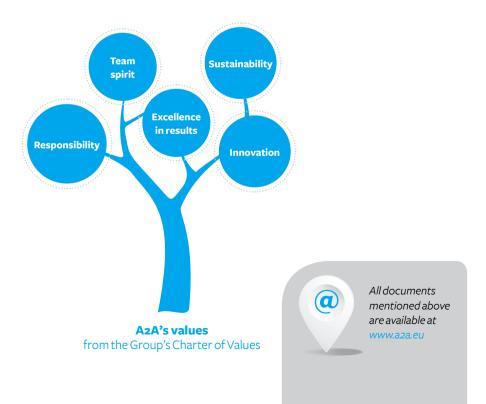
Social responsibility

Statement of compliance

2.5.2 Corporate Governance Tools

A2A manages our internal and external corporate governance using the following instruments:

- Code of Ethics
- Organizational, Management, and Control Model
- QES Policy
- QES Management Systems and Certifications



Organizational, Management, and Control Model

The 25 Group companies that have adopted the Organizational, Management and Control model pursuant to Legislative Decree no. 231/01 (representing 100% of employees) are systematically monitored for risks connected with corruption. There were no episodes of corruption in 2013.

In 2013, following the adoption/revision of the Legislative Decree no. 231/01 model by certain Group companies, specific classroom and e-learning training sessions were held. Employees not involved in this classroom training or e-learning (for example employees without a computer) received a guide explaining the contents of Legislative Decree no. 231/01 and their company's Organizational, Management, and Control Model.

QES Management System and Certifications

All the main Group companies have had their **Quality**, **Environment and Safety** processes certified. The major changes for 2013 were:

- the extension of QES certification for A2A Environment closed landfills as well as for the ecological recycling and collection center platforms owned by the company or Aprica company;
- A2A Heat and Services company received ESCO certification;
- A2A Energy company and the Sicura company's landfill in the Municipality of Comacchio received OHSAS 18001 certification.

By the end of 2013 the following had been certified:

- ISO 9001: 18 companies, for 20 certificates issued;
- ISO 14001: 16 companies, for 24 certificates issued;
- OHSAS 18001: 16 companies (representing 96% of the Group's employees), for 24 certificates issued.

In addition, A2A Group has 18 EMAS registrations, while another 5 EMAS registrations are in the issuing/renewing phase.

Compliance with the Quality, Environment and Safety systems is verified as follows:

- **internal audits**: performed in house, the objective of which is to assess the state of the QES Management System and highlight matters to be perfected; 121 internal audits were performed in 2013, with a total of 147 points for improvement noted;
- **independent audits**: conducted by outside independent certification bodies for the purpose of issuing or renewing certifications.

During the year, coordination committees were set up for the QES management systems with meetings also attended by the heads of the units/functions with management systems. The aim was to seek constant improvement in meeting the needs of customers and suppliers, increasing efficiency of corporate activities, and improving performance of activities impacting the environment and worker health and safety.

New Quality, Environment, and Safety Policy

During the evolution of the new Health, Safety, and Environment Management Model, A2A defined a **new Quality, Environment, and Safety Policy** (**QES**) as an instrument to develop the corporate culture on these issues. The new QES Policy is based on 5 key concepts:

- 1. **Development**: to grow the business and A2A presence in the area, involving all the stakeholders.
- 2. **Compliance**: to manage Group activities in compliance with applicable regulations.
- 3. Innovation: to improve processes, technologies, and work methods, and optimize environmental performance.
- 4. **Prevention**: to protect the environment, health, and safety.
- 5. **Resources**: to ensure workers have all the necessary skills and professional development, making sure that each one looks out for their own safety and that of their colleagues, as well as the environment in which they work.

After these were issued, in **October 2013**, the new QES Policy was unveiled within the Group with a special distribution strategy: through a special meeting with each individual involved with the environment, heath, and safety; on the company network together with a video; on the website (http://www.a2a.eu/it/sostenibilita/strumenti/politica); on the supplier portal (http://www.a2a.eu/it/fornitori); in the Group newsletter, "Inadueà"; and, with flyers posted in meeting rooms and circulation areas throughout the Group headquarters and plants. The policy was also introduced in all the training sessions and incorporated as part of the new hire induction plan.

Introduction

The A2A Group

Strategies and policies for sustainability

Mission and Vision

Business Plan 2013-2015

Sustainability Plan 2013-2015

Partnerships and awards for sustainability

Corporate Governance

Chart of stakeholders and engagement initiatives

Economic responsibility

Environmental responsibility

Social responsibility

Statement of compliance

2.5.3 Regulatory framework

A2A operates in highly regulated industries where the legislative and regulatory situation is in constant (and not always predictable) evolution.

The Group adopts rigorous policies to monitor and manage legislative risk. Among other things, these call for: collaborative dialogue with the institutions and government and industry regulatory bodies; active participation in trade associations and working groups set up by these bodies; and an examination of changes in legislation and provisions issued by sector authorities.

Competition rules

In 2012, A2A Group again met the commitments presented to and accepted by the **anti-trust regulator (the "AGCM")**. In particular,

- in 2010, following a report by the Authority for Electricity and Gas on an unusual trend in electricity prices on the wholesale electricity market in Sicily, AGCM initiated an enquiry into Edipower and the other tollers related to the San Filippo del Mela plant, including A2A Trading (simultaneously initiating a similar enquiry into ENEL) in which it alleged a possible coordination in the tollers' offering policies aimed at affecting the quantity and hence the price of electricity in Sicily. In December 2010, AGCM accepted the commitments made by Edipower and the tollers. In accordance with the provisions of the requirements of the measure, at the end of 2013, A2A SpA and A2A Trading issued AGCM our annual report on the measures adopted for implementing the agreed upon commitments;
- in relation to unfair business practices, there was an agreement signed in 2011 by A2A with the Codici, ACU, Lega Consumatori, and Casa del Consumatore associations to prevent and denounce the phenomenon of unsolicited contracts to the detriment of consumers.

Compliance with laws and regulations

With the measure published in December, the Authority for Electricity, Gas, and Water recalculated its administrative fine against A2A Reti Gas (formerly AEM Distribuzione Gas and Calore SpA) to 734,000 euro, following the decision by the Consiglio di Stato of May 20, 2011, no.3007. This represents an approximately 50% reduction compared to the original fine, which had been imposed because of the company's 2006 failure to comply with the requirement that emergency services arrive on site within 60 minutes for at least 90% of calls.

Safeguarding privacy

A2A guarantees the protection of the personal data of all our stakeholders in compliance with current law and the principles of transparency, lawfulness and propriety. In 2013, there were no customer complaints alleging privacy infringement or loss of personal data.



A detailed description of the evolution of the regulatory framework can be found in the Management Report 2013 available on the website: www.a2a.eu

2.6 Chart of stakeholders and engagement initiatives

The various stakeholder categories of the A2A Group are quite interconnected. It is important to bear in mind that the parent company's main shareholders are the very municipalities in which the Group operates, and that these municipalities (and hence the

institutions) are also customers. In addition, the residents (and hence the society as a whole) are very often customers as well. And finally, many employees and suppliers are also Group customers. To illustrate these overlaps, we have created a chart showing the different threads linking the various stakeholders to the Group, demonstrating how they intersect with one another in a mutually beneficial intertwining of relationships and interests.

One of the A2A Group's main objectives is listening to and understanding the needs of our stakeholders to ensure positive, stable, and long-lasting relationships. For this reason, in 2013 a structured reporting system was created using a database to identify the engagement and input of Group stakeholders.

The analysis showed that, in general, engagement was quite widespread in most territories and sectors across the different stakeholder subcategories, such as customers (domestic customers - protected and free market - and business customers registered online with VAT numbers, electricity customers, gas customer, integrated water service customers, customers/ community members/business operators in the environmental sector, etc.), institutions at all levels, and consumer, environmental, and community associations.

The following table shows **the main initiatives carried out in 2013**.

Some of these are discussed in detail in subsequent chapters of this report.



Introduction

The A2A Group

Strategies and policies for sustainability

Mission and Vision

Business Plan 2013-2015

Sustainability Plan 2013-2015

Partnerships and awards for sustainability

Corporate Governance

Chart of stakeholders and engagement initiatives

Economic responsibility

Environmental responsibility

Social responsibility

Statement of compliance

2013

13 Stakeholder engagement initiatives in 2013

Stakeholders involved	Mode of involvement	Issues addressed
Consumer Associations	MeetingsWorking groupsPlant toursParticipation in classroom activities	District heating: • drafting the Charter of Services for all municipalities served see also page 178 • construction site activities (Bergamo) • district heating development plan see also page 78-79 • joint settlement procedure (territorial/regional)
		Energy Sales: • extension of self-regulating business protocol to the small business sector see also page 166-167 • complaint management and analysis see also page 186 • "sensitive" clients (elderly, individuals with difficulty understanding Italian, difficulties with payments, etc.) see also page 163
		Urban sanitation services: increased recycling (Bergamo) see also page 96 drafting the Charter of Services for all municipalities served by Aprica (Brescia and Bergamo) see also page 184 AMSA recycling communication project for foreigners (Milan) periodic report on the Acerra incinerator (Naples) see also page 81 education project for schools with environmental and consumer associations (Naples) see also page 216
Environmental Associations	MeetingsPlant tours	Waste-to-energy plants: ash treatment and recovery plant (Brescia) evacuation plan for the area surrounding the incinerator (Brescia) amount, type, and origin of waste disposed of in the incinerator (Brescia) disposal of "ecoballs" at the Acerra incinerator (Naples) education project for schools with environmental and consumer associations (Naples) see also page 216 expansion of the Corteolona plant (Padua)
		Water Cycle: • quality of water supplied (Brescia) see also page 179
		Energy production: • new projects at the Monfalcone plant (Gorizia) see also page 86-87 • emptying of the Silani Lakes (Calabria) see also page 70 • drawdown of the Cancano dam (Sondrio) see also page 70 • Minimum Vital Flow (MVF) and pumping project (Sondrio) see also page 70 • start up of thermoelectric plants (San Filippo del Mela and Chivasso)

Stakeholders involved	Mode of involvement	Issues addressed
Institutions/Regulatory and Inspection Authorities	MeetingsPlant toursPress releasesWork groupsConferences	Waste-to-energy plants: origin of waste disposed of at incinerator (Bergamo) expansion of the Filago incinerator (Bergamo) epidemiological research (Bergamo) emergency waste contract for Acerra and Legge in Campagnia, August, 2013 (Naples)
		Urban sanitation services: New tender contract Aprica (Como)
		Energy production: drawdown of Lumiei dam (Udine) impact of Monfalcone plant on neighboring homes (Gorizia) A2A property easements (Calabria) emptying of the Silani Lakes (Calabria) see also page 70 plant-related activities in Premadio, Stazzona, and Braulio (Sondrio) Minimum Vital Flow (MVF) and pumping project (Sondrio) see also page 70 post-drawdown of the Cancano dam (Sondrio) see also page 70 line burying agreement (Sondrio) installation of electric poles (Sondrio) shunt compensation activities in Grosotto (Sondrio) ICI-IMU property tax for plants (Edipower) Minimum Vital Flow (MVF) experimentation (Edipower) start up of plants (Edipower) remediation progress of San Filippo del Mela power station (Edipower) water cooling fees (Edipower Lombardia plant) refuse derived fuel (SSF-Secondary Solid Fuel) to supply thermoelectric plants national legislation on the economic value of damns and assignment of hydroelectric concessions via call for tenders (A2A hydroelectric concessions expiring)
		Water Cycle: • Water Service 2013-2015 investment plan (Varese)

Introduction

The A2A Group

Strategies and policies for sustainability

Mission and Vision

Business Plan 2013-2015

Sustainability Plan 2013-2015

Partnerships and awards for sustainability

Corporate Governance

Chart of stakeholders and engagement initiatives

Economic responsibility

Environmental responsibility

Social responsibility

Statement of compliance

Stakeholders involved	Mode of involvement	Issues addressed
 Institutions/Regulators/ Associations/Community 	 Brescia waste-to-energy plant observatory 	• To verify and report on the environmental impact of the plant, paying special attention to the issues raised by community members and associated A2A proposals see also page 208
Members	 Technical working group for the Monfalcone plant 	• To assess the environmental status of the area, the plant's impact on the community's quality of life, and to implement any supplemental interventions see also page 87
	 "Water as a common resource" observatory (established 2014) 	Water quality of the Brescia water service
Shareholders/Investors	 Lunch meetings One-to-one meetings with investors/analysts 	 Debt reduction Value of action Governance simplification; Group listens to customers/community members (interest of ordinary shareholders in this aspect) Energy pricing risk Responsibilities (including in terms of sustainability) and gender (male/female) of the directors Supplier management optimization (costs and supplier selection)
Customers (Brescia Public Administration)	 A2A Ciclo Idrico Customer Satisfaction Survey 	• Service quality see also page 179-180
Customers (private individuals in Brescia)	 A2A Ciclo Idrico Customer Satisfaction Survey 	• Service quality see also page 179-180
Customers (community members in the municipalities neighboring Milan)	AMSA Customer Satisfaction Survey	• Service quality see also page 184-185
Customers (Milan business operators)	AMSA Customer Satisfaction Survey	• Service quality see also page 184-185
• Domestic Customers (protected and free market)	• A2A Energia Awareness Survey	Reasons for not taking part in the "Chiara A2A" promotion
Widespread free market customers (domestic and business customers)	A2A Energia Customer Satisfaction Survey	• Service quality see also page 170-171
Electricity and gas customers (with VAT numbers and SME and domestic use)	A2A Energia Customer Satisfaction Survey	• Service quality see also page 169-170
Customers (domestic customers with VAT registered online)	A2A Energia Online Services Survey	Online service quality

Stakeholders involved	Mode of involvement	Issues addressed
Customers (VAT with protected market gas contract)	• A2A Energia	• Letter of unilateral modification to the existing contract terms
• A2A Calore & Servizi Customers	 Meetings Special initiatives Listening system Production plant tours Specialized courses on district heating substations Direct marketing 	 2013 District heating development plan see also page 78-79 District Heating Charter of Services see also page 178
 Local Community/Citizens 	MeetingsSchool projects	 Drawdown of Lumiei dam (Udine) Impact of Monfalcone plant on neighboring homes (Gorizia) Involvement in the territory and grounds maintenance (Gorizia) Minimum Vital Flow (MVF) and pumping project (Sondrio) see also page 70 Expansion of the Filago incinerator (Bergamo) Quality of water supplied (Brescia) see also page 179 Emptying of the Silani Lakes (Calabria) see also page 70 Special school projects see also page 218-219
• Media	Meetings Press releases	 Relaunch plan for carbon Secondary Solid Fuel (SSF) power station (Brindisi) Emission limits and future of the power station (San Filippo del Mela) Emission limits and future of the power station (Chivasso) Doubling of the power station (Somplago) Decommissioning of plant smokestack(Sermide) Aprica environmental activities, new call for tenders contract (Como) Drawdown of Lumiei dam (Udine) Quality of water supplied (Brescia) see also page 179 Air quality (Acerra) see also page 81 Emptying of the Silani Lakes (Calabria) see also page 70
• Employees	 Structured feedback downstream of participation and development center activities Structured feedback downstream of each training session 	Development center assessment Training assessment
• Suppliers	Meetings Telephone Numbers	 A2A acquisitions methods and supplier registry access (Brescia) Reduction in work contracted out to third parties in the territory (Padua)

Introduction

The A2A Group

Strategies and policies for sustainability

Mission and Vision

Business Plan 2013-2015

Sustainability Plan 2013-2015

Partnerships and awards for sustainability

Corporate Governance

Chart of stakeholders and engagement initiatives

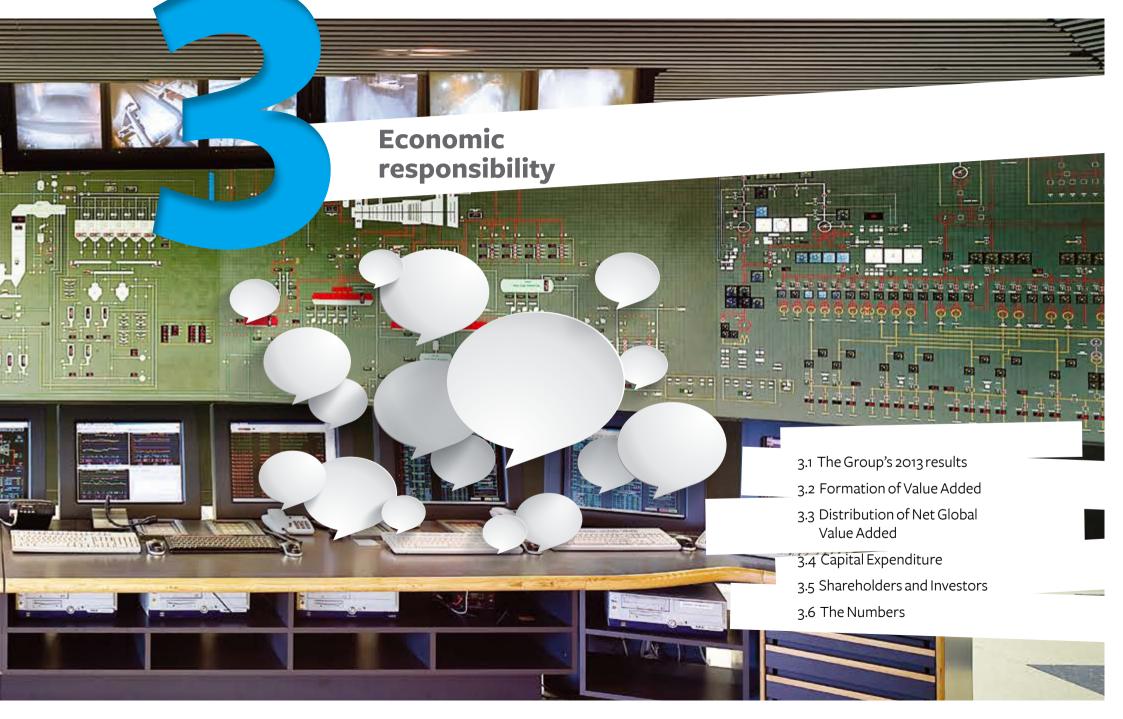
Economic responsibility

Environmental responsibility

Social responsibility

Statement of compliance







IDENTITY CARD AS OF DECEMBER 31, 2013



6% increase in the Group's gross operating income



280 million euro invested in the Group's various sectors



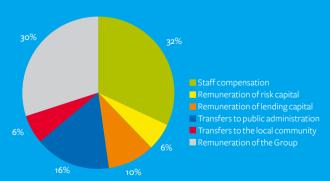
A2A stock grew steadily in 2013

14 Trends in key economic indicators for the past three years

2011	2012	2013
6,130	6,480	5,604
924	1,068	1,133
298	501	257
-423	260	62
-0.134	0.083	0.020
0.013	0.026	0.033
	6,130 924 298 -423 -0.134	6,130 6,480 924 1,068 298 501 -423 260 -0.134 0.083

^{*} Includes the effect of the asset write-down amounting to 118 million euro of which 94 million euro is the result of the "EPCG" cash-generating unit impairment test in 2011, 2 million euro in 2012 and 250 million euro of which 237 million euro is the result of the "EPCG" cash-generating unit impairment test in 2013.

15 **Distribution of Value Added***



^{*}Further details may be found on page 53

Value Added is a parameter that expresses the Group's capacity to create and distribute value across different stakeholder groups, including: employees, Public Administration, shareholders, financiers, businesses, and the community. In 2013, the gross global value added distributed by the Group was 1.591 million euro.

^{**} Dividend proposed by the Management Board.



3.1 The Group's 2013 results

The positive financial performance of 2013 was achieved against a backdrop of mostly deteriorating economic indicators, especially in the electricity industry.

The Group reacted proactively to address these external dynamics, launching a three-year operational efficiency plan, the results of which have contributed to the year's profitability.

The year 2013 saw the A2A Group revenues down 5.604 million euro from 2012, mainly due to the decision to downsize the gas brokering business on the wholesale market. Gross operating income of 1.133 million euro represents an increase of 65 million euro, up 6.1% over the previous year. Performance at the level of gross operating income contributed to the positive results in the Cogeneration and District Heating Sectors of the Environment and Networks Sectors.

The Energy Sector performance was stable thanks to the solid industrial results of the subsidiary EPCG. It should also be noted that the year's operating performance

includes a cost of 25 million euro associated with the gradual reduction of the workforce per the 2013-2015 plan.

Net profit from ordinary activities amounted to 156 million euro, up 34.5%; the net income, in the amount of 62 million euro (260 million euro in 2012), includes a thermoelectric asset write-

down of 267 million euro.

Net financial debt, in the amount of 3.874 million euro, represents a reduction of approximately 0.5 billion euro compared to December 31, 2012 (and 1 billion euro compared to June 30, 2012).

3.2 Formation of Value Added

Value added is the wealth that the Group generates in the year. It is the difference between revenues on the one hand and the intermediate costs and accessory and extraordinary items on the other. It is a parameter that measures the economic performance of operations and the Group's ability to create value for our stakeholders.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

The Group's 2013 results

Formation of Value Added

Distribution of Net Global Value Added

Capital Expenditure

Shareholders and Investors

The Numbers

Environmental responsibility

Social responsibility

Statement of compliance

Value Added and its distribution are calculated based on the model adopted by the Social Accounts Group (Gruppo per il Bilancio Sociale - GBS). In 2013, the global value added generated by the A2A Group was 1.591 million euro, down 136 million euro from 2012. This is primarily attributable to an asset write-down of 250 million euro (of which 237 million euro is the result of the "EPCG" cash-generating unit impairment test in 2013).

Schedule showing the calculation of net global value added

	<u> </u>			
(in millio	ons of euro)	2011	2012*	2013
+A)	Value of Production	6,130	6,480	5,604
	Revenues from the sale of goods and services (-revenue adjustments)	6,021	6,256	5,388
	Change in work in progress, semi-finished goods and finished goods	0	0	0
	Change in contract work in progress	8	25	1
	Other operating income	101	199	215
	Public entity grants	0	0	0
-B)	Intermediate costs of production	4,850	4,844	4,148
	Consumption of raw materials and consumables	124	145	158
	Consumption of energy and fuel	3,470	3,634	2,623
	Services	795	801	802
	Other operating expenses	167	103	65
	Accruals to bad debt provision - current receivables	73	32	53
	Accruals to risk provisions	32	44	87
	Other write-downs of fixed assets	118	2	250
	Miscellaneous operating expenses	96	104	128
	Own work capitalized	-25	-21	-18
	GROSS ORDINARY GLOBAL VALUE ADDED	1,280	1,636	1,456

•••	continues
-----	-----------

,	onemacs			
		2011	2012*	2013
- C)	Financial balance	-144	17	-40
	Financial income	18	35	15
	Financial expense which does not represent the remuneration of lending capital	-30	-31	-32
	Interest and expense from accounting for shareholdings in associates	-132	13	-23
- D)	Accessory and extraordinary items	-762	74	175
	+/- Accessory items, net	-758	29	100
	+/- Extraordinary items, net	-4	45	75
	GROSS GLOBAL VALUE ADDED	374	1,727	1,591
	- Operating depreciation and amortization	403	489	486
	NET GLOBAL VALUE ADDED	-29	1,238	1,105
			1	

^{*}The figures for 2012 have been restated to reflect the new income statement structure adopted.

3.3 Distribution of Net Global Value Added

The table shows the distribution of value added and provides an accurate view of the economic effect produced by the A2A Group on our main stakeholders.

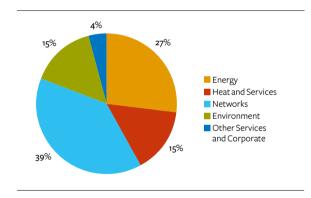
7 Schedule showing the distribution of net global Value Added

(in millions of euro)	2011	2012	2013
STAFF COMPENSATION	413	457	509
Wages and Salaries	359	399	422
Post-employment benefits	22	24	26
Other costs	32	34	61
REMUNERATION OF RISK CAPITAL		51	94
Distributed profits		40	81
Net income attributable to minority interests	-496	11	13
REMUNERATION OF LENDING CAPITAL	114	197	166
TRANSFERS TO PUBLIC ADMINISTRATION	291	227	260
Direct State taxes	154	79	104
Other State taxes and duties	3	3	1
Social charges	134	145	155
TRANSFERS TO THE LOCAL COMMUNITY	72	86	95
Direct local authority taxes	44	45	47
Local taxes and duties	20	35	43
Sponsorships	2	2	2
Contributions to the AEM and ASM Foundations, aid, donations, charities	6	4	3
REMUNERATION OF THE GROUP	-318	709	467
Reserves	-721	220	-19
Depreciation and amortization	403	489	486
GROSS GLOBAL ADDED VALUE	374	1,727	1,591
			$\overline{}$

3.4 Capital Expenditure

Capital expenditure totaling 280 million euro was made in the A2A Group's various sectors in 2013.

18 Capital Expenditure in % by sector



In the **Energy Sector**, capital expenditure totaled 76 million euro, of which 9 million euro is attributable to the EPCG Group. This mainly regarded extraordinary maintenance at the combined cycle thermoelectric plants in the amount of 16 million euro, at the coal thermoelectric plant at Monfalcone in the amount of 7 million euro, and at the hydroelectric plants in the amount of 9 million euro.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

The Group's 2013 results

Formation of Value Added

Distribution of Net Global Value Added

Capital Expenditure

Shareholders and Investors

The Numbers

Environmental responsibility

Social responsibility

Statement of compliance

Less intensive extraordinary maintenance was also carried out at Brindisi and San Filippo del Mela in the amount of 2 million euro. There were also investments in hydroelectric plant modernization and improvements in the amount of 26 million euro and 4 million euro invested in information systems. Regarding the EPCG Group, investments mainly involved the Pljevlja thermoelectric plant (4.4 million euro) and the hydroelectric plants of Perucica (0.8 million euro) and Piva (3.6 million euro).

In the **Heat and Services Sector**, capital expenditure for the year amounted to 43 million euro and related to extraordinary maintenance and development work on district heating networks (34 million euro) and cogeneration plants (9 million euro), mainly in the areas of Milan, Brescia, and Bergamo.

In the **Network Sector**, capital expenditure in Italy for the year amounted to 84 million euro and involved:

- in the Electricity Distribution segment, development and maintenance work on plants, and in particular the connection of new users, maintenance on secondary cabins, the extension and refurbishment of the medium and low voltage network and the maintenance and upgrading of primary plants (41 million euro);
- in the Gas Distribution segment, development and maintenance work on plants relating to the connection of new users and the replacement of medium and low pressure piping and gas meters (37 million euro);
- in Integrated Water Cycle Management, work carried out on the water transportation and distribution network and the sewage networks (6 million euro).

The EPCG Group made investments of 25 million euro for development and maintenance work carried out on the electricity distribution network (7 million euro) and meter replacement (18 million euro).

In the **Environment Sector**, capital expenditure for the year amounted to 41 million euro and related mainly to collection vehicles and containers (19 million euro), maintenance and development work on treatment plants and landfills (11 million euro), maintenance and development work on waste-to-energy plants (8 million euro), as well as various types of other maintenance (2 million euro).

In the **Other Services and Corporate Sector**, capital expenditure for the year amounted to 11 million euro and mainly related to investments in information systems (8 million euro) and telecommunication networks (1 million euro).

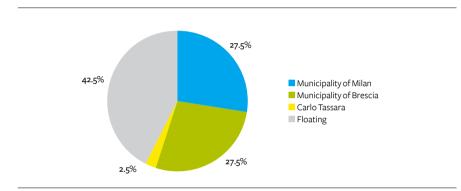
3.5 **Shareholders and Investors**

3.5.1 Composition of share capital

The parent company, A2A S.p.A., is listed on the Milan stock exchange. A2A stock is a part of the FTSE-MIB segment, forms part of the "Public Utilities - Electricity" sector, and is traded on the screen-based stock market. Under article 9 of the company's bylaws, no single shareholder other than the Municipalities of Brescia and Milan may hold more than 5% of share capital. Shares held in excess of the 5% limit have no voting rights.

The Company's main shareholders are the municipal administrations of the cities of Brescia and Milan, which each hold 27.5% of share capital. At the end of December 2013, the two administrations approved a **new shareholders agreement**, which commits each municipality to remain a shareholder with 25% plus one share. It also stipulates that the excess shares are to be put on the market by the first half of 2014 in accordance with legal procedures. The third largest shareholder is Carlo Tassara S.p.A. with 2.5%.

19 A2A's shareholders (as of December 31, 2013)*



^{*}Shares above 2% (update December 31, 2013) - Source: CONSOB.

The remaining 42.5% of capital is free floating. This also includes the holdings of the Municipalities of Bergamo and Varese and the treasury shares held by A2A S.p.A. (0.9%). The figures have been prepared on the basis of the shareholders register updated as of the distribution of the dividend on June 27, 2013.

A2A shareholders number approximately 109,000 and include both institutional investors and small (retail) investors.

Institutional investors hold approximately 19.8% of share capital (15.2% in 2012), while 40.2% of the floating capital in the hands of institutional investors is held by Italian investors, 18% by British investors, and 13.9% by US investors. There are also German investors (6.5%) and French investors (5.4%).

Retail investors number approximately 108,000 and together hold 19.6% of share capital, which represents an increase from the 19.0% of 2012. Of these retail investors, 99.6% are residents in Italy; more specifically, 55.8% are resident in Lombardy, the region where A2A has historically had our roots. Investors residing in the provinces of Milan and Brescia hold 27.4% and 13.0%, respectively, of the total retail.

The financial year ended December 31, 2013, showed a consolidated profit of 62 million euro, which corresponds to **earnings per share of 0.020 euro**. The distribution of an ordinary **dividend of 0.033 per share was proposed**, for a total aggregate dividend of approximately 102.5 million euro.

3.5.2 A2A in the stock market indices

Over the course of 2013, A2A's stock was on a nearly constant upward trend. Starting in mid-March, it outperformed the FTSE MIB index handily. In early January, the share stood at 0.46 euro. It dipped during the first two months, hitting its low for the year on March 4 at 0.39 euro. From there, it began to recover, reaching its peak on October 22 of 0.91 euro before closing the year at 0.85 euro (up 84% over the start of the year).

Introductio

The A2A Group

Strategies and policies for sustainability

Economic responsibility

The Group's 2013 results

Formation of Value Added

Distribution of Net Global Value Added

Capital Expenditure

Shareholders and Investors

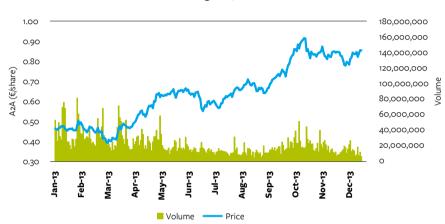
The Numbers

Environmental responsibility

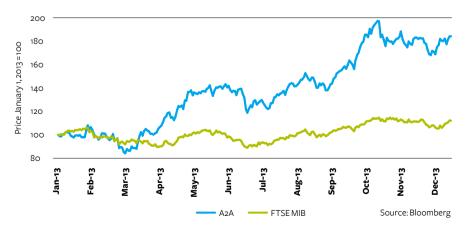
Social responsibility

Statement of compliance

Performance of A2A stock during 2013



A2A vs. FTSE MIB



Among the factors affecting share performance in 2013 were those arising from trends in the economy and in government policy, as well as capital flows on the international financial markets.

On the other hand, the company-specific factors include:

- positive results for the Group, which exceeded the expectations of the financial community;
- significant and progressive debt reduction;
- extension of the average debt life as a result of three new bond issues;
- finalizing of certain extraordinary transactions;
- \bullet the approval of new shareholder agreements by the Municipalities of Brescia and Milan, with the upcoming return to a traditional system of governance and announcement of the planned sale of 5% of A2A S.p.A.

3.5.3 A2A in the sustainability rating

Investors are increasingly paying attention and are sensitive to sustainability issues and the creation of socially responsible values.

More and more, a company, an investment, and equity are valued not only in terms of their financial performance, but also their respect for the environment, management of human resources, how business is conducted, respect for human rights, corporate governance, and involvement in community life.

The "ethics rating" provides an independent appraisal of a company's social and environmental commitments and is an important recognition of what a company does.

Sustainability indices in which A2A is included (as of December 31, 2013)

Index	Rating Agency	Rating	
ECPI Ethical Index EMU	ECPI		
Axia Sustainable Index	Axia	A+++	
Solactive Climate Change	Structured Solutions		
FTSE ECPI Italia SRI Benchmark Index	FTSE ECPI		
	AEI Standard Ethics	EE- (outlook: Stable)	

3.5.4 Relations with shareholders and investors

Providing accurate and comprehensive responses to the specific needs and requests of stakeholders is one of the basic duties of a listed company like A2A. To this end, A2A uses a wide range of communication tools and channels:

- company documents (financial statements, interim reports, corporate presentations);
- ad hoc documents (Investor Guidebook);
- press releases;
- the "Lettera2azionisti" newsletter (on-line and hard copy);
- meetings with analysts and investors.

For **analysts and institutional investors** (both Italian and international), special opportunities for interaction and updates are provided, including: road shows throughout Italy and the leading international financial centers, one-on-one meetings, group meetings, conference calls, and presentations when particularly important events for the Group occur (e.g. business plans, extraordinary transactions, etc.). There were a total of 13 analyst reports in 2013.

"Letterazazionisti", the A2A newsletter for small shareholders and investors

The newsletter is oriented towards small shareholders and investors but also to all individuals who want to know about A2A's initiatives and performance. It is regularly published on the Group's website (www.a2a.eu) in the Investors section. Here, it is also possible to sign up for the free newsletter. The three issues published in 2013 covered a wealth of information, including the Group's financial performance, performance on the stock market, key corporate events, projects, activities and industrial production, business news, and local news from the territories where A2A is most deeply involved. A new column was also launched, "Investor's Corner", addressing issues specifically relevant for small shareholders.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

The Group's 2013 results

Formation of Value Added

Distribution of Net Global Value Added

Capital Expenditure

Shareholders and Investors

The Numbers

Environmental responsibility

Social responsibility

Statement of compliance

2013

During the year, various events were organized in collaboration with the Borsa Italiana and certain brokers who follow A2A shares geared towards Italian and international investors. These included 4 conference calls for financial analysts and 5 public events with Italian and international investors, with one of these organized by Borsa Italiana.

In addition to offering opportunities for face-to-face interaction, considerable importance has been placed on **Internet communication** (web sites and e-mail), as these are channels which facilitate public access to a comprehensive financial overview in a timely way and in accordance with legal requirements and CONSOB guidelines. Over the course of 2013, the **Investors section of the site www.a2a.eu** was augmented with a new resource for investors and analysts: the Investor Guidebook. This provides a thorough overview of A2A using key points gleaned from publically available information.

The data book section includes historical financial data in Excel format (reported both annual and quarterly) starting from 2008. It is also possible to sign up for an online press alert service to receive price-sensitive press releases in real time.

The web site includes a historical archive of corporate documents and price-sensitive press releases, not only those of A2A but also the final three years of activity (2005-2007) of AEM and ASM before the merger into A2A.

The Internet is also an effective communication channel for retail investors. The answers to frequently asked questions (FAQ) are posted on A2A's website to instantly and comprehensively respond to the main requests received. The Investor Relations unit also provides timely responses to specific questions raised by small investors (especially by e-mail).



Further information may be found in the Investors section of the A2A web site http://www.a2a.eu/gruppo/cms/a2a/it/investitori/

3.6 The numbers

Gross operating income by sector

(in millions of euro)	2011	2012	2013
Energy	336	541	533
Heat and services	67	73	86
Environment	287	219	282
Networks	259	242	256
Other services and corporate	-25	-7	-24
Total	924	1,068	1,133

Balance sheet

(in millions of euro)	2011	2012	2013
Net fixed assets	5,846	6,969	6,481
Working capital	850	823	741
Assets and liabilities held for sale*	918	277	0
Net capital employed	7,614	8,069	7,222
Equity	3,593	3,697	3,348
ofwhich			
- Group share	2,767	2,846	2,791
- Minority share	826	851	557
Net financial position	4,021	4,372	3,874
Total sources	7,614	8,069	7,222
Gross debt	4,551	5,074	4,444

^{*} Excluding amounts included among net financial position.

24 Key financial statement indicators

			,
	2011	2012	2013
Revenue per permanent employee (in thousands of euro)	77	84	90
Gross operating income per permanent employee (in thousands of euro)	513	507	444
Net income per permanent employee (in thousands of euro)	-35	20	5
Average number of permanent employees	11,960	12,771	12,626

25 CAPEX

(in millions of euro)	2011	2012	2013
Energy	32	103	76
Heat and services	57	49	43
Networks	119	123	109
Environment	35	48	41
Services	28	30	11
Total	271	353	280

26 Equity indices

	2011	2012	2013
Earnings per share (EPS) (euro)	-0.134	0.083	0.020
Cash-flow per share (CFPS) (euro)	0.131	0.307	0.249
Dividend per share (DPS) (euro)	0.013	0.026	0.033
Price/earnings per share (P/EPS)*	-7.28x	6.06x	31.75x
Price/cash flow (P/CFPS)*	7.45×	1.64x	2.55X
Dividend yield (DPS/P)*	1.30%	5.20%	5.20%
Number of shares (millions)	3,133	3,133	3,133
·			

27 A2A on the stock market in 2013

Average capitalization (in millions of euro)	1,990
Capitalization at December 31, 2013 (in millions of euro)	2,665
Average volume	21,331,560
Average share price* (euro)	0.635
Maximum share price* (euro)	0.911
Minimum share price* (euro)	0.39

^{*} Euro per share (source Bloomberg).

28 Debt rating

Agency		12.31.2013
	Medium/long-term rating	BBB
Standard & Poor's	Short-term rating	A-2
	Outlook	Negative
C: 1 10 D 3	Medium/long-term rating	Baa3
Standard & Poor's	Medium/long-term rating	Negative

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

The Group's 2013 results

Formation of Value Added

Distribution of Net Global Value Added

Capital Expenditure

Shareholders and Investors

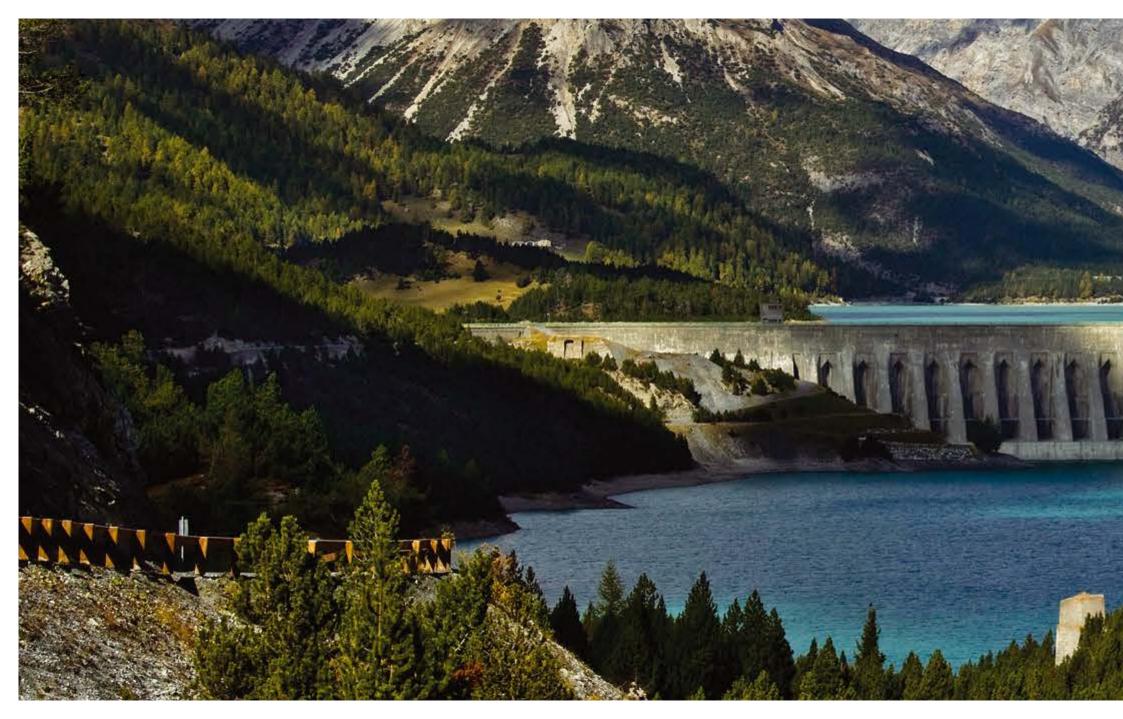
The Numbers

Environmental responsibility

Social responsibility

Statement of compliance

 $^{{}^*\}mathsf{Calculated}\,\mathsf{based}\,\mathsf{on}\,\mathsf{average}\,\mathsf{share}\,\mathsf{price}.$





4.1 Environmental management

IDENTITY CARD AT DECEMBER 31, 2013





Almost 59 million euro invested in the improved management of environmental aspects during the year



A2A is involved in numerous research projects for **developing the smart grid** (intelligent energy distribution network)



The network of **charge points for electric cars** created by A2A
in Milan and Brescia as part of the **e-moving project** is operational

The ISO 14001 environmental management system is officially recognized in the A2A Group and covers the following:

Plants

- 100% of installed hydroelectric power
- 100% of installed thermoelectric power
- **83%** of cogeneration park thermal power and 87% of cogeneration park electrical power from fossil/renewable sources
- **100%** of the waste processing capacity of the waste-to-energy plants
- **87%** of the processing capacity of the other integrated waste cycle plants.

Networks

- 100% of the Milan area gas distribution network
- 100% of the electricity distribution network
- **100%** of the integrated water cycle of the Municipality of Brescia (including the Verziano purification plant)
- 100% of the Milan and Brescia area district heating network
- 100% of public lighting and traffic lights

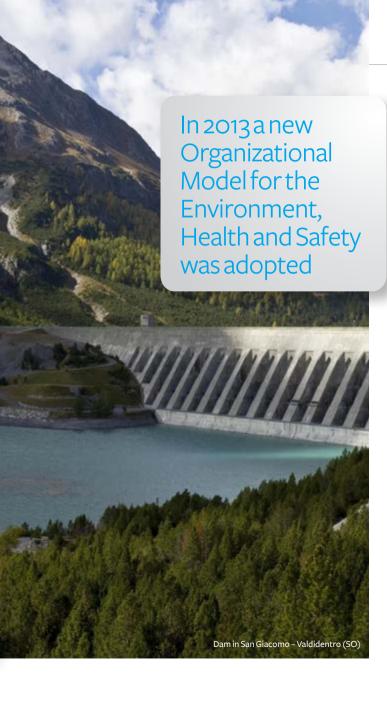
Services

- 100% of environmental services
- 71% of waste water treatment capacity

18 of the Group's plants are already EMAS registered, compared with 13 at December 31, 2012; the other 5 are currently being registered.



All the numbers are in the tables from p. 106 to p. 123



4.1.1 Environmental policy

The **Quality, Environment and Safety Policy** is at the heart of the Group's approach to sustainability, serving as a model for the day-to-day operations of all employees and contractors, as they carry out their activities for energy production and the provision of services.

The key environmental targets and strategies in this document are:

- the containment of atmospheric and acoustic emissions and soil pollution;
- the improvement of processes,
 technologies and working methods,
 using the contribution made by research and
 development activities, innovation and the
 sharing of experience and good practice;
- the efficient use of resources, optimizing the use of natural and energy resources and protecting biodiversity;
- the recovery and recycling of waste;
- compliance with regulatory requirements concerning the environment.

The values and principles of the Quality, Environment and Safety Policy are

proposed as a tool for achieving unity and a model of conduct between all the stakeholders within and beyond the Group, including employees and contractors, as well as customers, suppliers, residents and shareholders.



4.1.2 Environmental management system

A2A manages environmental aspects from a perspective of **constant improvement of performance**, using environmental management systems certified in accordance with internationally recognized standards, such as ISO 14001 and the EMAS regulation.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance

In 2013 a new **Organizational Model for the Environment, Health and Safety** was adopted, in which targets, methodologies and operational and assessment tools were defined, increasing the role of company structures that provide support to those in charge of operating lines, for the management and assessment of environmental and safety risks, in accordance with the policies made by the parent company.

The correct implementation of management systems is based on the identification of specific environmental, health and safety goals and the definition of the times and resources needed to achieve objectives. Training, information and staff development programs also have a major role in the management systems.

The formulation of objectives and specific improvement programs, including operational details, indicators, and time limits for planning checkpoints, makes it possible to monitor the extent of implementation and pay constant attention to environmental matters.

Throughout the Group **the operational management of the environment is based on criteria of prevention, protection, information and participation**, applied to all the activities it manages and in relation to the environmental issues identified, for which the impact is estimated on the basis of their significance in terms of legislation, magnitude, the sensitivity of the receptor and the attention of the parties concerned.

An internal legislative compliance checking process is operational in entities having consolidated environmental management systems, which is carried out through the use of periodic inspections. This process has also been applied within other entities in the Group since 2012, and it was further consolidated in 2013.

In 2013 the **Gap Analysis process for the Group** was completed, pursuant to Italian environmental crime legislation Legislative Decree No 231/01. It identifies critical issues associated with the activities managed by A2A, defines roles and responsibilities for regulating these issues, and determines the gaps and shortcomings that may lead to the commission of environmental offences. Operating procedures for intervention were defined for each individual critical issue, to prevent and manage risks associated with environmental crime.

With regard to training, the Group's initiatives for continuous staff development in relation to key environmental themes have continued, in compliance with the relevant legislation.

Certified plants for fewer risks and more savings

Being qualified to transport waste and authorized to operate waste management plants leads to the need to provide specific financial guarantees, with amounts established by current legislation, as security for any environmental damage that may occur. For the plants and activities with an Environmental Management System that is recognized through UNI EN ISO 14001 certification or EMAS registration, the law provides for a respective reduction of 40% and 50% of the amounts of sureties. Proper management of the plants and activities leads to a significant reduction of risks and of the likelihood that any environmental damage may occur.

Thanks to the recognition obtained for the Environmental Management Systems that govern transportation and waste processing activities, the Group has benefited from an overall reduction of over 50 million euro in the amount insured for performing these activities.

4.1.3 Management of environmental emergencies

A2A adopts and implements strategies for the prevention and management of environmental risks in order to ensure compliance with constantly evolving legislative requirements and minimize the risk of accidents or occurrences of non-compliance.

In order to regulate the management of environmental emergencies efficiently, the Group follows the intervention procedures set out in the **Emergency**Management Plans and Environmental Management Systems.

A2A has taken out specific insurance against any damage that may arise from accidental pollution connected with the ownership and/or management of plants, providing for both third party liability and the recovery of any costs incurred for decontamination inside and outside the plants.

During the year **no company within the Group was required to pay any fines or non-monetary sanctions** for failing to comply with
environmental laws and regulations. There were a limited number of
environmental proceedings in 2013, some for alleged formal breaches of
authorizations and others for apparent alleged formal irregularities and
infringements in waste management, in all cases without substantial damage
to the environment. There were also no occurrences of environmental
damage, significant spillages or significant environmental emergencies.

4.1.4 Environmental accounting

A2A has a system of environmental accounting that collects data on activities, plants and services, together with physical environmental data and data on the costs incurred by the Group to protect the environment. With reference to the latter, a system is currently being developed to

identify and report on environmental expenditure and investment

made by the Group at all the various stages of operations, with the possibility of creating indicators for statistical and communications purposes by company, by subject matter or for the whole Group.

The **SEREE-EPEA** model, supplemented by other items relating to the saving of resources, is used to classify environmental spending (SEREE-Système Européen de Rassemblement de L'Information Economique sur l'Environnement, a system of satellite accounts conceived by Eurostat for collecting economic information on the environment and harmonized at a European level).

While waiting for the system to become fully operational, the following table is proposed as a summary of investment expenditure at Group level, with figures being combined under the separate headings of investment for reducing emissions (into the air, into water and acoustic), investment for energy efficiency, investment for renewable energy and investment for innovation.

29 Environmental investment (millions of euro)

Investment classification	Energy sector	Heat sector	Environmental sector	Networks sector	Total
Emissions reduction	5.76	2.09	1. 71	-	9.56
Energy efficiency	6.08	4.26	3.15	-	13.49
Renewable energy	16.62	-	0.68	-	17.30
Innovation	14.99	-	3.67	0.15	18.81
Total	43.45	6.35	9.21	0.15	59.16

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmentalresponsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance

In order for managers at the individual plants, processes and services to collect, check and validate physical data, A2A uses a centralized software application which can be accessed from any location or site, using an internet browser as an interface. A controlled access system allows the data to be approved and validated before being processed and aggregated to determine the environmental sustainability indicators.

Significant indicators and data for the Group as a whole are presented in the tables to be found at the end of this chapter.

4.1.5 Research and innovation for the environment

The sustainability of production processes is closely associated with the provision of environmentally-friendly services and results from research and development activities which are proving vital for identifying innovations that can achieve the best performance levels in terms of production and the environment. Efficiency and emissions reduction targets are reflected within the A2A Group in the application of new technological solutions, some of them resulting from research carried out jointly with institutions and public bodies.

In particular, 2013 saw the implementation of some innovative projects for the **recovery of fly ash from waste incineration** as well as the **use of communication technologies for managing electricity networks**. In this area A2A has been involved in limiting power consumption in electricity distribution, by starting projects and measures for managing **smart grid distribution networks**. A summary of the main projects undertaken over the past year is given below.

The COSMOS-RICE project

Following the successful completion in 2012 of the COSMOS project, which showed the effectiveness of the process for the **inertization of fly ash** and the possibility of reusing the inert materials in industrial applications, Brescia University successfully

presented a second Life+ project, called COSMOS-RICE (COlloidal Silica Medium, to Obtain Safe inert, from RICE husk ash), that has been developed at the Brescia waste-to-energy plant.

A new method has been developed in the context of the COSMOS-RICE inertization process, using silica derived from rice husk ash in substitution for commercial colloidal silica. The product obtained is a gel characterized by a high purity, the ultrafine size of the silica particles and high reactivity, with very similar characteristics to those of the colloidal silica used in the COSMOS process.

Experimental studies on COSMOS-RICE have also shown that the release of heavy metals, such as lead and zinc, for this material is over 99% lower than those released by the initial fly ashes, while for other metals such as rubidium and barium the releases are 90% and 98% respectively.

The results obtained have made it possible to establish that silica extracted from rice husk ash shows the same inertization characteristics as pure colloidal silica. Soluble salts can be removed after the metal stabilization process and a stage when the inert material obtained is washed, and then completely recovered and reused.

This project is based on **an ecologically and economically sustainable process** and focused on the creation of a stable and innovative material made exclusively from by-products, which can thus be recycled in the production and manufacturing sectors.

The INTEGRIS project

A2A represents Italy in the consortium involved in the INTEGRIS (INTElligent GRId Sensor communications) project, co-financed by the European Commission within the 7th Framework Program. In addition to A2A, the consortium is formed of the Spanish company Endesa, and other technological partners and university research institutes. A2A Reti Elettriche has been tasked with **defining the scenario for changing over to the smart grid**, the requirements of the system and, above all, coordinating field demonstrations on its own grid and at two other test sites.

The INTEGRIS project had the objective of planning and building an **ICT infrastructure to support smart grids**, using several innovative means of communication (broadband power line carrier, Wi-Fi, fiber optic, etc.) to overcome the costs and limitations of the current technologies (GSM). The project was successfully completed in 2013.

The Smart Domo Grid project

The project has the objective of planning, building and implementing a smart grid solution with demand/response functionality, with capacity for intelligent interaction between the electrical grid of the power distribution company, Energy Management Systems (EMS) for controlling domestic equipment (smart appliances, micro-generation, electric cars, etc.) and energy storage devices **designed to improve power quality**. A pilot



system is being installed in a district of Brescia, involving around twenty families, and there is a potential plan to extend the process to Milan in the future. The Smart Domo Grid project is co-financed by the Ministry of Economic Development and led by A2A with the Energy Department of the Polytechnic University of Milan and Whirlpool.

The IDE4L (Ideal Grid for All) project

This project is a natural continuation of the INTEGRIS project, complementing the objectives of the Smart Domo Grid, and is co-financed by the European Union within the framework of the FP7 research and innovation program. Taking INTEGRIS (which is directed more towards ICT infrastructures) IDE4L focuses on more electrical functionalities, tackling extremely complex technical contexts with a significant impact on the

planning and operational management of grids, such as:

- grid automation with identification and automatic isolation of faulty sections, to improve service quality;
- congestion management, for service quality and in order to define development investments effectively;
- distributed Energy Resource (DER) Distributed Generation (DG) integration, to promote the integration and management of renewable sources;
- power quality and DER, to examine and resolve the effects of DG integration on service quality.

Plans for AEEG Resolution ARG/elt 39/10 (AEEG - *Autorità per l'Energia Elettrica ed il Gas* - Italian Regulatory Authority for Electricity and Gas)

A2A has received approval from the AEEGSI for two smart grid pilot projects. The first relates to a primary substation in Lambrate, a

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance

Sustainability Report

Environmental responsibility

2013

district of Milan, and the second to a primary substation in the municipality of Gavardo (Brescia), with different underlying grid characteristics. Both cases have the objective of overcoming the current limitations of the interface protection of generators connected to the medium voltage (MV) grid, introducing innovative voltage regulation functionalities and, potentially, dispatching locally by sending Terna summarized data only on the production fed into the MV grid. This serves to promote development of Distributed Generation and thus the use of renewable sources for the production of electricity.

The WFM and DMS projects

The smart grid can only be developed successfully if the technological development of field devices is accompanied by the development of the operational management processes for the grid. Due to this A2A is taking forward a series of innovation projects, the most important being:

- the **Work Force Management** (WFM) system, with the objective of integrating asset management systems, the GIS cartographic system and GPS technology for the location of installations and the engineering teams available on the ground and equipped with field devices, in order to manage their activities more efficiently and effectively;
- the **Distribution Management System** (DMS), constituting the development of SCADA (Supervisory Control And Data Acquisition) systems for the remote monitoring and automation of the grid, which will be the "brain" of the A2A smart grid of the future.

The ECCOFLOW project

This project, co-financed by the European Commission, consists of the designing, building and field testing of superconducting fault current limiters (SFCLs) for applications in medium voltage electricity networks. The project has the objective of evaluating the effectiveness and potential applications of this new class of power device, the use of which fosters the development of Distributed Generation and makes it possible to improve power quality.



4.1.6 Biodiversity and the countryside

A2A operates in harmony with regional, natural and cultural features, and is aware of our contribution to defining the identity and wealth of the environment. The safeguarding of biodiversity is based on the maintenance of terrestrial ecosystems and their suitability for the development of human life and animal and plant species.

The A2A Group promotes the safeguarding of biodiversity and the countryside through active co-operation with organizations, institutions and local landscape protection associations. With this in mind, we work to ensure that the introduction of its activities and installations is compatible with the vulnerability and sensitivity of the environment, above all where there are sites of particular natural beauty or sites which, by virtue of their ecological features, have been designated as Parks or Protected Areas. Environmental restrictions, if any, are perceived not as a limit or imposition, but rather as a positive element for maintaining the natural balance of the local area.

In addition to being listed as environmental offences within the meaning of Legislative Decree No 231/2001, the acts of destroying or significantly harming habitats situated inside a protected site and killing, removing or capturing protected wild animal or plant species are recognized by the Group as being contrary to our Code of Ethics. The following table lists the animal and plant species included in the International Union for Conservation of Nature (IUCN) and Italian Red Lists, found in the Natural Parks or Protected Areas affected by the presence or proximity of the Group's plants.

30 Main animal and plant species vulnerable to or at risk of extinction in the parks in which A2A operates

	Stelvio National Park				dda Nord Mincio gional Park Regional Park		Saline di Punta della Contessa Regional Park	
	IUCN red list	Italian red list	Italian red list	IUCN red list	Italian red list	IUCN red list	Italian red list	Italian red list
Animal Species	Snow vole Squirrel	Royal eagle Goshawk Roe deer Imperial raven Rock partridge Pine marten Hazel grouse Capercaillie Bearded vulture Alpine chough Eagle owl Hare Wolf Ptarmigan Dotterel Squirrel	Snow vole Scops owl Goshawk Roe deer Hare Wolf Pine marten Squirrel	Squirrel	Grey heron	Red-footed falcon Eagle owl Ferruginous duck Aquatic warbler Corncrake	Grey heron Montagu's harrier Montagu's harrier Scops owl Cattle egret Teal-/Short-toed eagle Gadwall Cormorant Imperial raven Long-eared owl Little tern Mediterranean gull Black tern Ferruginous duck Redshank Green woodpecker Corncrake Bittern Shelduck	Purple heron Garganey Marsh harrier
Plant Species		Edelweiss				Salvinia Natans Summer lady's tresses		

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance

Care for the countryside and biodiversity also translate into the planning and adoption by A2A of **environmental compensation strategies**, which while not directly reducing the environmental impact caused by building and operating plants and carrying out activities there, enable the conditions of the environment, the local area and the countryside to be improved or benefits to be brought to the animal and/or plant species to be found there.

Ecoidro project for safeguarding biodiversity

A2A has taken part in the Italian-Swiss **Ecoidro project, on the use of water and the safeguarding of the environment and biodiversity in the Adda, Mera, Poschiavino and Inn basins**, promoting a number of projects in the Sernio and Cancano basins in Valtellina (Sondrio). Within the project, which was led by the Province of Sondrio and came to an end in 2013, A2A was in charge of the planning and implementation of experimental interventions for the management of sediment in various reservoirs that require regular maintenance to ensure the efficiency and safety of the hydroelectric system. In order to minimize environmental impact, all necessary measures are taken to protect and safeguard plant life and fish while these operations are carried out. The Ecoidro project falls within area 1 - Environment and Territory - of the Italy-Switzerland INTERREG 2007-2013 Cross-border Co-operation Operational Program.

Minimum Vital Flow and reservoirs in Valtellina

In order to preserve life and conserve habitat in water courses from which water is abstracted for the production of hydroelectric energy, a minimum amount of water called the Minimum Vital Flow (MVF) must be maintained in the river bed.

For several years A2A has undertaken to release predetermined quantities of water from the main intakes in Valtellina in order to reduce the environmental impact to the minimum.

Automatic control systems have been used since 2009 **to ensure the minimum vital flow** required by current legislation.

By carrying out a scientific project to verify the state and responsiveness of water courses that are subject to repeated flushing, A2A decided to suspend all reservoir activities in Valtellina for 2013. For this purpose, specialized companies have carried out specific monitoring in the areas concerned.

Draining the Lumiei Dam (province of Udine)

In February 2013 the Lumiei dam was flushed and the reservoir completely emptied (for the first time in around 60 years since the construction of the dam). These activities were essential in order to maintain the efficiency of the structures for the safety of the dam and the surrounding area. During the operations the waters of the Lumiei stream and a short stretch of the river Tagliamento became cloudy due to the suspended solids carried downstream. This gave rise to critical issues with a temporary effect on the ecosystem that could quickly be fully reversed (as is shown by similar experiences over many years at other reservoirs).

In-depth environmental monitoring of the water courses involved was performed before, during and after the maintenance work. An agreement between Edipower and the Friuli Venezia Giulia *Ente Tutela Pesca* (Fishing Protection Body) made it possible to start the reintroduction of fish into the reservoir and the Lumiei stream that autumn. Further restocking is planned in 2014 and 2015.

Restoration of the Silani rivers and Ancinale stream as fish habitats

In Calabria, A2A has promoted environmental compensation and restoration schemes for a long time, both after emptying various lakes, and following major repairs to the water intake system from the Ancinale stream, near the village of Cardinale (Cosenza).

At the time of the mandatory restocking of Lake Passante and the Alli river with two hundred thousand live fry as required by the regulations governing the concession, and on a one-off basis in agreement with the province of Catanzaro and FIPSAS (the Italian Federation of Sport Fishing), the company also introduced thirty thousand small trout.

When a fishing competition was held on the Ancinale in order to raise awareness of the activities of A2A on the river, including the building of a fish ladder, **two hundred kilograms of brown trout and ten thousand live fry were also introduced on a one-off basis** (see also the caption "Sport Fishing: first edition of the A2A Trophy" on p. 214).

Nesting Niches at the Cassano d'Adda and Ponti sul Mincio Power Stations

In order to encourage birds of prey to nest, a cubbyhole was built and installed at the Cassano d'Adda (Milan) power station at the level of the window of the reinforced concrete chimney stack, at over 100 meters in height, creating a niche suitable for nesting pairs. The first to take advantage of this possibility were a pair of kestrels (*Falco Tinniculus*) in 2010. Over the following years various birds of prey were present at the chimney stack almost every day and in 2013 a young pair of peregrine falcons (*Falco Peregrinus*) adopted the chimney as a place to rest and watch for prey in the daytime.

There is another artificial nesting site at the Ponti sul Mincio power station, again used by a pair of peregrine falcons. The two species of falcon hosted by A2A power stations, identified with the assistance of a falconer, are on the national list of protected species.

Fill up with electricity with A2A

A2A is continuing with its commitment to develop the charging network for electric vehicles, as part of the experimental e-moving project. The public charging infrastructure for electric cars that has been created in Brescia and Milan, with a total of 100 charge points, is now operational and has recently been upgraded to enable rapid charging of the latest generation of cars (in about 30 minutes). The installation of private charge points for carsharing companies and owners of electric vehicles is proceeding in parallel. Out of all the testing being promoted by the AEEG, which will continue until 2015, the e-moving project appears the most complete and advanced platform. On the www.e-moving.it website it is possible to subscribe to the service and obtain an access card, while a free smart phone app makes it easy to find the charge points.

A2A is working with ENEL and Repower to achieve the interoperability of the public charging infrastructures and top-up cards used by end customers, allowing them to access all charging facilities using the same card.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance

4.1.7 Effects connected with transport

Many of the activities managed by the A2A Group, such as waste collection, environmental sanitation services and network maintenance, require the use of vehicles in addition to those used by staff for work-related journeys.

A2A is committed to promoting sustainable mobility and, for this purpose, evaluates the transport-related impact associated with carrying out company activities, adopts advanced strategies for the management of its vehicle fleet, and undertakes initiatives aimed at reducing the consumption of oil-derived fuels and the emission of pollutants into the atmosphere. Most of the company's vehicles have a bi-fuel system, enabling them to use methane as an alternative to more polluting traditional fuels.

The implementation of the e-moving project received a further boost in 2013; this is a project promoted by A2A to encourage the use of electric vehicles in cities, by installing charging columns in Brescia and Milan.

4.1.8 Greenhouse gas emissions

The activities of A2A Group lead to the emission of carbon dioxide (CO_2) into the atmosphere both directly (for example during energy production) and indirectly (through energy consumption at plants and offices, the use of materials and consumable goods, and the management of plants owned by third parties).

Direct emissions (classified as Scope 1) are primarily due to the supply chain for energy production and, secondarily, to methane leaked from the distribution network or not collected at landfill sites. The following table specifies details of emissions by source in 2013. An increase (+34%) compared with the previous year was recorded, due to the inclusion of the Edipower power plants.

31 Total direct emissions (Scope 1) - tCO2 eq

Total	6,862,002
Service and distribution networks	10,436
Fluorinated gases	13,394
Motor vehicles	34,835
Methane loss from landfill sites (estimated)	46,242
Methane loss from distribution networks (estimated)	591,187
Energy production	6,165,908

Indirect emissions due to electricity consumption (Scope 2) have also increased by around 71% in 2013, because of the additional power plants, reaching a level of **174,853 t**.

Scope 3 emissions consist of the emissions of plants managed on behalf of others such as heating boilers (heat management system) and the plants at Acerra (waste-to-energy plant) and Caivano (shredding of urban waste). They also include emissions from work-related travel. The figure for 2013, **746,150 t** is a little higher than that for last year (+3%).



In 2013 A2A participated again in the questionnaire prepared by the Carbon Disclosure Project, a not-for-profit organization that collects climate change data around the world, by publishing independently audited data on its carbon balance. The data are available on the following website: www.cdp.net.

4.1.9 Removal of asbestos and polychlorinated biphenyls

The Group's Environmental Policy requires the careful handling of dangerous substances such as asbestos and polychlorinated biphenyls (PCBs) through the planning of extraordinary maintenance measures designed for their removal.

None of the transformers on the electrical distribution grids have a PCB content of over 50 ppm.

The needs and priorities for decontamination activities have been identified on the basis of the survey carried out in 2012, listing Group structures where asbestos is present, and its subsequent updates.

During 2013 A2A Reti Gas carried out decontamination operations at 16 structures, removing a total surface area of 1,270 m2 of asbestoscontaining materials, with a final investment of 168,000 euro.

While maintenance is being carried out at the Monfalcone thermoelectric plant, decontamination operations are taking place with the aim of progressively reducing the quantity of asbestos there. 27.4 metric tons of asbestos-containing materials were removed in 2013.

During the year A2A Reti Elettriche has disposed of asbestos-containing materials in a mostly friable matrix, originating from our premises at Via

Ponte Nuovo, Milan.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance

4.2 Responsible management of energy production and distribution



IDENTITY CARD AT DECEMBER 31, 2013



The share of electrical energy from renewable sources has increased to 41.8%

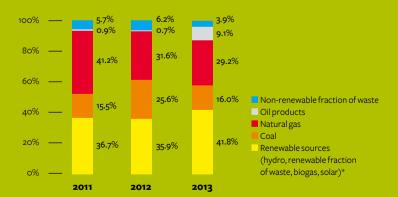


The district heating network has expanded by over 43 km, and is now close to 1,000 km



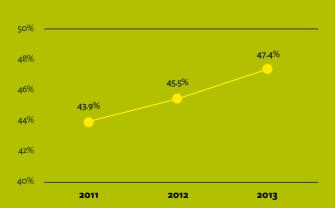
An **new plan** has been submitted for the **full environmental remediation of the coal-fired units** at the Monfalcone power plant

32 Electricity production by source



* It has been assumed that there is a renewable fraction of 51% for non-hazardous waste (Ref. Decree of the Ministry of Economic Development of December 18, 2008). As a consequence the non-renewable fraction has been taken as 49%.

33 Thermal energy from waste to energy**



** Energy produced by waste-to-energy plants as a percentage of the total thermal energy produced by the Group.

The average CO₂ emission factor for the Group in 2013 amounted to 385 g/kWh (-4% compared with 2012). Over 3 million metric tons of CO₂ emissions have been avoided thanks to the use of A2A technologies (hydroelectric, cogeneration, recovery of energy from waste).



All the numbers for the environment are in the tables from p. 106 to p. 123



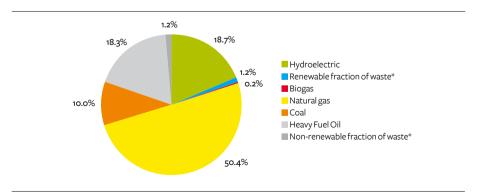
4.2.1 Efficiency in energy production

Energy sources

The A2A Group is characterized by a significant use of renewable sources and by a wide diversification of energy sources, among which a considerable role is played by the recovery of energy from waste.

In addition, electricity production is based on the use of primary energy sources with a high diversification of installed power amongst renewable and fossil sources and amongst the various fossil fuels. There has been a notable increase in installed hydroelectric and natural capacity compared to 2012, due to the acquisition of the Edipower energy company. A2A has around 2,000 MWe of installed electric power based on renewable hydroelectric sources and over 5,000 MWe of installed electric capacity based on high efficiency combined cycle technology.

34 Installed electric capacity by source



^{*} On the basis of the type of waste on entry, the proportion of power produced by renewable sources amounts to 51%.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmentalresponsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

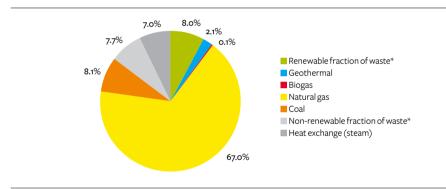
Social responsibility

Statement of compliance

2013

Around 10% of installed thermal capacity is based on the use of renewable sources, while the remaining non-renewable installed thermal capacity is mainly based on the use of natural gas.

Installed thermal capacity by source



^{*} On the basis of the type of waste on entry, the proportion of power produced by renewable sources amounts to 51%.

In 2013 the yield from natural gas combined cycle plants went down to 49.3% (compared with 51.3% in 2012) due to the reduced use of these plants caused by the Italian national electricity market, which forces it to function less efficiently. As a consequence of this, the total yield of A2A's thermoelectric park has also diminished to around 40% (42.6% in 2012). The average yield of cogeneration plants fired by fossil fuels remained in line with the data for 2012 at 78.3%.

Renewable energy sources

Renewable energy sources, which make it possible to reduce the use of fossil fuels and become less constantly dependent on them, play a key role for the A2A Group.

Hydroelectricity, historically present in the two companies from which the A2A Group was formed, is the main renewable source used by A2A to produce electricity.

By exploiting the energy in the water of mountain basins, water courses and underground flows further significant environmental benefits are obtained, as atmospheric emissions are eliminated. The available installed hydroelectric capacity of the Group increased significantly in 2013, thanks to the acquisition of Edipower.

A2A now owns the following hydroelectric plants in Italy(1):

- the Valtellina hydroelectric system (province of Sondrio), around 780 MW of efficient electrical power;
- the Mese hydroelectric system (province of Sondrio), around 380 MW of efficient electrical power;
- the Udine hydroelectric system, around 315 MW of efficient electrical power;
- the Calabria hydroelectric system (provinces of Catanzaro, Cosenza and Crotone), around 580 MW of efficient electrical power.

Hydroelectric production amounted to **5.12 TWh** in 2013. Aggregating contributions from other sources such as biogas, renewable fraction of waste, geothermal and photovoltaic to the production data for hydroelectric, **the proportion of electrical energy from renewable sources produced by the Group reached 41.8% in 2013.** The national figure for electrical energy from renewable sources amounted to 27.5% (Source: *Gestore dei Servizi Energetici (GSE)* - latest available figure).

A significant contribution to the production of electricity and/or heat from renewable sources comes from waste-to-energy plants based on non-hazardous waste, the use of

⁽¹⁾ A2A also has a significant shareholding in the Montenegro hydroelectric company EPCG, which in its turn owns further hydroelectric plants.

biogas produced from the biological decomposition of waste in landfills, and groundwater heat pumps. This latter technology is used successfully by the Municipality of Milan to feed its district heating networks; the heat pump, powered by electricity, "transfers" the heat contained in a cold source (groundwater) to a warmer source (the water circulating in a district heating network) without the *in situ* combustion of methane gas or diesel fuel, and thus without the emission of pollutants into the atmosphere.

Cogeneration and district heating

Through **A2A Calore & Servizi and Varese Risorse**, the A2A Group constructs and manages district heating and district cooling plants and networks. District heating is by now a consolidated reality and is constantly expanding in the cities of Milan, Bergamo, Brescia and Varese and in some municipalities in the respective provinces. The Edipower thermoelectric power plant at Piacenza also supplies heat to the city's district heating network. District cooling in Milan is provided by the Tecnocity plant, in Varese by the cogeneration plant at the city's hospital and in Brescia by the Brescia Nord plant.

A2A Calore & Servizi - Esco Certified

In 2013 A2A Calore & Servizi achieved certification as an ESCo (Energy Service Company) according to UNI CEI 11352:2010 for the provision of energy services in the public and private sectors.

This certification is in addition to its recognition in 2005 as a company operating in the promotion, installation and management of measures for the reduction of energy consumption, in accordance with the Ministerial Decree of July 20, 2004 and AEEG Resolution 103/03. This is a new milestone for A2A Calore & Servizi in terms of certification, placing the company among the first in Italy to have this type of validation, showing its technical capacity to operate in the energy analysis sector and to manage contracts with guaranteed results for the energy savings achieved.

High efficiency cogeneration

The operators of cogeneration plants, including those using heat to feed district heating networks, can make an annual application to the *Gestore dei Servizi Energetici* (*GSE*) for the award of High Efficiency Cogeneration (HEC) status. This recognition is awarded when there is a Primary Energy Saving (PES) of at least 10%. A2A has been awarded High Efficiency Cogeneration status for the cogeneration units of the plants in the Milan area (Tecnocity, Famagosta, Canavese, Novate, Cassano d'Adda and the Silla 2 waste-to-energy plant), the Bergamo area (Carnovali and Monterosso), Varese (Circolo Hospital) and Brescia (Lamarmora and the Brescia waste-to-energy plant). All these plants feed urban district heating networks managed by A2A Calore & Servizi.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmentalresponsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

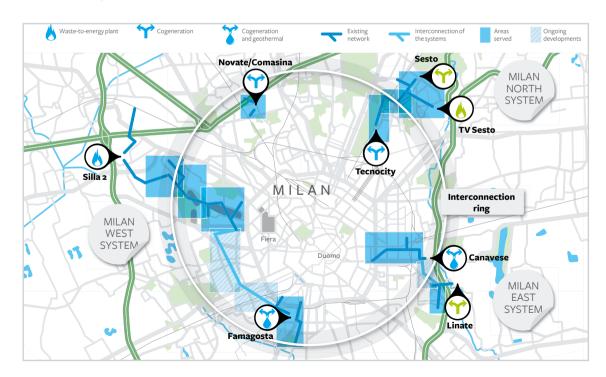
Social responsibility

Statement of compliance

2013

The available thermal capacity at the plants amounts to 1,500 MW, which is obtained by means of various high efficiency plant solutions such as cogeneration systems (the simultaneous production of electricity and heat in the same production cycle and using the same amount of fuel, currently among the most effective and efficient technologies for rational energy use and the reduction of air pollution), heat recovery systems and heat pumps.

The connection of the Silla 2 waste-to-energy plant with the methane gas power plant in Selinunte, completed in summer 2011, has made it possible to increase the amount of thermal energy recovered from the waste-to-energy plant and save around 9.9 million cubic meters of natural gas over the last two heating seasons, thanks to the reduced use of the power plant, while also avoiding the emission of the related pollutants. In 2013 a connection was started with the cogeneration plant in Famagosta, where three new natural gas supplementary boilers have been brought into use, with a total capacity of 36 MWt. The connection work will be completed in autumn 2014.



The first route (Silla 2 - Selinunte) is 4 kilometers long, while the continuation towards Famagosta will involve developing the network for a further 6.5 kilometers. The construction of the western area system, with the interconnection of the Silla 2, Selinunte and Famagosta plants, will make it possible to configure the network-plants system to use mainly renewable and/or high efficiency cogenerated energy. This is a major project involving a substantial economic commitment, which gives concrete form to the ring distributing heat around the city, on the basis of three large areas to the west, east and north of Milan.

In the city of Milan alone, in the 2013-2014 heating season the number of apartment equivalents (= 80 m2) served by the district heating network, showed an increase of 9.4% compared with the previous year. The volumes connected amount to 22 million m³ and around 12 kilometers of network have been installed in 2013.

36 Current and predicted development of A2A district heating in Lombardy

	Situation at December 31, 2013			Development forecasts for 2016	
	Network development (double pipe) Km	Buildings connected* (users) No	Volume served M³	Apartment equivalents** No	Volume served M³
Bergamo area	60.0	451	5.2	21,700	7.4
Brescia area	660.1	20,430	41.6	173,300	42.6
Milan area	238.2	2,776	39.8	165,800	49.0
Varese area	16.0	143	2.6	10,800	2.7
Total	974-3	23,800	89.2	371,600	101.7

 $[*] Users\,may\,be\,a\,single\,residential\,unit\,in\,the\,case\,of\,independent\,heating\,or\,a\,whole\,building\,in\,the\,case\,of\,centralized\,heating.$

^{**} Apartment equivalent = 80 m².



Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance

Energy redevelopment in Varese (caption)

In 2013 the amendment to the agreement awarding the district heating service in Varese was signed, appointing Varese Risorse to carry out the upgrading works to comply with regulations and increase energy efficiency, and the management of the energy service of 26 municipal heating systems, mostly schools, of between 35 and 1,000 kW. 25 heating systems were completed over the year (the twenty-sixth will be completed in 2014). For 23 heating systems the redevelopment consisted of removing the diesel boilers from municipal buildings and installing new energy efficient condensation boilers fuelled by methane and biomass. Before the work the systems consumed around 820,000 liters of diesel per year. Replacing this with methane and biomass has resulted in **significant environmental benefits**, as detailed in the following table.

37 Pollutant emissions prevented by the redevelopment of heating systems in Varese

Data item	Before the work	After the work	Difference	%
NO _x emissions (<i>Kg/year</i>)	1,479.26	1,335.13	-144.13	-10%
SO ₂ emissions (<i>Kg/year</i>)	1,385.80	20.96	-1,364.84	-98%
PM ₁₀ emissions (<i>Kg/year</i>)	147.93	35.97	-111.96	-76%
CO ₂ emissions (t/year)	2,202.26	1,450.51	-751.75	-34%

Two boilers were converted in buildings of the Astronomical Observatory and Chalet in Varese, where 2 biomass boilers (at the Observatory) and 1 (at the Chalet) were installed, to be used for winter space heating and the supply of water for hygiene and sanitation. The new boilers are fuelled by pellets, a renewable fuel which has replaced a fossil fuel such as diesel, and also eliminates the risk associated with spillages into the environment.

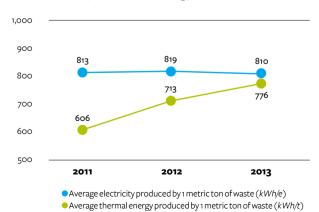
Recovery of energy from waste

For the A2A Group the recovery of energy from waste and biomass is a key activity in its energy source diversification strategy. This activity is mainly carried out in Lombardy, at the plants in Brescia, Milan, Bergamo and Pavia, and in Campania, by managing the Acerra waste-to-energy plant in Naples.

Electricity produced from waste in 2013 was approximately 8% of the total electricity produced by the Group, while thermal energy from waste reached 47.4%.

On average 810 kWh of electricity and 776 kWh of thermal energy were produced for each metric ton of waste, -1.1% and +8.8% respectively compared with 2012.

38 Electricity and thermal energy produced from waste



Acerra waste-to-energy plant: clean energy from waste

The Acerra waste-to-energy plant confirmed **full production capacity in 2013, processing over 600,000 metric tons of pre-treated urban waste** collected in the Region of Campania and feeding around 592 GWh of electricity into the grid, which would otherwise have required the use of 111,000 metric Tons of Oil Equivalent to produce.

The plant also maintained **high levels of environmental performance**. Up to the end of 2013 the waste-to-energy plant has made it possible to avoid the emission of 146,000 metric tons of ${\rm CO}_2$. Atmospheric emissions were monitored continuously throughout the year, with two monitoring systems on each chimney stack. Six monitoring campaigns were also carried out by accredited independent laboratories, all of which confirmed the reliability of the plant, the efficiency of the flue gas treatment system and the plant's full compliance with the limits set in the Integrated Environmental Authorization (IEA). The same results were also achieved on emissions of organic micropollutants into the atmosphere, sampled by means of systems installed on each line, and on water discharges and groundwater, repeated analyses of which have shown that emission values are in compliance with the requirements made in the authorizations for the plant.

Partenope Ambiente, which managed the plant throughout 2013 (the company has now merged with A2A Ambiente) confirmed that it was applying the Quality, Environment and Safety Management Systems correctly, obtaining the approval of ARPA Campania (Regional Environmental Protection Agency) for EMAS registration and confirmation by the external certification body ICIM of the Environmental Declaration for the waste-to-energy plant.

Environmental markets and energy efficiency

In relation to environmental markets, EU directives and Italian legislation provide for enterprises to be strongly involved by means of mechanisms such as cap and trade (based on the setting of a threshold and a trading mechanism), which make it possible to achieve environmental targets at a lower total economic cost for the system⁽¹⁾.

In Italy there are currently three regulatory schemes in the environmental field of the cap and trade type:

- Emissions Trading Scheme (ETS), which has the aim of containing carbon dioxide emissions and is linked to the 1997 Kyoto Protocol;
- White Certificates (or Energy Efficiency Certificates), which have the objective of increasing energy efficiency in the end consumption of energy and the use of thermal renewable sources;
- **Green Certificates**, which have the objective of increasing the production of energy from renewable sources and which will remain in force until 2015 (this mechanism will be replaced by a feed-in tariff approach in 2016).

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmentalresponsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance

⁽¹⁾ The mechanisms are based, on the one hand, on the setting of a mandatory threshold (cap) by a competent authority and, on the other, on a market in permits in which parties can trade in order to meet their obligations.

Numerous plants form part of the environmental markets and these are to be found in various Group companies:

- Emissions Trading Scheme: 23 plants including 9 thermoelectric plants, 1 waste-toenergy plant and 13 cogeneration and boiler plants;
- White Certificates: 2 gas and electricity distributors with 282,343 energy efficiency credits as of the 2013 obligation, corresponding to over 5% of the Italian target, equal to 5.51 million white certificates;
- Green Certificates: over 30 power production plants using conventional, renewable or cogeneration sources.

In 2013 the Emissions Trading System entered its third implementation stage for trading in CO₂ emission permits: **the objectives for reducing pollutant emissions are increasingly challenging** and an additional commitment is required from enterprises. By contrast with the previous stages, for the purely thermoelectric sector, the credits with which CO₂-equivalent metric tons emitted are compensated must all be purchased on the market and will no longer be allocated without charge to Member States, while thermoelectric cogeneration plants and thermal plants associated with district heating networks will benefit from a percentage of free allocation. Thanks to the latter, **270,071 free CO₂ quotas were allocated to A2A in 2013**.

With regard to energy efficiency, A2A has confirmed its position as the third operator in Italy (first among the multi-utilities) for the energy saving objective to be achieved. In 2013 88,237 white certificates were issued to A2A for its energy efficiency projects, corresponding to an emissions saving of 261,675 CO_2 -equivalent metric tons.

In consideration of its obligations and the growing importance of energy efficiency, the A2A Group is committed to promoting and sustaining a reduction in the consumption of primary energy in end usage in Group companies and industrial entities, in operating as an ESCO (Energy Service Company). A2A Trading works with the client to obtain white

certificates at all stages: planning, drawing up plans and the *Gestore dei Servizi Energetici* approvals procedure until the credits are obtained and issued. Thanks to its presence on the market, where it has operated since this mechanism started, it also offers support to customers for the management and sale of the certificates they have obtained, maximizing their market value (for information see certificatibianchi@a2a.eu).

All credits connected with the Group's environmental markets are managed within A2A Trading in order to bring together all the relevant information about new initiatives, the actual flows of the credits and the trading on the market, which also serves to optimize risk management and take advantage of opportunities connected with legal requirements.

4.2.2 Management of environmental aspects in energy production

Air and climate

A2A Group's production plants are equipped with advanced flue gas treatment systems, making it possible to stay well within the authorized limits and, in most cases, achieve the performance levels identified by the European Commission for the Best Available Technologies. The main regulated pollutants in fossil fuel fired plants are: nitrogen oxides, carbon monoxide, sulfur oxides and dust. The levels of these emissions are kept under control in thermoelectric and waste-to-energy plants, recorded using continuous monitoring systems, and submitted regularly to the relevant authorities. The region of Lombardy has additionally established that the monitoring network for emissions from large-scale plants (the "SME network") in that region must be integrated with the existing air quality network to enable the ARPA (Regional Environmental Protection Agency) to have access to the instant data provided by the continuous emissions monitoring systems installed on the chimney stacks of the plants. The power plants operated by the Group that are affected by this connection are Cassano d'Adda (Milan), Ponti sul Mincio and Sermide (Mantua).

With regard to emissions from waste-to-energy plants, particular emphasis is placed on emissions of dioxins, polychlorinated biphenyls, polycyclic aromatic hydrocarbons and metals. These pollutants are regularly monitored to ensure that legal limits are complied with. The concentrations measured have always been below these limits, and in certain cases they have been below the measurability threshold.

Total emissions of nitrogen oxides, sulfur oxides and dust in 2013 increased over those of the previous year, mainly as a consequence of the greater thermoelectric capacity brought to the A2A Group by Edipower. Specific emissions (that is in relation to the actual amount produced by power plants) are however in line with those of 2012, despite the intermittent operation of the plants due to the electrical market. The data are available in the tables included at the end of this chapter.

Waste-to-energy plant emissions online

In accordance with the transparency policy followed by A2A, in December 2011 an information service for emission data from the Group's six waste-to-energy plants went live.

"Online emissions" makes it possible to view average daily data in a consistent format for the four weeks preceding the day when the website is visited. The data are updated on a weekly basis and gradually filed and summarized in an ad hoc section. This service makes it possible to have a complete and exhaustive view of all of A2A's waste-to-energy plants and check atmospheric emissions accurately.



The "Air Quality" page grouping together atmospheric emission data from plants may be consulted on the sustainability section of the corporate website at www.a2a.eu

In 2013, the **total emissions of dioxins** from the Group's plants was 0.010 grams, 28.6% lower than the 0.014 grams in 2012, a result achieved thanks to concentrations in the flue gases which remained much lower than legal limits, at one ten billionth of a gram per cubic meter (0.1 ng/Nm³). Reduced concentrations of nitrogen oxides and carbon monoxide are achieved by using a combination of the following techniques: installing low emission burners, recirculating flue gases, the controlled pre-mixing of fuel and air and the use of catalytic systems.

In 2013 new SCR (Selective Catalytic Reduction) systems for the denitrification of nitrogen oxides in flue gases were brought into service at the **Edipower plant in Piacenza**. This measure became necessary following a requirement made in the Integrated Environmental Authorization, which reduced the emissions limit set for nitrogen oxides (NOx) from 40 mg/Nm3 to 30 mg/Nm3.

To reduce the concentration of sulfur oxides, plants using coal are equipped with advanced desulfurization systems.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmentalresponsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance

The desulfurization reactor at the Lamarmora plant in Brescia was upgraded in 2012.

Wet limestone-gypsum desulfurizing (wet Flue Gas Desulfurization or wet FGD) plants are installed at the **Monfalcone thermoelectric plant**, which entered service in November 2008. Using these systems average monthly concentrations of sulfur dioxide (SO_2) have been obtained, which are well below 200 mg/Nm3 (the limit set by the current Integrated Environmental Authorization).

The **Edipower thermoelectric plant in Brindisi** uses low sulfur coal (below 0.24% by weight) to reduce emissions of sulfur oxides.

Abatement systems to reduce emissions of sulfur oxides (DeSOx) have been installed at the **Edipower thermoelectric plant at San Filippo del Mela (Messina)**, and were brought into use between 2002 and 2010. The two units without DeSOx have been permanently out of service since January 2014, as required by the Integrated Environmental Authorization.

Carbon dioxide (CO₂) emissions from power plants constitute the majority of A2A Group's direct emissions (Scope 1). The 2013 figure, amounting to 6,165,908 metric tons is greater (+37%) than that for 2012 because of the addition of the emissions from the thermoelectric plants owned by Edipower.

-4% average CO₂ emission factor

The total average CO₂ emission factor for the Group, calculated by adding together all the emissions from the production of energy and taking this as a ratio of total energy production (electricity and thermal energy), improved considerably and fell to 385 g/kWh (403 g/kWh in 2012).

The use of renewable resources such as hydroelectricity and biodegradable waste, and the

use of cogeneration and advanced technologies, makes it possible to both reduce carbon dioxide emissions and save fuel in comparison with conventional processes.

In order to measure the savings in CO₂ emissions produced by the activities of the A2A Group a method is used **to calculate avoided CO₂ emissions and the energy savings** which is applicable to all of the Group's plants and energy processes throughout Italy. This method was developed in 2010 and is updated each year using the reference parameters and emission factors published by Terna or ISPRA for national Italian generating capacity.

The data are summarized in the following table:

39 Avoided CO₂ emissions and energy savings in energy reduction

	2011	2012	2013
Avoided CO ₂ (t)	2,823,227	1,374,116	3,080,648
Energy saved (TOE)	948,885	867,211	1,327,551

The improvement in performance in 2013 is due to the hydroelectric production of Edipower. The main contribution to avoided emissions comes from hydroelectric production, after which come waste-to-energy plants and, to a lesser degree, cogeneration.

Use of water resources

A2A is constantly engaged in carrying out measures to improve the use of water resources from a sustainability standpoint. The following table summarizes the ways in which the A2A Group uses water resources.

No outside water resources are used at the **Gissi (Chieti) thermoelectric plant**, where all the water required is obtained from the recovery of rainwater and the use of water

coming from the consortium's purifier. In addition to this, air is used to cool the thermodynamic cycle. These systems have made it possible to save around 32,000 m3 of primary resource in 2013.

At the **Edipower plant in San Filippo del Mela (Messina)** new treatment facilities for the recovery of oily water and the production of industrial water by desalinating sea water have become operational in 2013. The use of this equipment has eliminated the abstraction of deep groundwater for industrial purposes. Only water needed to operate facilities associated with soil decontamination and surface water continues to be abstracted.

In the **Lamarmora plant in Brescia**, the use of water from the public supply has been reduced by recovering water from demineralizer regeneration. This system has also reduced the quantity of effluents.

At the **Brescia waste-to-energy plant** the waste is cooled by reusing water from the plant that treats the waste water from the waste-to-energy plant itself and from the nearby Lamarmora plant. This makes it possible to reduce the volume discharged by the water treatment unit into the body of surface water and the quantity of water extracted.

Activities	Water uses
Hydroelectric production	The hydrographic basins most involved are those of the rivers Adda and Spoel in the Upper Valtellina and the river Liro in Lombardy, that of the river Tagliamento in Friuli Venezia Giulia, and those of the rivers Neto, Simeri, Ancinale and Savuto in Calabria. The water extracted is returned in full.
Thermoelectric production	The water is needed for the production of steam, for cooling purposes in the thermodynamic cycle, and for limiting the dispersion of dust. The water extracted for cooling is fully returned to the same water body with the same qualitative features apart from a slight increase in temperature. The surface water bodies affected by abstraction are: the Valentinis canal (Monfalcone thermoelectric plant, Gorizia), the Muzza canal (Cassano d'Adda thermoelectric plant, Milan), the river Mincio (Ponte sul Mincio thermoelectric plant, Mantua), the Cavour canal and river Po (Chivasso thermoelectric plant, Turin), river Po (Piacenza thermoelectric plant, Sermide thermoelectric plant, Mantua), the Adriatic sea (Brindisi thermoelectric plant), the Tyrrhenian sea (San Filippo del Mela thermoelectric plant, Messina.
District heating	Water consumption is mainly due to refilling the water in the network, for which drinking water from the public supply is generally used. Some of the A2A Group's plants use groundwater heat pumps to produce energy, with water extracted from wells located close to the plants.
Electricity distribution	In certain plants water is needed for cooling the transformers and comes partly from wells and the public water supply.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmentalresponsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance

Monfalcone plant: environmental management and commitment on the ground

A2A pays close attention to the environmental management of the Monfalcone thermoelectric plant (Gorizia) and to relationships with the area and residents living near the plant.

The plant currently consists of two coal-fired units with a total capacity of 340 MWe. There are also two oil-fired units with a capacity of 640 MWe,, which are not currently operational because, in compliance with the provisions of the Integrated Environmental Authorization (IEA), they have been declared to be unavailable for commercial operation. Due to this, A2A has decided to stop supplying the site with fuel oil, which is no longer present at the plant.

144 employees work on the site and another 200 workers are employed in related industries.

The plant is has been awarded ISO 14001 (environment), ISO 9001 (quality) and OHSAS 18001 (health and safety) certifications, and is part of the EMAS European Eco-Management and Audit Scheme.

In recent years major modernization work has been carried out on the flue gas treatment and **atmospheric emission** reduction systems. In addition to the electrostatic precipitators for dust reduction that were already present, wet flue gas desulfurizers have been installed to reduce sulfur oxides (SOx). In order also to reduce emissions of nitrogen oxides (NOx), A2A has submitted a new plan for the full environmental remediation of existing coal-fired units to the relevant authorities. The project originated from the requirement in the Integrated Environmental Authorization to bring the NOx emission values into line with the best techniques available and envisages the installation of a high dust SCR reactor. This plan has been screened and passed an environmental impact assessment, for the purposes of which the environmental impact study investigating aspects relating to the power plant were carried out. All the relevant documentation has been published in the VIA and AIA sections of the Ministry of the Environment website: www.minambiente.it.

The SCR in question, which involves **an investment of approximately 25 million euro** represents the best available technology that can be applied at the plant and will make it possible to ensure the reduction of NO_x emissions to flue gas concentrations to below 180 mg/Nm³ (at an O_2 content of 6% by volume on a dry basis). This concentration is below the limit given in the European Industrial Emissions



Directive (2010/75/EU) and is in line with the Best Available Techniques Reference Document (BREF).

According to the plan the SCR will, once it is in operation, allow the reduction of current emission levels for nitrogen oxides by over 60%.

With regard to emissions of heavy metals, the treatment systems that are currently installed are fully effective for containing them well within the legal limits.

40 Expected emission values after the DeNOx installation and comparisons with EU limits

(values at an O₂ content of 6% by volume on a dry basis)	Group 1 - 2 mg/Nm³	Limits set in Directive 2010/75/EU
NO _x	≤180	≤200
NH ₃ slip	≤ 0,76 (1 ppm)	-

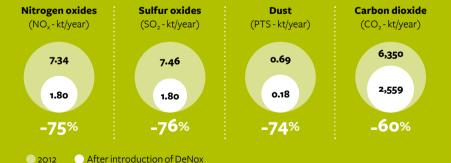
41 Average monthly concentrations measured in 2013 compared with Integrated Environmental Authorization limits

(values at an O ₂ content of 6% by volume on a dry basis)	Group 1 mg/Nm³	Group 2 mg/Nm³	IEA limits mg/Nm³
SO ₂	min. 37.8 - Max. 85.6	min. 23.6 - Max. 76.5	200
Dust	min. 8.1 - Max. 13.1	min. 5.5 - Max. 17.8	30

42 Concentrations measured in 2013 compared with limits set in Legislative Decree 152/2006

(values at an O ₂ content of 6% by volume on a dry basis)	Emissions measured mg/Nm³	Legal limits Legislative Decree 152/2006 as amended mg/Nm³
Beryllium	0.0001	0.05
Mercury	0.0001	0.05
Cadmium and thallium	0.00025	0.05
Hexavalent chromium, arsenic, cobalt	0.00745	0.05
Selenium, tellurium	0.0026	0.05

Comparing the total emission values measured in 2012 (the last year when the two oil-fired units were operational) with those expected after they have been dismantled and the DeNox has been installed, the net environmental improvement produced by the two actions becomes apparent.



The project for the construction of a new high efficiency unit, which was intended to replace the heavy fuel oil units, has been temporarily suspended for investigations by the company.

In accordance with usual relationships and interactions with local communities and bodies, A2A presented the investment and development plans for the plant at information and discussion meetings with local stakeholders: residents, environmental associations, consumer associations and the press. As set out in an agreement signed in 2012 between the municipality of Monfalcone and A2A, in spring 2013 a technical roundtable was held at which the following took part: A2A, municipality of Monfalcone, Region of Friuli Venezia Giulia, Province of Gorizia, and the local **ARPA** and **ASL** (local health service). The roundtable's objectives were to: evaluate the environmental state of the area; verify and study environmental aspects associated with the operation and development of the plant and its effects on the quality of life of local residents; and agree additional measures to be taken in addition to those required by legislation. In this context, it was decided to transfer the management of the air monitoring network from A2A to the ARPA, and to integrate it with the modern instruments for the detection of fine particles (PM2.5) that have already been installed and are currently operational, at the expense of A2A. The next commitment will be the start of epidemiological research on the local population, an investigation to be coordinated by the ASL, competent regional bodies and the ARPA.

The **emissions data**, which are continuously measured on the chimney stack of the plant, **can be viewed online** at www.aza.eu, and on the websites of **ARPA Friuli Venezia Giulia and the municipality of Monfalcone**. The analyses of micropollutants, which are measured on a six-monthly basis, are published at www.agendaz1.provgo.it. With regard to the other environmental aspects, following specific requests from residents living near the plant, A2A has carried out monitoring and environmental improvements with regard to noise, vibrations and shading.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance

Management of water discharges

Water discharges are the quantity of water discharged by the treatment systems installed at the electricity and thermal power production plants. After specific treatment, this water is partly recovered and partly discharged. There is an innovative **Zero Liquid Discharge (ZLD)** system at the Gissi (Chieti) thermoelectric plant, which combines the recovery of process water with the treatment of waste water. It uses a steam-driven crystallization system to recover the water through evaporation and then sends it to the collection tank for further processing and recovery. The saline residue from this process is filtered and sent for disposal as waste. This system represents a significant example of the recycling of a valuable resource like water and made it possible to recover over 13,000 m³ of water in 2013, and avoid the intake of the same amount of water from natural water bodies.

Measures for the optimization of the reverse osmosis system at the Edipower thermoelectric plant in Chivasso (Turin) became operational in 2013. This made it possible to recover around 70% of the effluent discharged, and also reduced the amount of well water abstracted for industrial use.

The following table lists the surface water bodies into which the effluents of power production plants are released.

Site	Surface water body
Corteolona waste-to-energy plant - (Pavia)	Roggia Bollana (irrigation ditch)
Giussato plant (Pavia) - Lacchiarella plant (Milan)	Roggia Mezzabarba (irrigation ditch)
Ecolombardia 4 waste-to-energy plant - Filago (Bergamo)	Rio Zender (stream)
Famagosta plant - Milan	Deviatore Olona (diversion canal)
Canavese plant - Milan	Roggia Borgognone (irrigation ditch)
Cassano d'Adda (Milan) plant	Muzza Canal
Silla 2 – Milan waste-to-energy plant	Cavo Parea (channel)
Lamarmora plant – Brescia	Vaso Guzzetto and Vaso Garzetta
Ponti sul Mincio plant (Mantua)	River Mincio
Brescia Nord plant	Torrente Garza (stream)
Monfalcone plant (Gorizia)	Lisert canal and Valentinis Canal
Acerra (Naples) waste-to-energy plant	Regi Lagni canal
Bergamo Plants Sector	Torrente Morletta (stream)
Brindisi plant	Adriatic sea
Chivasso (Turin) plant	Cavour canal - River Po
Piacenza plant	River Po
San Filippo del Mela (Messina) plant	Tyrrhenian sea
Sermide (Mantua) plant	River Po

Management of the waste produced

The production of electricity and heat produces waste, due mainly to the combustion of certain fuels (coal, waste, biomass) and the treatment of the related flue gases. The maximum recovery of the waste produced is one of A2A's environmental protection objectives.

The boiler bottom ash of the Brescia waste-to-energy plant, separated from ferrous metals, has for several years been taken to plants for recovery. Depending on its particle size and chemical and physical features, it is taken to cement works where it is used as the raw material in the production of cement, or to plants for making concrete. The products resulting from these recovery activities are submitted to strict controls to ensure compliance with environmental legislation.

The Group's other waste-to-energy plants also send boiler ash and filtration residues for recovery, and ferrous materials are also recovered. **Light coal ash and desulfurization residues** are also usable as mixing components for making concrete and for road sub-bases; in 2013 all the waste of this type produced by the Lamarmora plant was sent for recovery. An experimental project, called **COSMOS**, has been successfully completed for the recovery of **flue gas cleaning dust in waste incineration plants** (see the chapter on Research and innovation for the environment on p. 66).

At the Monfalcone (Gorizia) and San Filippo del Mela (Messina) plants, large quantities of fly ash and gypsum are produced by the flue gas cleaning process.

Recovery and reuse of fly ash and gypsum in the Monfalcone power plant

The Monfalcone thermoelectric plant produces fly ash and gypsum as by-products of the flue gas cleaning process. For some time these substances have been sent for recovery (as waste) in the concrete and building industry, making it possible to save raw materials and avoid the disposal of large quantities of waste in landfill.

The fly ash and gypsum produced by the power plant were registered in 2010 as required by the European REACH regulation. This regulation contains a duty to register substances placed on the market and the preparation of a dossier on chemical safety, in order to increase knowledge of existing and new chemicals. The research and analysis carried out have shown that the fly ash and gypsum produced by the Monfalcone power plant are not classified as dangerous. The fly ash has also received CE mark certification.

Accordingly, in 2013 A2A prepared a dossier showing that the fly ash and gypsum produced by the plant meet the legal requirements for their classification and management as by-products, in accordance with the specific provisions of the Consolidated Environmental Law Legislative Decree No 152/06. The dossier has been submitted to the Ministry for the Environment and Protection of Land and Sea which has approved its content, thus permitting the plant, in the context of the Integrated Environmental Authorization in force, to manage these substances.



Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental

Social responsibility

Statement of compliance

At all A2A's hydroelectric plants in Calabria, septic tank sludge is collected in specific tanks that are then emptied by cleaning trucks and sent to appropriate third party processing facilities as waste. At the Nocelle, Trepidò, Orichella, Passante, Satriano and Savuto dams, and the Timpagrande and Calusia power stations, there are evapo-transpiration facilities that eliminate the sludge by using plants located within the holding tanks, which absorb the water and organic substances found in the sludge itself without producing effluents, significantly reducing waste production at these sites. In order to avoid the dispersal of wastewater into the environment due to breakage of the tanks, each tank is equipped with a float and full tank indicator. The tanks and evapo-transpiration facilities are also inspected regularly to check that they are functioning correctly.

43 Special waste (hazardous and non-hazardous) sent for recovery

Sectors of activity	2011	2012	2013
Production of energy and heat (excluding waste to energy)	81%	98%	93%
Waste to energy	76%	87%*	83%
Electricity distribution	5%	9%	25%
District heating	15%	65%	34%
		1	

^{*}The figure for 2012 has been recalculated.

Use of chemical products

Over the past few years there have been major developments in legislation on the management of chemicals, with significant changes being made by the European REACH (1907/2006) and CLP (1272/2008) Regulations. A2A has tackled these issues with timely training measures for users of substances and mixtures at production

plants and taken considerable steps to limit the use of chemicals that are potentially harmful for natural ecosystems

The hydroelectric production process is typified by a limited use of chemicals, mainly lubricating substances. To minimize the risk, in any case reduced, of contaminating water courses in the event of accidents or the malfunctioning of hydraulic equipment, **biodegradable oil is used in all of the Group's hydroelectric plants**.

The water used by thermoelectric plants must have specific chemical and physical features which are obtained by suitable demineralization systems, that is by chemically sequestering the ions dissolved in the incoming water. These systems require the use of **hazardous chemicals**, such as hydrochloric acid and caustic soda. A2A has made significant investments to reduce the presence of these substances in the water used for its plants.

At the Cassano d'Adda (Milan) thermoelectric plant a new reverse osmosis system coupled with electrodeionization (EDI) makes it possible to achieve a high level of water purity, reducing the use of hazardous substances and preparations by around 98% (no further use of hydrochloric acid and a drastic reduction in caustic soda) compared with the system used until 2012.

Similar reverse osmosis systems are installed and operational for the production of demineralized water at the Gissi (Chieti) and Monfalcone (Gorizia) thermoelectric plants and most of the Edipower thermoelectric plants.

Following the updating of the risk classification of fuel oil as "very toxic to aquatic organisms", the Monfalcone thermoelectric plant falls within the scope of the **Seveso legislation** and all the resulting procedures were carried out in 2012. At the end of 2012



the two units burning heavy fuel oil (HFO) were taken out of service and following the disposal of the heavy fuel oil, since March 13, 2013 the plant has been officially excluded from the scope of the Seveso legislation. The Edipower plants at Brindisi, San Filippo del Mela (Messina) and Sermide (Mantua) are also within the scope of the Seveso legislation: the first two received a positive Safety Report in 2013.

In all plants generating energy, an emergency supply of electricity must be guaranteed for specific auxiliary systems. To this end, emergency generators with batteries are in place

at the plants, which act as uninterruptible power supplies. With regard to the batteries, new legislation has recently been passed which requires the availability (close to the sites where they are stocked) of specific absorbent and neutralizing materials for use in the event of a spillage of the liquid they contain (mainly acid substances). A2A uses a non-toxic, non-polluting environmentally compatible product which at the end of its life can be disposed of as non-hazardous waste (provided it has not been used to absorb the acid solution).

Noise

The A2A Group uses the services of skilled technicians to carry out activities for the monitoring, evaluation and mitigation of acoustic emissions for the entire lifecycle of its plants and infrastructures. If residents file a report or make a complaint, A2A carries out specific measurements to assess the actual need for planning and implementing mitigation measures.

The following measures were carried out in 2013 to mitigate the effect of noise:

- the main transformer in unit 1 at the Monfalcone plant has been replaced to abate the tonal components of the noise emissions, as required by the Integrated Environmental Authorization;
- the measures on precise micro-sources started at the Brescia Nord plant in 2012 have continued.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmentalresponsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance

4.3 Responsible waste management



IDENTITY CARD AT DECEMBER 31, 2013

A2A is a leader in the environmental sector in Italy and providing integrated management of the entire waste collection, recovery and disposal cycle.



Over 2.5 million metric tons of waste processed and disposed of during the year

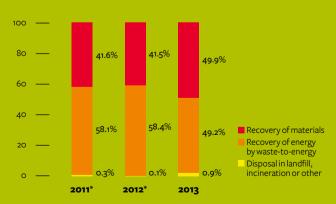


Almost 1.2 million metric tons of urban waste processed and disposed of



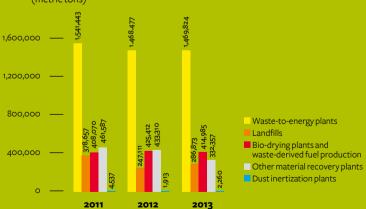
100% of recyclable waste from differentiated collections sent for recycling

44 Destination (recovery/storage) of urban waste collected by the Group in provincial capitals



*Only includes the provincial capitals of Milan, Brescia, Bergamo and Varese.

45 Waste processed by type of plant (metric tons)





All the numbers are in the tables from p. 106 to p. 123



4.3.1 Integrated waste cycle

Through its subsidiary A2A Ambiente, established in 2013, **A2A** is the leader in the environmental sector in Italy.

Its principal activities are:

- the design, construction and maintenance of plants, owned by itself or by third parties, for the recovery and disposal of waste, including electric power plants;
- decontamination;
- the collection, transport and brokering of waste;
- street sweeping.

These services, offered both to public authorities and private companies, are mainly carried out in Lombardy (in the provinces of Bergamo, Brescia, Como, Mantua, Milan, Pavia and Varese), and in Campania.

In the provision of environmental services, the Group is directed towards the continuous improvement of service quality, safety and the protection of the environment by seeking out new

technologies designed to optimize the use of waste as a resource.

The industrial activities of A2A Ambiente are expressed in a waste processing capacity of 3 million metric tons, and an energy production amounting to 1,400 GWh of electricity and 1,000 GWh of heat

Collection and transportation of urban waste

In the context of the services offered to local authorities A2A, through its subsidiaries Aprica, Amsa and Aspem, provides services for **waste management and street cleaning** and the disposal of the waste collected to plants that, where possible, recover materials and energy from them. In 2013 Group companies in the Environment Sector **collected 1,191,608 metric tons of urban waste**, an increase of 4.3% from the previous year. The increase is mainly due to starting a collection service in the municipality of Como, for which the contract was awarded to Aprica in 2013.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

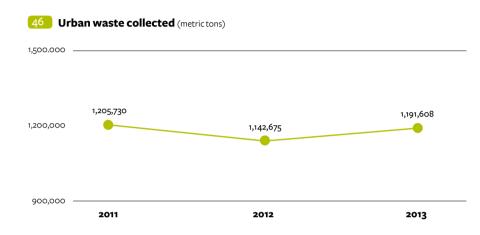
Social responsibility

Statement of compliance

Sustainability Report

Environmental responsibility

2013



Almost 100% of the urban waste collected is recovered, partly through energy recovery in waste-to-energy plants and partly by recovering materials. Only a negligible proportion, less than 1%, is sent to waste disposal facilities (landfill or other plants). There was a decrease in the proportion of urban waste used for waste-to-energy plants in 2013 compared to 2012, with a parallel increase in material recovery.

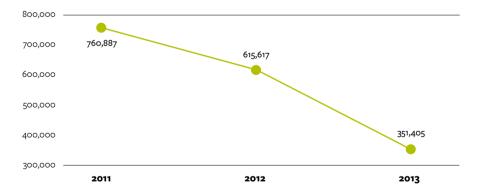
Collection and transportation of special waste

Within the waste management sector, the Group provides services for the collection, transportation, recovery, disposal and brokering of special waste.

The service is mainly directed to industrial and craft activities. Hazardous special waste is collected from both public (hospitals, clinics etc.) and private users (dentists, car repair workshops, laundries etc.).



Special waste collected and transported (metrictons)



Over 351 thousand metric tons of special, hazardous and non-hazardous waste were transported during the year. There was a fall in special waste compared with 2012 affected by the effects of the economic recession, which led to a 42% decrease in the special waste collected and transported.

Both urban and special waste is collected and transported using **a fleet of 2,035 vehicles** (of which 532 are used for street sweeping), equipped for various service requirements. To meet logistical requirements, use is also made of subcontractors working on behalf of the companies in the sector.

Waste recovery and disposal plants

The Group's plants enable waste processing and disposal to be managed with the aim of material recovery, energy recovery and final disposal.

48 A2A Group's waste disposal and recovery plants

Type of plant	No of plants
Landfills (of which 5 in post operational management)	15
Biogas recovery plants at landfills	10
Waste processing platforms	3
Intelligent Transfer Stations (ITS) - Bio-drying	2
Intelligent Transfer Stations (ITS) - Bio-drying and RDF (Refuse Derived Fuel)/SSF (Secondary Solid Fuel) production	2
RDF/SSF production plant	1
Mechanical biological processing plant	1
Composting plants	2
Sludge recovery plant	1
Urban and special waste storage plants	2
Inertization plant	1
Waste washing plants	2
Glass recycling plant	1
Recycling points/collection centers	51
Mechanical selection plant	1
Waste-to-energy plants with cogeneration or heat recovery	3
Waste-to-energy plants with simple electricity production	3

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

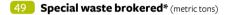
Tables: environmental numbers

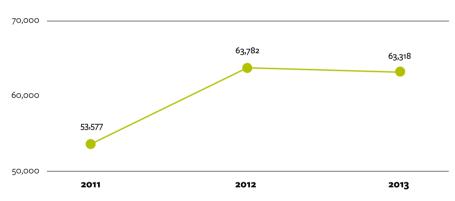
Social responsibility

Statement of compliance

Waste brokering

The Group also provides waste brokering services for the management of waste produced by its customers. In this context it identifies, engages and coordinates third parties, ensuring that this waste is assigned to authorized shippers and plants while optimizing management costs.





^{*} Transport and processing carried out by third parties.

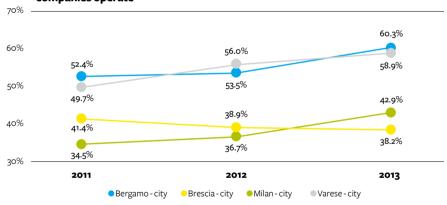
4.3.2 Efficiency in the integrated waste management service

In its waste collection activities, A2A promotes and encourages the differentiated collection of all fractions (paper, glass, plastic, metal, organic, green garden waste, etc.) by residents, using different methods depending on the needs of the municipalities served.

The Group's Environment Sector companies support municipal administrations in reaching their differentiated collection objectives, not only by means of a precise planning and management of the collection service, which can also include information and

awareness campaigns for residents, but also by supporting its decisions from a technical, economic and environmental standpoint, considering the best possible destination for the waste and exploiting any opportunities for recovering materials and energy. In many municipalities in Lombardy A2A performs the entire waste management and street sweeping service, while in others it only provides a partial service.

Percentage of differentiated collection in the municipalities where Group companies operate*



^{*}The quantity collected and the differentiated collection rate are calculated in accordance with the recommendations of the Region of Lombardy. Data for provinces refers to all the municipalities where a complete waste collection service is provided.

In **Bergamo** there was an increase of nearly 7 percentage points, mainly due to the introduction in June 2012 of the differentiated collection of the organic fraction from non-domestic users in a new area of the city, and the introduction in November 2012 of the collection of plastic packaging in the outer suburbs of the city. During the last months of 2013 the differentiated collection rate reached nearly 65% on several occasions, with an annual average of 60.3%.

In **Brescia** there was a slight decrease, due to the combined effect of an increase in unsorted waste (+2.7%) and the reduced growth of the quantity of differentiated waste collected (+0.2%). The increase in unsorted waste may be associated with the migration of this type of waste from neighboring municipalities, which changed their collection system in 2013, moving to door to door collection, or fitting communal wheeled bins with covers with an electronic key. The type of waste that has certainly had an influence in limiting the growth of differentiated collection is that of paper and cardboard packaging, which decreased in quantity in 2013. The cause for this can mainly be attributed to the continuing economic crisis, which has severely affected traders and craftspeople in the area, who are the main producers of this type of waste.

In **Milan** the rise of over 6 percentage points is mostly due to the start of house-to-house collection of organic waste in November 2011, and the introduction in May 2012 of transparent bags for undifferentiated waste which

discourages people from throwing potentially recyclable waste away in them (see caption below for details).

In **Varese** there was an increase of almost 3 percentage points, due to the "Varese, make the difference" information campaign, which has involved local residents since 2012, as well as a percentage increase in the recovery of bulky waste.

The differentiated waste collection rate for municipalities in the provinces where A2A provides a complete collection service (excluding provincial capitals) has also been calculated.

Province of Bergamo	58.6%
Provinces of Brescia and Mantua	53.7%
Province of Milan	54.6%
Province of Varese	68.7%

Differentiated collection - firing on all cylinders with Aprica!

The need to achieve ever higher percentages of differentiated collection has led local authorities to use increasingly efficient collection methods. The main differentiated waste collection methods currently available in Italy are used in over 70 municipalities in the provinces of Bergamo, Brescia, Como and Mantua where waste collection is managed by Aprica (approximately 800,000 inhabitants). The door to door service (42.03%) and traditional communal wheeled bins (39.97%) are almost equally widespread, followed by top-opening communal wheeled bins (13.95%) and a mixed service (top-opening communal wheeled bins for some waste fractions and door to door collections for others) in use in 4% of municipalities.

In comparison with the already high percentage of differentiated waste collection reached in the municipalities where Aprica operates, the performance of Prevalle is outstanding. It boasts an excellent 82.05% in the 2013 report (using data for 2012) issued by the Province of Brescia Waste Monitoring Center, the first municipality in the province of Brescia to exceed the threshold of 80%.

Some municipalities where top-opening communal wheeled bins are provided also performed very well. Some of them are among the top 10 in the report: Polaveno (79.22%) is in third place and Borgostallo (77.44%) came eighth.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmentalresponsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental

Social responsibility

Statement of compliance

AMSA increases organic waste collection in Milan

The "Increased Differentiated Waste Collection and Introduction of Organic Waste Collection for apartment blocks" project, started in 2012 and developed by Amsa with the municipality of Milan, had the objective of:

- increasing the percentage of differentiated waste and sending the organic fraction for recovery, in accordance with European directives and Italian regulations;
- maintaining service quality levels in terms of the impact on residents (impact on traffic, noise from the operations, etc.);
- benefiting from potential positive knock-on effects on the quantity and quality of all the differentiated waste fractions collection.

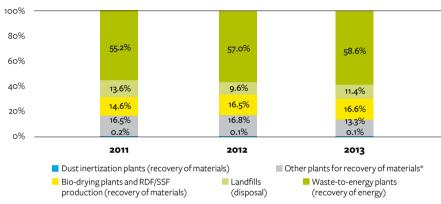
An intense publicity campaign to inform residents was held before the start of the project. In order to encourage an increase in differentiated collection, black bags were gradually replaced by transparent bags for the collection of unsorted waste.

All the recyclable waste from differentiated collection in 2013 was sent

for recovery, obtaining four environmentally significant results at the same time: a considerable saving in raw materials, a reduction in the energy used in the production process for the materials, the resulting decrease in the environmental effects connected with the production and a fall in the volume of waste disposed of in landfills.

The total waste processed and disposed of by the A2A Group in 2013 amounted to 2,506,633 metric tons: this quantity was broadly in line with that for the previous year.

Waste processed by the Group's plants by type of plant



*The fall in the percentage of waste processed in material recovery plants can be attributed mainly to the fact that the Maserati Light plant was not taken into consideration, since it was used only as a transfer station.

Recovery of materials from waste

The Group carries out numerous activities for recovering material from waste:

- the recovery of glass, paper and cardboard, plastic, wood, unusable tires, ferrous materials, etc. mainly by selecting waste obtained through differentiated collection, bulky waste and non-differentiated waste;
- the recovery of sludge resulting from biological waste water treatment, used for agricultural purposes;
- the recovery of inert materials, sand and gravel, certified in accordance with UNI standards, for use in the building sector, by processing and washing dust from street sweeping;
- the production of fuel to be used in waste-to-energy plants, through mechanical selection processes and the bio-drying of non-differentiated urban waste;
- the treatment of solid residues from waste incineration and fly ash from waste-to-energy plants through recovery and inertization operations.

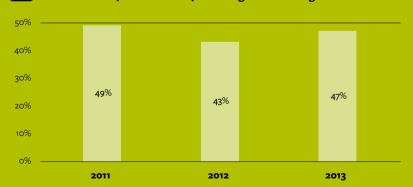
Materials recovered from waste washing

The A2A Group has two **waste washing plants** for material recovery
(one in Milan and one in Brescia), for
EC certified inert material in three
different particle sizes: sand, gravel and
chippings. These can be used directly
as raw materials, for example in the



preparation of cement or bituminous conglomerates, the preparation of road foundations, etc. The ratio of raw materials produced to incoming waste is close to 50%, showing the high efficiency of these street sweeping dust washing plants. Data variations from year to year are the result of the varying types of incoming waste.

52 Raw materials produced as a percentage of incoming waste

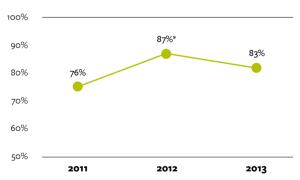


Recovery of energy from waste

Waste that cannot usefully be recycled as material is used as fuel for producing energy by means of a **waste-to-energy process** in order to feed district heating networks in Brescia, Bergamo and Milan and produce electricity, thus saving on traditional fuels.

Further use is made of a significant portion of the residues derived from the combustion process in waste-to-energy plants by sending them for material recovery as shown in the following graph.

Proportion of waste produced by waste-to-energy plants and sent for recovery



^{*} Figure corrected from the 2012 Sustainability Report.

Besides the efficiency of the plants, the main factor contributing to the calculation of the energy performance of waste-to-energy plants is the saving in fossil fuels

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmentalresponsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance

obtained as the result of burning the waste, that is by using materials of plant origin or that in any case have been discarded and are not otherwise usable. This saving is expressed in saved metric Tons of Oil Equivalent (TOE) (the data for this indicator is shown in the "Efficiency in energy production" chapter on p. 84).

Waste disposal

A fundamental role in the integrated waste cycle is played by the **controlled landfill** which is necessary as a way of segregating waste of which no further use can be made. The companies of the Group's Environment Sector manage non-hazardous and hazardous urban and special waste landfills on their own behalf and for third parties.

Some of the Group's landfills have come to the end of the waste disposal stage and, after carrying out waterproofing and environmental restoration through grass seeding and plant laying, are now in the post-operative management stage. During this period the leachate formed by the percolation of precipitation through the waste is collected and/or treated and/or disposed of.

The biogas produced by the biological decomposition of the deposited waste at landfill sites is captured and where possible **recovered for energy purposes**. In this way use is made of all the remaining possibilities for exploiting the potential for waste recovery.

4.3.3 Managing environmental aspects of the integrated waste cycle

The environmental aspects associated with the collection and transport of waste mainly relate to the consumption of fuel for motor vehicles and the emissions resulting from the use of diesel, petrol and methane driven vehicles. Some of the vehicles used for street sweeping services are light electric vehicles.

54 Fuel consumption for waste collection and sweeping vehicles

	2011	2012	2013
Petrol (TJ)	3.9	3.7	4
Diesel (TJ)	324	318	354
Methane (TJ)	111	95	64
Electricity (TJ)	0.2	0.1	0.03

The policy of the companies in the Environmental Sector is to reduce the emissions from vehicles used to collect and transport waste, and this is being carried out in various ways, such as:

- the use of emission-reducing technologies;
- preventive and corrective maintenance of all vehicles subject to the statutory tests and inspections;
- changing from diesel vehicles to methane or low emission diesel (Euro 4 and Euro 5) vehicles, which now amount to 60% of the total vehicle fleet used for collection.

Aprica: new, more environmentally-friendly vehicles

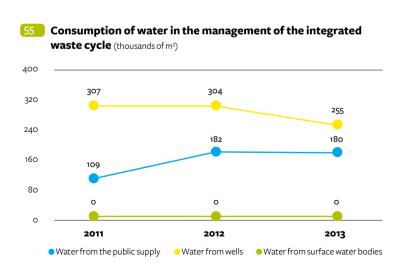
In 2013 Aprica gave a major boost to its plan to renew the vehicle fleet it owns and uses to collect and transport waste. With the entry into service of new vehicles, fuelled by Euro 5 diesel engines or methane, a significant improvement in environmental performance has been achieved, thanks to the reduction in atmospheric emissions for each hour that they are in service. There is an additional environmental advantage due to the scrapping of older vehicles, which did not perform particularly well from the point of view of emissions (classed as Euro o and Euro 2).

With regard to **waste treatment and disposal plants**, (with the exclusion of waste-to-energy plants whose main effects were discussed in the previous paragraph), the emissions with the greatest effect were **greenhouse gas emissions** including, in particular, the emission of methane in biogas produced by landfills.

Landfill gas methanization processes help to mineralize the waste, resulting in the stabilization of the waste itself. In order to achieve a potentially significant reduction in the quantity of landfill gas emitted into the atmosphere, biogas collection networks are installed in landfills and the gas is then used to produce electricity. In the absence of energy recovery, or if there is a stoppage at the plant, the captured biogas is burned off in a flaring process. 1850 metric tons of methane derived from biogas were emitted by the Group's landfills in 2013.

Another environmental factor linked to waste treatment and disposal plants, and in particular waste washing plants, is the **use of water resources**. The water supply for various activities is obtained by taking water from wells and the public water supply, but it is not abstracted from surface water bodies. In order to reduce water consumption, washing water in the street sweeping dust washing plants is cleansed in the plant and recycled as part of the process. The consumption of water from the public supply remained substantially at the level of the previous year, while the consumption of well water was significantly reduced (-16%).





Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance

4.4 Responsible management of the Integrated Water Service



IDENTITY CARD AT DECEMBER 31, 2013

The water distributed by A2A comes from 262 wells and 213 springs. Over 4,700 kilometers of distribution network for drinking water and 57 million m3 of waste water are processed at water treatment plants.



Further increases in water testing: the number of parameters analyzed was +30%



Per capita water consumption reduced by 8% compared with 2012

56 Environmental indicators for the public water supply

2013
3,224
29.9%
231

57 Environmental indicators for water treatment

	2011	2012	2013
Removal yield - COD*	92%	94%	95%
Removal yield - BOD*	95%	97%	99%
Removal yield - Nitrogen	69%	67%	70%
Removal yield - Phosphorus	75%	73%	77%

^{*}COD (Chemical Oxygen Demand): the quantity of oxygen required for the chemical oxidization of the organic substances present in the waste water.

^{**} BOD (Biological Oxygen Demand): the quantity of oxygen used by microorganisms to fully or partially metabolize the organic compounds present in the waste water.



All the numbers are in the tables from p. 106 to p. 12



4.4.1 The Integrated Water Service

The integrated water service includes the activities of collection, transportation, treatment and distribution of water that is fit for human consumption, in addition to the collection (sewage) and treatment of urban waste water and, to a lesser extent, industrial effluents.

A2A Cicolo Idrico and Aspem carry out their activities as part of the integrated water cycle in the provinces of Brescia and Varese respectively, responding efficiently to service supply needs and ensuring respect for and protection of water resources while complying with Italian national legislation.

The supply of drinking water to the end customer is the final stage in the public water supply management cycle: A2A manages this service and the related activities of water supply from wells and springs and the treatment of water resources. In 2013 a total of 108 municipalities were reached by

the integrated water service of the provinces of Brescia and Varese.

The main sources of the drinking water supply were the Mompiano spring in the province of Brescia, with an average flow of 100-150 l/s, and the two Cogozzo di Villa Carcina springs, with an average flow of 55 l/s. In addition to these springs, and others with a smaller flow, the water supply also makes use of many wells.

In the Varese area, the main water sources are the Valle Bevera spring, with an average flow of 250 l/s, and the Luvinate spring, with an average flow of 100 l/s.

The total amount of water extracted from wells and springs in 2013 amounted to 112 million m³, lower than that for the previous year. Per capita consumption (230 liters per inhabitant per day) is also lower, while the actual losses remain below 30%.

The gathering, collection and treatment of waste water is managed by A2A's sewage and water treatment service in the province of Brescia alone.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance

At the treatment plants the water is submitted to a process of eliminating pollutants, mainly by biological means, in order to give them quality characteristics compatible with safeguarding the environment, to which they are then returned.

Water supply network in Brescia and Varese

	Municipalities		
	served	Wells	Springs
Brescia	1	47	3
Province of Brescia	73	128	166
Varese	3	18	9
Province of Varese	31	69	35
Total	108	262	213

In 2013 the collection and sewage service collected water from a total of 91 water treatment works, all situated in the province of Brescia, for a total of approximately 57 million m^3 treated. The main and most modern purifier is that of Verziano.

4.4.2 Managing environmental aspects of the integrated water service

The collection of water, especially in the case of pumping water resources from wells, leads to a significant consumption of electricity to power the plants. A high proportion of water is currently obtained from wells, and the minimization of this type of consumption involves the **use of high efficiency pumps**, usually regulated by inverters which adjust the flow to the actual need of the distribution network.



Water resource monitoring is a very significant factor for the purposes of groundwater protection. Almost 30% more checks were performed in 2013 than in the previous year, in terms of the number of parameters analyzed, reaching **3224 parameters analyzed per million m³ supplied**.

In relation to the chemical characteristics of the extracted water, in order to ensure compliance with the limits making the water fit for human consumption, before it is distributed to users water drawn from wells is subjected to a **specific disinfection and purification treatment**. Disinfection plants, mainly using chlorine dioxide, are present at all water sources of water, as well as appropriate treatment plants where it is necessary to eliminate specific substances. There are 65 physicochemical, biological and reverse osmosis plants in all.

One of the most recent plants of a significant size was installed at the Luvinate spring in 2012. With a flow of 100 l/s it serves one third of the inhabitants of Varese.

The soil surface has been sealed in order to protect the spring, while the supplied water is passed through a set of four active carbon filters to prevent the risk of any contamination by hydrocarbons or organic substances.

With regard to waste water management, the efficiency of the purification is ensured by careful management of the process, aimed at optimizing the activity of the bacteria responsible for digesting the organic substance and reducing the concentration of pollutants. The flows adopted for the purification stage are characterized by a high level of variability in terms of quality and quantity, depending on differences in human activities and on a significant variation in water usage throughout the day, on different days of the month and in the different months of the year. If not properly controlled this variability could impede the optimization of the purification activity performed by the bacteria and the reduction of pollutant content. To avoid this problem occurring, and in order to seek the highest levels of purification efficiency, increasing use is being made of equalization tanks which make it possible to homogenize the quality characteristics of the sludge and make the quantities of waste water sent to the biological treatment stages constant. As mentioned, the water treatment plant at Verzano (Brescia) is the largest, also treating waste water from Collebeato, Bovezzo, Cellatica, Gussago, Rezzato and part of Castenedolo and Roncadelle, and serving a population of around 250,000. Membrane Bio Reactor (MBR) technology, using hollow fiber membranes with a pore size of 0.035 microns, has been used on one of the three lines at the Verziano purification plant since 2001 for the **pressure**driven ultrafiltration treatment of domestic waste water, replacing the secondary sedimentation tank. MBR technology has many technical and environmental advantages, raising purification standards using significantly less bulky equipment. The small water treatment plant at Montichiari, which has recently become operational, also uses this technology.

Chromium reduction experiment

Given the particular attention paid to the hexavalent chromium present in the drinking water supplied in Brescia, A2A Ciclo Idrico has chosen, out of the known removal techniques, to investigate the technique based on the

reduction of hexavalent chromium to trivalent chromium through the addition of ferrous sulfate and complete removal by filtration.

After the first experimental stage in the laboratory, equipment was installed at a well that was temporarily out of use, consisting of a ferrous sulfate dosing station, a tank for the oxygen needed for the complete removal of the excess iron added, and two sand filters in series.

As well as confirming the validity of the removal process, the field tests performed showed that it would be possible to simplify the equipment in a way that could not have been imagined beforehand. This involves replacing the sand filters for the filtration stage by reusing the active carbon filters with which many wells that feed into the city's public water system are already equipped for the removal of organo-halogenated compounds. These wells are located in urban areas, so they would rarely have space available for the installation of additional sand filters. Thanks to this simplification of the equipment, in 2014 it will already be possible to equip the main sources supplying the city's public water system with the hexavalent chromium removal system that has been developed.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmentalresponsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance

2013

4.5 Tables: environmental numbers

4.5.1 Activity data

Compared with last year's edition, some items have been combined. In particular, there is a single indicator for waste-to-energy plants that includes those operating in cogeneration mode, while "cogeneration plants" is taken to mean those burning fossil fuels.

Energy production

59 Net electricity produced divided by type of plant and source - GWh

		2011	2012	2013
Thermoelectric plants*	High efficiency natural gas combined cycles	4,015	2,600	3,782
	Multi-fuel plants	1,614	2,230	3,323
Cogeneration plants		286	300	295
Waste-to-energy plants (including biogas)		1,174	1,104	1,095
Hydroelectric plants*		3,048	2,631	5,118
Photovoltaic plants (including energy used for self-consumption)		<1	<1	3
Total		10,137	8,864	13,616

 $^{{}^* \}text{The increase compared with 2012 can be attributed to the inclusion of Edipower plants within the Group.} \\$

60 Net thermal energy produced by type of plant and source - GWh

			/	
		2011	2012	2013
Cogeneration and heat recovery plants		717	752	746
Waste-to-energy plants		907	1,034	1,130
Thermal plants	Boilers	395	431	445
Thermal plants	Heat pumps	323 13	62	
Total		2,067	2,274	2,382
			\	

61 Percentage of electricity produced by type of source

	2011	2012	2013
Renewable sources (hydro, renewable fraction of waste, biogas, solar)*	36.7%	35.9%	41.8%
Coal	15.5%	25.6%	16.1%
Natural gas	41.2%	31.6%	29.2%
Oil products	0.9%	0.7%	9.1%
Nuclear	0%	0%	0%
Non-renewable fraction of waste	5.7%	6.2%	3.9%

^{*} It has been assumed that there is a renewable fraction of 51% for non-hazardous waste (ref. Decree of the Ministry of Economic Development of December 18, 2008). As a consequence the non-renewable fraction has been taken as 49%.

62 Energy produced from waste to energy*

	2011	2012	2013
Thermal energy from waste to energy	43.9%	45.5%	47.4%
Electricity from waste to energy	12.4%	12.6%	8.0%

^{*} Energy generated by incinerators and biogas plants as percentage of total energy generated by the Group.

63 Energy performance

	2011	2012	2013
Average thermoelectric power station yield	45.7%	42.6%	39.6%
Yield from high efficiency natural gas combined cycle plants	51.4%	51.3%	49.3%
Yield from multi-fuel plants	34.9%	35.6%	32.4%
Average cogeneration yield from fossil fuel plants	79.2%	78.0%	78.3%
Average energy saving from fossil fuel cogeneration plants*	13.9%	12.0%	12.6%
Average electricity produced by 1 metric ton of waste (Kwh/e)	813	819	810
Average thermal energy produced by 1 metric ton of waste (Kwh/t)	606	713	776
			X

^{*} This indicator was calculated with reference to the method described in Ministerial Decree 4/8/2011.

Energy distribution

64 Electricity, thermal energy and gas fed into the grid

	2011	2012	2013
Electricity distributed (GWh)	11,489	11,361	11,099
Electricity losses in the grid* (GWh)	not av.	231	199
Heating and cooling energy (GWh)	2,105	2,322	2,424
Natural gas** (Mm³)	2,024	2,197	2,220

^{*}Source: Report on Operations.

Integrated waste cycle

65 Collected, transported and intermediated waste

	2011	2012	2013
Urban waste collected (t)	1,205,730	1,142,675	1,191,608
Special waste collected and transported (t)	760,887	615,617	351,405
Special waste brokered (t)	53,577	63,782	63,318
Special waste recovered	not av.	43.6%	57.0%
Percentage of hazardous special waste	not av.	7.1%	6.5%
·			\

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmentalresponsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance

The figure is an average and is merely indicative.

^{**} Includes gas supplied directly to users by Retragas.

66 Differentiated collection*

	2011		2012		2013	
	Quantity collected (t)	Index %	Quantity collected (t)	Index %	Quantity collected (t)	Index %
Bergamo	32,938	52.4%	32,821	53.5%	36,595	60.3%
Brescia	56,935	41.4%	50,324	38.9%	50,230	38.2%
Milan	238,662	34.5%	244,237	36.7%	278,797	42.9%
Varese	20,354	49.7%	22,250	56.0%	22,995	58.9%
Waste collection Province of Bergamo	not av.	not av.	not av.	not av.	4,883	58.6%
Waste collection Provinces of Brescia and Mantua	not av.	not av.	not av.	not av.	84,796	53.7%
Waste collection Province of Milan	not av.	not av.	not av.	not av.	46,571	54.6%
Waste collection Province of Varese	not av.	not av.	not av.	not av.	5,733	68.7%
Total/average	348,889	37.4%	349,632	39.0%	530,600	47.5%

^{*}These figures refer only to municipalities that are also provincial capitals; the quantity collected and differentiated collection rate have been calculated on the basis of the recommendations of the Region of Lombardy.

67 Waste processed by the Group's plants by type of plant* - t

			/
	2011	2012	2013
Waste-to-energy plants	1,541,443	1,468,477	1,469,824
Landfills	378,657	247,111	286,873
Bio-drying plants and RDF production plants	408,070	425,412	414,985
Other material recovery plants	461,587	433,310	332,692
Dust inertization plants	4,537	1,913	2,260
Total	2,794,295	2,576,223	2,506,633

^{*} Includes all waste received by Group facilities.

Integrated water service

68 Sourcing and distribution

			·
Technical data	2011	2012	2013
Wells (No)	255	262	262
Springs (No)	188	198	213
Drinking water treatment plants (No)	55	57	65
Total length of network (km)	4,670	4,709	4,738
Water supplied (Mm³)	76	74	68
Water abstracted (Mm³)	118	117	112
Network losses (Mm³)	32	33	33
Potability analysis – samples (No)	14,047	14,578	14,520
Potability analysis – total parameters (No)	169,576	180,428	220,642

69 Collection and treatment

Technical data	2011	2012	2013
Sewerage system - Network extension (km)	2,080	2,069	2,102
Waste water treated (mln m³)	55	51	57
Water treatment plants (No)	61	59	59
Loads treated – COD (t)	14,293	14,775	13,906
Loads treated – BOD (t)	6,744	6,905	6,078
Loads treated – Total nitrogen (t)	1,726	1,558	1,732
Loads treated – Total phosphorus (t)	216	194	231

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance

4.5.2 **Resources**

70 Resources used for the production of electricity and heat

	-		
	2011	2012	2013
Fuels (TJ)			
Natural gas	32,789	23,038	32,606
Coal	16,350	23,257	22,588
HFO (heavy fuel oil)	772	474	15,863
Diesel	130	136	279
Waste and biomasses	14,377	13,602	11,630
RDF (from external suppliers)	1,780	551	3,562
RDF (from Group plants)	357	1,073	1,040
Biogas (from Group landfills and water treatment works)	675	757	769
Automotive fuels (TJ)			
Petrol	1,8	2,3	2,8
Diesel	2,7	3,1	3,8
Methane	0,02	0,7	0,5
Electricity (TJ)	565	333	1,019
Water resources consumed (thousands of m³)			
From the public supply	503	387	377
From wells	6,581	8,214	9,767
From surface water bodies	22	15	177
			T

	2011	2012	2013
Surface water resources taken for the product and fully returned to the water body (thousand		icity	
Hydroelectric production	3,292,092	2,765,278	10,849,566
Thermoelectric production	698,425	551,102	1,299,784
Chemical products and materials (t)			
Mineral acids	797	494	610
Additives/water conditioners	303	209	308
Ammonia (solution)	5,029	4,814	5,020
Gypsum and neutralizing solids	38,964	42,620	49,69
Active carbons	924	808	874
Cement, sand and inert materials	2,534	2,355	2,00
Sodium chloride	42	19	18
Technical gases (nitrogen, CO ₂ , hydrogen, oxygen)	236	287	306
Sodium hydroxide (solution)	913	471	713
Methanol, solvents and other products	51	46	5:
Odorizers	-	-	
Oils and lubricants	72	112	189
Urea (solution)	2,417	2,541	2,580



71 Resources used for electricity distribution

Resources used for electricity distribution				
	2011	2012	2013	
Automotive fuels (TJ)				
Petrol	5.0	4.1	3.8	
Diesel	8.3	7.8	7.6	
Methane	2.6	2.8	2.6	
Electricity (TJ)	47	49	61	
Water resources consumed (thousands of n	n³)			
From the public supply	214	221	251	
From wells	163	0	0	
From surface water bodies	0	0	0	
Chemical products and materials (t)				
Mineral acids	0	0	0	
Additives/water conditioners	0	0	0	
Ammonia (solution)	0	0	0	
Gypsum and neutralizing solids	0	0	0	
Active carbons	0	0	0	
Cement, sand and inert materials	0	0	0	
Sodium chloride	0	0	0	
Technical gases (nitrogen, CO2, hydrogen, oxygen)	0	0	0	
Sodium hydroxide (solution)	0	0	0	
Methanol, solvents and other products	0	0	0	
Odorizers	0	0	0	
Oils and lubricants	2.6	2.1	2.2	
Urea (solution)	0	0	0	

72 Resources used for district heating

	2011	2012	2013	
Automotive fuels (TJ)				
Petrol	2.5	2.4	2.7	
Diesel	1.8	1.7	1.7	
Methane	1.7	1.8	1.7	
Electricity (TJ)	29	31	32	
Thermal energy (TJ) - purchased externally	780	882	856	
Water resources consumed (thousands of r	n³)			
From the public supply	282	468	406	
From wells	0	0	0	
From surface water bodies	0	0	0	
Chemical products and materials (t)				
Mineral acids	256	303	189	
Additives/water conditioners	43	75	66	
Ammonia (solution)	0	0	0	
Gypsum and neutralizing solids	0	0	0	
Active carbons	0	0	0	
Cement, sand and inert materials	0	0	0	
Sodium chloride	0	0	0	
Technical gases (nitrogen, CO ₂ , hydrogen, oxygen)	0.1	0.1	0.0	
Sodium hydroxide (solution)	146	173	130	
Methanol, solvents and other products	0.1	0.1	0.0	
Odorizers	0	0	0	
Oils and lubricants	0	0	0	
Urea (solution)	0	0	0	

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance

Resources used for gas distribution

Resources used for gas distribution			
	2011	2012	2013
Fuels (TJ)			
Natural gas	51	48	48
Automotive fuels (TJ)			
Petrol	4.6	4.1	4.2
Diesel	8.7	8.5	8.4
Methane	3.1	3.3	3.0
Electricity (TJ)	2.0	2.4	2.5
Water resources consumed (thousands of m³)			
From the public supply	0.5	0.7	0.5
From wells	0	0	0
From surface water bodies	0	0	0
Chemical products and materials (t)			
Mineral acids	0	0	0
Additives/water conditioners	0	0	0
Ammonia (solution)	0	0	0
Gypsum and neutralizing solids	0	0	0
Active carbons	0	0	0
Cement, sand and inert materials	0	0	0
Sodium chloride	0.3	0.2	0
Technical gases (nitrogen, CO ₂ , hydrogen, oxygen)	0.1	0	0
Sodium hydroxide (solution)	0	0	0
Methanol, solvents and other products	0	0	0
Odorizers	55	60	57
Oils and lubricants	0	0	0
Urea (solution)	0	0	0

74 Resources used for the integrated waste cycle

	2011	2012	2013			
Fuels (TJ)						
Natural gas	0	0	1			
Diesel	28	29	31			
Automotive fuels - waste collection and street	sweeping (T	J)				
Petrol	3.9	3.7	4			
Diesel	324	318	354			
Methane	111	95	64			
Electricity for electric vehicles	0.2	0.1	0			
Electricity (TJ)	81	85	90			
Water resources consumed - plants*(thousan	ds of m³)					
From the public supply	166	182	180			
From wells	307	304	255			
From surface water bodies	0	0	0			
Chemical products and materials (t)						
Mineral acids	2,217	2,307	1,685			
Additives/water conditioners	232	215	229			
Ammonia (solution)	215	455	516			
Gypsum and neutralizing solids	418	389	269			
Active carbons	22	14	50			
Cement, sand and inert materials	50,260	59,057	68,573			
Sodium chloride	1,640	1,592	1,810			
Technical gases (nitrogen, CO ₂ , hydrogen, oxygen)	623	444	533			
Sodium hydroxide (solution)	3,423	3,774	2,660			
Methanol, solvents and other products	26	25	155			
Odorizers	0	0	0			
Oils and lubricants	32	31	253			
Urea	0	0	0			

75 Resources used in the integrated water service

			$\overline{}$
	2011	2012	2013
Fuels (TJ)			
Methane	0.1	0.7	0
Diesel	< 0.1	< 0.1	< 0.1
Electricity (TJ)	293	309	297
Automotive fuels (TJ)			
Petrol	1.9	1.9	1.9
Methane	4.6	5.0	4.9
Diesel	1.0	1.0	1.3
Chemical products (t)			
Mineral acids	373	351	296
Additives/water conditioners	3,174	4,105	5,621
Ammonia solution	0	0	0
Gypsum and neutralizers	33	62	50
Active carbons	62	36	78
Cement and inert materials	0	0	0
Sodium chloride (common salt)	0	0	0
Technical gases	114	29	126
Sodium hydroxide solution (caustic soda)	0	0	0
Methanol, solvents and other products	518	618	642
Odorizers	0	0	0
Hydraulic oils and lubricants	0	2	1
Urea (solution)	0	0	0

76 Resources used in general services

			<u> </u>
	2011	2012	2013
Water (thousands of m³)	770	754	841
Electricity (TJ)	105	117	101
Fuels (TJ)			
Diesel	3	3	5
Methane	92	87	89
Fuels (TJ)			
Petrol	2	2	2
Methane	3	3	2
Diesel	10	11	11

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance

4.5.3 Air and climate

Atmospheric emissions

77 Total NOx (nitrogen oxide) emissions from electricity and thermal energy production plants - t/year

		2011	2012	2013
Thermoelectric plants	High efficiency combined cycle	449	289	511
	Multi-fuel plants	2,434	3,401	3,809
Cogeneration plants	Fossil fuels	217	223	202
Waste-to-energy plants (including biogas)		687	644	652
Thermal plants	Fossil fuels (natural gas)	55	49	46
Total		3,842	4,605	5,220

78 Total NOx (nitrogen oxide) emissions during transients- t/year

		2011	2012	2013
Thermoelectric plants	High efficiency combined cycle	61	51	122
	Multi-fuel plants	17	5	128
			1	

79 Total NOx (nitrogen oxide) emissions from other plants/networks - t/year

	2011	2012	2013
Electricity distribution	0	0	0
District heating	0	0	0
Gas distribution	0.8	0.9	1,1
Integrated waste cycle	5.7	1.6	1.3
Water cycle	2.5	0.8	0.7
General services	0	0	0
Total	9.0	3.3	3.2

80 NOx emission factors of electricity and thermal energy production plants - g/kWh (e+t)

		2011	2012	2013
Thermoelectric plants	High efficiency combined cycle	O.11	0.11	0.14
	Multi-fuel plants 1.51	1.51	1.53	1.15
Cogeneration plants	Fossil fuels	0.22	0.21	0.20
Waste to energy	Waste to energy	0.33	0.30	0.29
Thermal plants	Fossil fuels (natural gas)	0.14	0.12	0.12

81 Total SO₂ (sulfur dioxide) emissions from electricity and thermal energy production plants - t/year

	2011	2012	2013
High efficiency combined cycle	0	0	0
Multi-fuel plants	602	810	1,595
Fossil fuels	236	193	136
Waste (including biogas)	8	3	7
Fossil fuels (natural gas)	0	0	0
	846	1,006	1,739
	combined cycle Multi-fuel plants Fossil fuels Waste (including biogas) Fossil fuels	High efficiency combined cycle Multi-fuel plants 602 Fossil fuels 236 Waste (including biogas) 8 Fossil fuels (natural gas)	High efficiency combined cycle Multi-fuel plants 602 810 Fossil fuels 236 193 Waste (including biogas) 8 3 Fossil fuels 0 0

82 Total SO₂ (sulfur dioxide) emissions during transients- t/year

				$\overline{}$
		2011	2012	2013
Thermoelectric plants	High efficiency combined cycle	0	0	0
	Multi-fuel plants	13	4	120
			1	

Total SO₂ (sulfur dioxide) emissions from other plants/ networks - t/year

	2011	2012	2013
Electricity distribution	0	0	0
District heating	0	0	0
Gas distribution	0	0	0
Integrated waste cycle	3.8	3.0	2.6
Water cycle	0.1	0.2	0.2
General services	0	0	0
Total	3.9	3.1	2.8
			\

SO₂ emission factors from electricity and thermal energy production plants - t/year

		2011	2012	2013
Thermoelectric plants	High efficiency combined cycle	0	0	0
	Multi-fuel plants	0.37	0.36	0.48
Cogeneration plants	Fossil fuels	0.24	0.18	0.13
Waste-to-energy plants (including biogas)	Waste to energy	<0.01	<0.01	<0.01
Thermal plants	Fossil fuels (natural gas)	0	0	0

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance

85 Total dust emissions from electricity and thermal energy production plants - t/year

		2011	2012	2013
Thermoelectric plants	High efficiency combined cycle	0	0	0
<u> </u>	Multi-fuel plants	47	67	103
Cogeneration plants	Fossil fuels	2	2	2
Waste-to-energy plants (including biogas)		3	4	3
Thermal plants	Fossil fuels (natural gas)	0	0	0
Total		52	73	108
			ĺ	

86 Total dust emissions during transients- t/year

			/	
		2011	2012	2013
	High efficiency combined cycle	0	0	0
Thermoelectric plants	Multi-fuel plants	1.4	0.5	5

87 Total dust emissions from other plants/networks - t/year

	2011	2012	2013
Electricity distribution	0	0	0
District heating	0	0	0
Gas distribution	0	0	0
Integrated waste cycle	0.6	0.7	0.2
Water cycle	0	0	0
General services	0	0	0
Total	0.6	0.7	0.2

88 Dust emission factors of electricity and thermal energy production plants - t/year

				()
		2011	2012	2013
Thermoelectric plants	High efficiency combined cycle	0	0	0
	Multi-fuel plants	0.03	0.03	0.03
Cogeneration plants	Fossil fuels	<0.01	<0.01	<0.01
Waste-to-energy plants (including biogas)	Waste (including biogas)	<0.01	<0.01	<0.01
Thermal plants	Fossil fuels (natural gas)	0	0	0

89 Total emissions of CO (carbon monoxide) by electricity and thermal heat production plants – t/year

		2011	2012	2013
Thermoelectric	High efficiency combined cycle	90	74	74
plants	Multi-fuel plants	138	76	109
Cogeneration plants	Fossil fuels	52	53	46
Waste-to-energy plants (including biogas)	Waste to energy	153	153	164
Thermal plants	Fossil fuels (natural gas)	9	7	10
Totale		442	363	403

Total CO (carbon dioxide) emissions during transients-t/year

		2011	2012	2013
Thermoelectric plants	High efficiency combined cycle	401	528	1.721
	Multi-fuel plants	30	9	46

91 Total emissions of CO (carbon monoxide) from other plants/networks - t/year

	2011	2012	2013
Electricity distribution	0	0	0
District heating	0	0	0
Gas distribution	n.d.	n.d.	n.d.
Integrated waste cycle	1.5	0.6	0.6
Water cycle	0.1	0.3	0.2
General services	0	0	0
Total	1.6	0.9	0.7
			\

92 Other pollutants - t/year

			/
	2011	2012	2013
Hydrofluoric acid (HF)	3.2	8.6	7.6
Hydrochloric acid (HCI)	53	60	39
Total organic carbon	31	34	34

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmentalresponsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance

93 Dioxins and micropollutants - electricity and thermal heat production plants

			/
	2011	2012	2013
Dioxins (gram equivalents)	0.024	0.014	0.010
Other micropollutants (Kg)			
Polychlorinated biphenyls (PCBs)	0.03	0.04	0.12
Metals (Sb + As + Pb + Cr + Cu + Mn + Ni + V + Sn)	1,495	1,745	1,765
Cadmium + Thallium	12	16	7
Polycyclic aromatic hydrocarbons	0.27	0.63	0.22
Mercury	19	6	11

Direct emissions of greenhouse gases and ozone-depleting gases

94 Total CO₂ emissions from electricity and thermal energy production plants* - t/year

		2011	2012	2013
Thermoelectric plants	High efficiency combined cycle	1,556,366	1,009,967	1,538,100
•	Multi-fuel plants	1,482,598	2,070,271	3,236,180
Cogeneration plants	Fossil fuels	312,395	324,153	332,215
Waste-to-energy plants**		871,376	989,633	964,710
Thermal plants	Fossil fuels (natural gas)	86,645	91,436	93,195
Process auxiliaries		178	1,150	1,508
Total		4,309,558	4,486,610	6,165,908

 $^{{\}rm *The\, data\, reported\, are\, not\, relevant\, for\, the\, requirements\, of\, the\, Emissions\, Trading\, Directive\, (2003/87).}$

95 Total emissions of CO₂ from other plants/networks - t/year

	2011	2012	2013
Electricity distribution	0	0	0
District heating	0	0	0
Gas distribution*	2,872	2,660	2,675
Integrated waste cycle	2,070	3,511	2,363
Water cycle	6	41	2
General services	5,374	5,065	5,396
Total	10,323	11,277	10,436

96 Total emissions of CO2 from motor vehicles- t/year

	2011	2012	2013
Production of electricity and heat	332	437	507
Integrated waste cycle (waste collection and street cleaning)	30,579	29,219	30,246
Integrated water service	474	510	503
General services	1,054	1,124	1,086
Electricity distribution	1,127	1,031	988
District heating	410	399	413
Gas distribution	1,150	1,112	1,094
Total	35,126	33,832	34,835

^{**} Consists only of the CO_2 emitted by the combustion of the non-renewable fraction.

97 Other emissions: greenhouse gases and ozone-depleting substances - kg

	2011	2012	2013
Sulfur hexafluoride (SF6)	119	287	198
R134a	1,701	4,354	5,780
R22 (HCFC-22)	202	252	112
R407C	150	626	107
R410A	13	238	26
R427A	0	5	29
R422	17	8	36
Other refrigerant fluids	0	0	225
Methane (CH4)10 – losses from natural gas distribution networks*	26,623,330	21,138,391	23,647,473
Methane (CH4)11 – from biogas dispersed in landfills	2,112,659	1,999,163	1,849,698

^{*} Figure calculated as the difference between the amount put into the grid and the amount supplied; where the figure for the amount supplied is not available a loss of 2% has been estimated.

98 CO₂ emission factors of electricity and thermal energy production plants -g/kWh(e+t)

		2011	2012	2013
Therme electric plants	High efficiency combined cycle (natural gas)	388	388	407
Thermoelectric plants	Multi-fuel plants	919	929	974
Cogeneration plants	Fossil fuels	318	315	319
Waste-to-energy plants	Waste to energy	555	645	626
Thermal plants	Fossil fuels (natural gas)	219	212	202
			(

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance

Indirect emissions of greenhouse gases

99 Indirect emissions of greenhouse gases - Scope 2* - tCO₂ eq/year

	2011	2012	2013
Production of electricity and heat	60,661	43,113	111,214
Integrated waste cycle (waste collection and street cleaning)	9,237	8,880	9,860
Integrated water service	33,662	34,030	32,406
General services	11,945	12,818	10,985
Electricity distribution	n.d.	n.d.	6,678
District heating	3,334	3,412	3,442
Gas distribution	232	227	269
Total	119,071	102,479	174,853

^{*}Emissions of CO₂ relating to electricity purchased by and consumed within A2A (Scope 2); the mix of primary energy sources is the national average; the emission factor indicated in the APAT Italian Greenhouse Inventory Report for 2012 (0.393 t/MWh) has been applied.

Global impact indicators

100 Global impact indicators

	2011	2012	2013
Total greenhouse gas emissions - Scope 1 (tCO_2 eq/year)	5,079,241	5,124,047	6,862,002
Indirect greenhouse gas emissions - Scope 2 (tCO ₂ eq/year)	119,071	102,479	174,853
Other indirect greenhouse gas emissions - Scope 3 (tCO ₂ eq/year)	n.d.	727,446	746,150
Total emissions of ozone-depleting gases (<i>Kg R11eq</i>)	7	9	4
Total acidifying emissions (tSO₂eq)	3,544	4,279	6,958

 $^{{}^* \}text{The increase compared with 2012 can be attributed to the inclusion of Edipower plants within the Group.} \\$

4.5.4 Biodiversity

101 Water released for MVF (Minimum Vital Flow) - thousands of m³

	2011	2012	2013
Waterreleased	390,040	394,925	232,156

4.5.5 Discharges and emissions into water

102 Industrial waste water - volume - thousand of m³

		2011	2012	2013
	Energy production	377	303	268
	of which from waste to energy	222	185	157
	Integrated waste cycle	147	130	263
	General services	0	0	0
Discharged into sewers	Water cycle	0	0	С
	Electricity distribution	163	154	177
	District heating	0,1	0,3	C
	Gas distribution	1	4	1
	Total	689	592	710
Discharged into surface water bodies	Energy production	1,051	1,069	2,384
	of which from waste to energy	0	0	(
	Integrated waste cycle	1,614	1,582	1,236
	Water cycle	0	0	(
	Electricity distribution	0	0	(
	District heating	0	0	(
	Gas distribution	0	0	(
	Total	2,664	2,651	3,620
	Energy production	157	159	1,482
	Integrated waste cycle	250	236	25!
	General services	0	0	(
W	Water cycle	0	0	(
Vaste water recovered in the production cycle	Electricity distribution	0	0	(
	District heating	3	3	
	Gas distribution	0	0	C
	Total	410	398	1,740

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance

103 Industrial waste water – pollutant discharges into surface water bodies - t

	•			$\overline{}$
		2011	2012	2013
Production and distribution of energy	BOD	4	6	16
	COD	14	22	63
	BOD	1	1	1
of which waste to energy	COD	0	7	10
Integrated waste cycle	BOD	13	18	19
	COD	93	130	84
Meterovolo	BOD	0	0	0
Water cycle	COD	0	0	0
	BOD	0	0	0
Electricity distribution	COD	0	0	0
District le setion	BOD	0	0	0
District heating	COD	0	0	0
Can distribution	BOD	0	0	0
Gas distribution	BOD	0	0	0
General services	BOD	0	0	0
Geriei ai sei vices	BOD	0	0	0

4.5.6 Waste produced by the Group

104 Non-hazardous special waste - t

	2011	2012	2013
Production of energy and heat	306,387	311,739	347,958
of which waste to energy	211,993	195,759	208,250
Integrated waste cycle	216,133	177,485	214,065
Integrated water service	22,623	20,849	20,185
General services	61	122	863
Electricity distribution	439	163	160
District heating	193	296	39
Gas distribution	134	443	457
Total non-hazardous waste produced	545,971	511,095	583,726
			1

105 Hazardous special waste - t

	2011	2012	2013
Production of energy and heat	90,676	93,340	92,501
of which waste to energy	89,878	92,160	89,187
Integrated waste cycle	179	425	428
Integrated water service	1	3	2
General services	22	47	9
Electricity distribution	277	355	35
District heating	8	11	1
Gas distribution	4	13	10
Total hazardous waste produced	91,167	94,193	92,987
of which from PCBs	5	0	0
· · · · · · · · · · · · · · · · · · ·			\

106 Cross-border hazardous special waste – t

	2011	2012	2013
Hazardous special waste exported - A2A Group total *	n.d.	47,213	36,261

 $^{^{*}}$ Includes waste from treatment plants (inertization).

107 Special waste (hazardous and non-hazardous) sent for recovery

	2011	2012	2013
Production of energy and heat (excluding waste to energy)	81%	98%	93%
Waste to energy	76%	87%	83%
Integrated waste cycle	3%	3%	1%
Integrated water service	84%	97%	98%
Generalservices	32%	71%	93%
Electricity distribution	5%	9%	25%
District heating	15%	65%	34%
Gas distribution	59%	20%	41%
Average data for the A2A Group	54%	65%	60%

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Environmental management

Responsible management of energy production and distribution

Responsible waste management

Responsible management of the Integrated Water Service

Tables: environmental numbers

Social responsibility

Statement of compliance





5.1 A2A people



IDENTITY CARD AT DECEMBER 31, 2013



There were **9,945**A2A employees on
December 31, 2013



Over 220 thousand hours of training given, averaging 22 hours per person



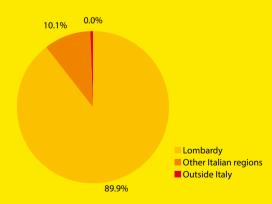
The house organ, "Inadueà", is distributed in **10 thousand copies** per issue

4.7 million euro contributed to the Group Recreational Clubs

108 Workers by type of contract



109 Personnel by workplace



Of total employees, 9.4% have a university degree, 47.7% have a diploma or professional qualification and 42.9% have a high school diploma.

The largest age range (38%) is between 41 and 50 years of age. 36% of employees have been working in A2A for less than 10 years and 12% for more than 30 years.

In 2013, 528 employees were hired in contrast to 494 terminations of employment.



All the Group data may be found in the tables on pages 141 to 155



5.1.1 Human resources management

The growth and development of A2A depends on the Group's human resources. For this reason, A2A invests constantly in its people and strives to create the best conditions for successful career progression.

A2A's **Human Resources Development System** is based on performance appraisal, assessment of potential and training courses that provide a growth path throughout the working life of each employee. Beginning in 2008, a number of tools and processes have been progressively designed and implemented: Job Positioning, Performance Management, Managerial Training, Mapping by professional family, Development Centers for young professionals and the Appointment Process for senior and middle managers.

The **training strategy** and resulting operational plan maintain an overall vision that integrates training with other development tools. Managerial training has been planned based on this logic, providing for targeted courses over the medium- to long-term time period that are designed to accompany employees along their professional paths through four crucial stages: newly hired, professional, middle manager/supervisor, manager. For certain roles deemed particularly critical, specific training courses are organized to guarantee the level of professionalism required by the quality standards of the sector. This role training consists of technical courses, mainly connected with operational knowhow and skills (specific job training), arranged by subject: environment, administration, information technology, and technical, quality and safety issues.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

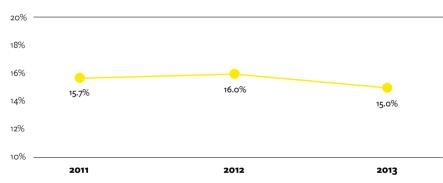
The customers and public served
Suppliers
Institutions and local communities

Statement of compliance

5.1.2 Equal opportunities policy

No employee may be discriminated against for reasons of age, gender, sexuality, race, state of health, nationality, political opinion, religious creed or for any other reason. Any breach of this right is considered to be a breach of the Group's Code of Ethics.

110 Female population as a percentage of total personnel*



^{*}The decrease in percentage of the female population is due to the acquisition of the company Edipower, in which 90% of employees are male.

By adopting the **Charter for Equal Opportunities and Equality at Work**, signed in 2012, the Group has made a commitment to promote the diversity of its organization by identifying and overcoming stereotypes associated with gender, age, disability, ethnicity, religion and sexual orientation.

In establishing the type of contract and remuneration, A2A abides scrupulously by Italian legislation, which excludes distinction of any kind by gender. There is no difference between the basic wage earned by women and men at the same level, while slight

differences, which are gradually diminishing, remain in the average wage at the various category levels.

111 Average wages of women compared to men

Category	2011	2012	2013
Senior managers	91.6%	98.1%	98.9%
Middle managers	97.2%	98.0%	98.5%
White-collar workers	91.3%	91.0%	90.3%
Blue-collar workers	88.3%	90.0%	91.3%

To help employees reconcile work and private life, the Group has granted **351 part-time jobs** (3.5% of total employees), of which 72% have gone to women. In addition to maternity requirements, applications based on family needs to assist disabled people and people with serious illnesses are considered to have priority. **Parental leave** was granted to **436 people**, of which 58.9% women. 91.9% of the people granted parental leave in 2013 returned to work in the same year.

A2A ensures working rights for **people with disabilities**, as required by current legislation. **423** disabled persons were employed by the Group in 2013, of whom **21.9% women.**

As part of the Group's "Diversity Management" policies, A2A has continued to work with the Sodalitas Foundation, taking part in the second edition of the "Diversity at Work" Career Day, an event that encourages the identification and recruitment of potential job candidates belonging to protected categories.

5.1.3 Hiring policies and staff turnover

The A2A recruitment process makes use of diagnostic tools that permit targeted selection procedures based on the principles of transparency, propriety and timeliness.

Over the course of 2013, the process has been supported by **employer branding** activities designed to constantly consolidate the image and appeal of A2A on the job market. While specific attention is given to the most representative universities in the local areas with the highest percentage of hiring (Milan and Brescia), where **8 recruiting events** such as career days and company presentations were held during the year, A2A has strengthened its channels of approach to young graduates and junior professionals by increasing its use of **social networks** as a recruiting tool.

The Group's companies **hired a total of 528 people** in 2013, of which 52% on a permanent basis.

A total of **280 internships** were arranged, involving secondary school students, university students and recent university graduates. The various types of internships include 78 apprenticeships for obtaining the first or second grade license for operating steam generators.

45%

of new worker hires were in the Environment Sector

112 Hiring by type of contract



To increase opportunities of professional growth of current staff members, **44 internal recruitments** were implemented in 2013 through job postings available to all employees. To date, approximately 52% of these positions has been successfully covered by internal staff, demonstrating the effectiveness of this tool and its appreciation on the part of employees.

Over the course of the year there were **494 separations** for a **4.97% turnover rate**, a slight increase over 2012. The increase in separations was mainly due to the sale of Edipower business units (in particular administrative staff and energy management), as well as the sale to Iren Energia S.p.A. of the Turbigo (Milan) and Tusciano (Salerno) plants.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

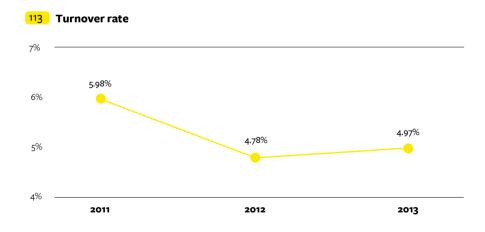
Suppliers

Institutions and local communities

Statement of compliance

The increase is also the result of a policy of incentives to encourage staff turnover, pursued through the adoption of a **workforce mobility procedure**. Intended mainly for those employees of the core staff of A2A and Edipower whose pension rights would mature within the duration of the period of unemployment, the aim of the procedure is to support the process of integration of the respective corporate departments.

There has nonetheless been a considerable decrease in retirements, mainly due to pension reforms on the part of the Italian Government. Finally, the high number of terminations of fixed-term contracts is ascribable to the use of **seasonal contracts** with Amsa for the organization of work during the summer months and for the collection of leaves during the autumn months.



There were no collective dismissals in 2013 and as a consequence no specific policies were drawn up to deal with these issues.

5.1.4 Remuneration and incentives

The Group's remuneration policies have been arranged to ensure that employees are positioned correctly in terms of the wages or salary they receive with respect to the work they do, and to appraise their work performance and conduct. In addition to the **fixed remuneration** resulting from the application of the national collective labor agreements, there are both **selective wage or salary increases** and **specific monetary economic awards**. For the managerial population these are linked to preset annual Group and individual objectives (management by objectives) and for other employees they are given as one-off payments in connection with work performance and conduct.

To ensure all the Group's staff are involved, including those in non-managerial positions, the variable remuneration system is supplemented by a collective incentive tool (results bonus) based on profitability and productivity objectives.

Certain **fringe benefits** may also be given, such as by way of example:

- for managerial staff: accident, life and health insurance and the use of a company car;
- for non-managerial staff: meal vouchers/company canteen, discounts and subsidies through the Group Recreational Clubs and contributions to the supplementary pension scheme of the sector.

On induction, in the absence of past working experience, A2A pays men and women the minimum wage or salary established by the applicable national collective labor agreement for the category into which they fall.

Labor costs, net of capitalized costs, totaled 664 million euro for the year ending December 31, 2013, compared to 602 million for the year ending December 31, 2012, for an increase of 62 million euro (+10%) due to the consolidation of Edipower over the entire year.

5.1.5 Worker health and safety

For the A2A Group the prevention of occupational accidents and illnesses is an indispensable objective of its business activities, going beyond merely meeting legislative requirements. Each business function is required to comply with the standards for worker health and safety, as well as the rules of business conduct. The same commitment is required of all contractors with whom the Group works.

In 2013 steps continued to be taken for **certification in accordance with standard OHSAS 18001** to promote the adoption of an increasingly effective and efficient Safety Management System. Over the course of the year, two additional companies of the Group have achieved certification, for a **total of 16 certified companies**.



In addition, the guidelines and procedures designed to identify significant roles in health and safety in the workplace have continued to be updated, with the aim of ensuring increased organizational consistency in managing these issues and facilitating the implementation of the Safety Management System.

Accident trends

Companies that are similar from a work-risk standpoint have been grouped together into two macro-sectors to make the Group's accident statistics easier to understand and more comparable:

- the Environment Sector, which consists of the companies operating in the waste cycle: Amsa, Aprica, A2A Ambiente and subsidiaries;
- the **Energy Sector**, which consists of all the other Group companies, which essentially operate in energy generation and distribution and in the water cycle.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

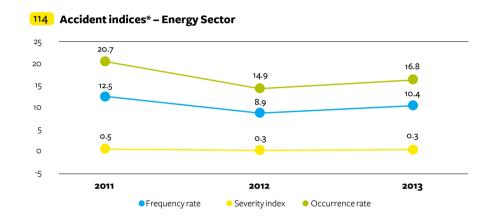
Social responsibility

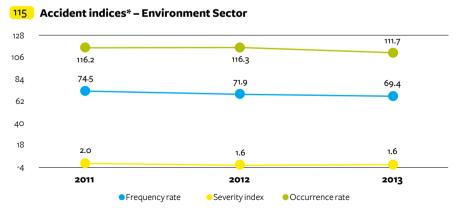
A₂A people

The customers and public served
Suppliers
Institutions and local communities

Statement of compliance

For the Energy Sector the general trend of the 2011-2013 period reveals a situation of substantial stability, with levels of improvement of all indices over the course of 2012 that were not confirmed the following year. For the Environment Sector on the other hand there was a slight improvement over the course of the three-year period.





*the way in which the accident indices have been calculated is explained on page 149.

Safety training

With regard to Presidential Decree no. 177/11, which became effective on November 23, 2011, and stipulates training and updating requirements for people working in confined spaces or suspected polluted areas, A2A continued the relative training activities over the course of 2013, consisting of theoretical training together with specific practical exercises, for a total of more than 1,500 attendances and over 6,500 training hours.

A total of **136,795 health and safety training hours** were provided by the A2A Group in 2013.

Survey on the awareness of health and safety issues in the workplace

In 2012, in conjunction with the Faculty of Medicine and Surgery of the Department of Preventive Medical Sciences at the Federico II University in Naples, a **survey was**launched to investigate the awareness level of workers at Partenope Ambiente regarding the subject of health and safety in the workplace.

The survey was conducted through the distribution of an anonymous questionnaire, with the aim of contributing to the design of training activities based on a better understanding of worker awareness regarding these issues.

The survey was completed in 2013, and on analysis of the questionnaires, 64% of the responses given by the workers were discovered to be accurate. The highest percentage of accurate responses were from the group of questions regarding "Regulations" (74%) and "PPE Safety Procedures" (69%), while the lowest percentage of accurate responses were from the group of questions regarding "Biological Risks" (57%) and "Other Risks" (48%).

Worker health supervision

Health supervision in A2A is carried out on the basis of the specific risk assessed for each individual worker.

Examinations and tests are carried out at **35 health centers** throughout the country and in external organizations with whom agreements have been reached. A pool of 38 physicians operate within the Group, plus a general practitioner at the headquarters in Brescia. In the companies of the Group where more than one physician is present, a coordinating physician has been nominated. Presently there are 9 coordinating physicians.

A total of **6,800 medical examinations** and approximately 15,000 **further investigations** were carried out in 2013. In addition, company physicians conducted **114 inspections** in the work environments to verify coherence between the health

The results were used to identify training gaps relative to the areas under study, and the results were taken into account in the planning of training courses.



supervision program and the work performed by employees.

The physicians held **22 training** meetings for group or individual training on a variety of subjects such as: preventive training regarding tests for the absence of drug and alcohol dependence, first aid courses, information on the results of environmental testing, and training regarding specific risks (computer terminals, biological and chemical risks, etc.). A total of **595 toxicological** opinions were issued, to assess the chemical risk of preparations and substances used or being purchased.

The following health promotion measures were implemented during the year, with the voluntary participation of workers:

- seasonal influenza vaccination campaign, involving 638 workers;
- optional medical examinations proposed by the company physicians and aimed at homogeneous groups of workers and technicians;
- **Progetto Cuore**, a campaign for cardiovascular risk prevention, proposed by the Italian National Institute of Health and launched at the end of 2012. A total of 458 people amongst operational staff and shift workers from certain business sectors initially took part in the program. Monitoring of the participants has continued in 2013, and increased awareness has led to a reduction of risk factors.

Amsa doctors reported 4 cases of occupational disease in 2013.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served
Suppliers
Institutions and local

communities

Statement of compliance

5.1.6 Industrial relations

All of the Group's workers are covered by the National Collective Labor Agreements (CCNL), which establish the means of dealing with trade union relationships at the various levels of representation: national, local and single company level.

Supplementary negotiations in addition to the applicable Labor Agreements are broad and articulated. They are conducted at a national level with the national trade union organizations for the specific sector, and at a local (and/or company) level with the local trade union organizations and with internal trade union representatives (RSAs or RSUs).

In 2013, **128 trade union agreements** were signed. They affect all sectors and companies of the Group and can be categorized in following classes:

- working hours and organization;
- the use of technologies for the safety of work sites and work activities;
- the transfer of companies, business units and contracts;
- personnel management, training and education;
- industrial relations procedures;
- reduction of surplus staff with the application of social guarantees and economic incentives;
- productivity enhancement.

The agreements have affected all sectors and companies of the Group; in particular, 30 of them involved the parent company.

The Group has paid special attention to defining policies and approaches that help limit impact in its management of surplus staff, preferring solutions that permit the workers concerned to use **early retirement programs and incentives** to supplement income.

Issues related to health and safety in the workplace have also found ample space in relations with trade unions. Dialogue and exchange of opinion with workers' representatives regarding safety, technical training and accident prevention measures are managed by the Environment, Health and Safety Office.



128

As far as **strikes** are concerned, they are regulated and protected as provided by Italian Law 146/1990 "Rules concerning the right to strike in essential public services and safeguarding the rights of constitutionally protected persons" and subsequent amendments and additions. In the case of absences from work due to strikes, the Group maintains minimum services to guarantee plant safety, the safety of the workers themselves and that of the public. The criteria used to identify the staff required are determined with the trade union organizations.

Employees join or may elect to join **supplementary pension schemes** in compliance with their specific employment contracts; the main supplementary pension funds are: Pegaso, Fonte, Fopen, Fondichim and Previambiente, and for managers Previndai and Mario Negri.

Laws, employment contracts and company agreements specify the required notice period to be given in the case of transfer of personnel following operational changes, organizational changes and contract succession.

The Group also recognizes, as a matter of standard procedure, forms of individual benefits or supplementary remuneration in the event of special problems relating to personal situations, gender or age.

One hundred sixty-one **employment-related disputes** were in progress or completed in 2013. Of these, there were 26 cases regarding appeals against dismissal, including 18 for dismissal for disciplinary reasons, 4 cases regarding appeals against dismissal for exceeding the time of respite (the maximum period allowed by law for a worker to

be on sick leave), and 1 for objectively justifiable reasons. In addition, 26 claimants asked to be hired on a permanent basis. In 28 cases the claimants complained about a reduction in job content, and 8 asked to be recognized in a higher category. Finally, 12 cases were in progress or completed in 2013 for alleged occupational illnesses or accidents.

5.1.7 Development and training

Enhancing the value of human resources is one of the basic objectives that A2A set itself on creation, and each individual company of the Group is committed to promoting the growth of internal staff into positions of increasing complexity and responsibility.

Over the course of 2013, **of 18 vacant middle-management positions, 13 were covered through internal promotions** (of whom 4 women), with only 5 new hires. A2A has continued activities launched in recent years in favor of its younger employees: 20 recently hired university graduates participated in **professional development interviews** to map out their professional pathway. In addition, the Development Center determined the events to take place in 2014 in favor of young professionals.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served
Suppliers
Institutions and local communities

Statement of compliance

A2A Day for young new hires

Over the years A2A has developed an "induction" path for young new hires, to provide them with a more complete view of the Group's organization, to help them get to know some of the companies' most important activities and projects, and to **foster a sense of identity and belonging**.

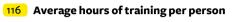
In 2013, this introduction to the Group involved 53 people, with two-day classroom sessions featuring 28 internal speakers from the middle management level of the individual departments/companies.

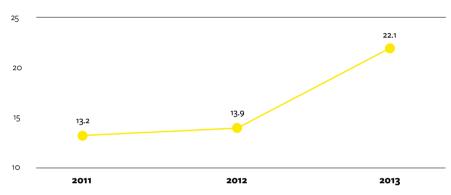


Over the course of the year approximately 220 thousand training hours were provided, of which 96,132 in Edipower, for an average of over 22 hours per person.

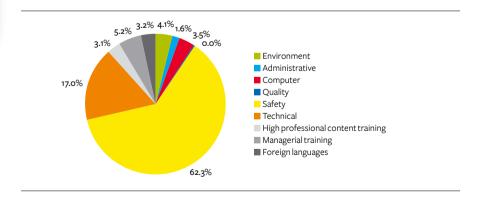
Average satisfaction rating of training (on a scale of 1 to 7)

The largest portion of **training activities** overall were devoted, as in the past, to **safety**, also because regulatory changes continue to expand the scope of mandatory training. **Technical** training came in second in terms of hours provided. With respect to 2012, **environmental** training





117 Main training areas in A2A



increased, while **computer** training decreased, after having been unusually high in 2012 due to the unbundling project.

Steps are being taken to complete the **managerial training** programmed in recent years for selected clusters.

Language training, also structured this year into different thematic streams (grammar for basic level groups and business English for the intermediate and advanced levels), involved 422 people (+34% with respect to 2012), for approximately 7,000 hours; The main language is English, accompanied by courses in other languages for specific needs: French, German and Italian.

A2A has continued to use the **e-learning platform** as a supplementary training method, totaling 4,556 hours, and 1,814 participants (+62% with respect to last year).

A2A uses a **performance management** system which is gradually being extended to increasing sectors of the Group's employees. This process was set up in 2009 and by 2012 its use had extended to appraising all senior managers, middle managers and white-collar workers of the Group's companies, with the sole exception of Camuna Energia and Edipower. For the latter, participation has already been planned for 2014 following acquisition of the company.

A2A's performance management system is used on an annual basis and varies, in terms of the process and appraisal areas, on the basis of the reference population. The tool assesses and addresses three basic elements of people's behavior within an organization: the individual results they achieve, the conduct they adhere to, and their personal improvement plans. In 2013 this training path involved newly appointed supervisors for a total of 355 hours and 25 attendances.

The right training for everyone

- A2A Energia. Challenge: a training course for supervisors, designed to strengthen the identity and cohesion of human resources by improving teamwork and team spirit. The course consists of 705 training hours (average participant appreciation 6.1 out of 7).
- A2A Calore & Servizi. Quality and customer relations: for supervisors and key account managers; designed to improve customer satisfaction in relation to the quality of service rendered. The course consists of 130 training hours (average participant appreciation 5.3 out of 7).
- Amsa. Conduct training for street cleaners: involved 90 employees, focusing on their role in and relationship with the community, designed to strengthen motivation and maintain high quality of service.
- A2A. Effective and efficiency for reaching the objectives of the Business Plan: training course for all managers aimed at supporting them in their commitment to achieve challenging business objectives and to guide the collaboration of their teams in this endeavor. Articulated in four modules over two days, with 121 participants.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served
Suppliers
Institutions and local communities

Statement of compliance

5.1.8 Internal Communications

There are two main means by which internal communications are channeled in A2A: the house organ "Inadueà" and the Intranet. "Inadueà" is the corporate newspaper, written for and dedicated to all personnel of the Group. Its purpose is to highlight A2A's projects, its products and technological innovations while promoting the professional achievements and contributions of the people who work in the Group's various companies and locations. The paper is sent in hard copy by mail four times a year to all employees, but there is also a web version available on the Group's intranet. Inadueà is printed and distributed in accordance with precise eco-compatibility standards, ranging from the paper (FSC) and ink used, to the packaging in "mater-bi" bioplastic for mailing. New features in 2013 include the use of infographics and the introduction of pages expressly devoted to the Group's four business segments (Environment, Heat, Energy and Networks), giving them even more prominence and visibility. The section devoted to the people who work at A2A (*Noi e il nostro Gruppo*), based on interviews, has been redesigned to showcase the professional experiences of the employees of all of the Group's sectors.

The intranet portal cww.a2a.eu is

constantly updated and is used to disseminate information about the Group's activities and to provide employees with a useful tool for obtaining the information they need to carry out their work. Over the course of 2013 the portal has been enriched with an increasing number of sections that help facilitate the integration of employees coming from other organizations.

A special area has been created with a brief coordinated image manual for all of the companies of the Group (letterheads, trademarks and logos, presentation formats, etc.), to provide easy access to indispensable



Employees' children, mini-actors for a day

One of the films made for A2A as part of the 10th edition of Movi&Co 2013 (a competition that puts young independent video-makers in contact with Italian and international brands for the production of advertising and company videos) was devoted to "Progetto Scuola A2A". The young director, Ludovica De Feo, proposed a screenplay that called for the participation of eighteen children and young people, male and female, aged 3 to 18, giving rise to the idea of involving the children of employees in the film-making. The enthusiastic participants became actors for a day in the video "Progetto Scuola A2A: ambiente ed energia per **crescere insieme**". The video was made as a communications tool for the project Progetto Scuola (see page 216) with which the Group's companies aim to promote the growth of a culture that is respectful of the environment. It was shot in October in an atmosphere of fun and creativity at A2A's Casa dell'Energia (Home of Energy) in Milan and at the Ponti sul Mincio power station in the province of Mantua.

work tools, reduce the consumption of paper and toner, and unify the production of company documents.

An application has also been created to permit distribution to employees of the free tickets resulting from sponsorships of events in the regions in which the Group operates. A completely automatic and impartial system, it extracts the names of the lucky "winners" directly from the human resources database.

Finally, **experimental portals devoted to individual company functions were launched**, as well as a "Welcome to A2A" section in which newly hired employees can find the first essential tips for their successful integration.

5.1.9 Other initiatives benefiting employees

In January 2013, a Social Policies team was established within the Group, with the aim of devising and developing **wellness activities** for the benefit of employees, favoring an improved work/life balance and increased sense of cohesion and belonging. The activities are open to all personnel, whether working on a fixed-term or permanent basis, full-time or part-time.

For those who work in the Milan area, the **agreement between A2A and ATM** (the Milan transport company) has continued, enabling employees to purchase annual transport passes with particularly favorable conditions. The agreement consists in a price reduction of 15%, with the possibility of paying in twelve monthly installments without interest and receiving the pass directly at their place of work. Applications for 886 annual passes were made in 2013.

For Amsa employees, specific initiatives have been continued to **facilitate the daily commute** of groups of workers.

The **private shuttle bus service** for Edipower employees has continued throughout 2013, facilitating their commute to Sesto San Giovanni, with frequent stops at the railway station and the MM1 subway station in Sesto San Giovanni. Edipower employees also benefit from a series of agreements permitting favorable conditions for **purchasing cars** and for **car leasing**, as well as for **obtaining credit cards**.

The **psychological assistance service** continued in 2013, offering employees the possibility of free-of-charge sessions with a psychologist at some of the A2A (Milan and Cassano d'Adda) and Amsa locations. In 2013, the service was extended to the Brescia and Bergamo locations, for a total coverage of 14 locations of the Group.

A2A has a **Group daycare center** situated next to the Brescia location which gives priority to the children of the Group's employees. It also accepts, on a pro-rata basis, the children of employees of other companies with which it has an agreement and the children of private citizens in the area. The daycare center can accept up to 60 children (with ages ranging from 12 to 36 months).

A2A and its partner companies contribute to a portion of the monthly charges payable by employees. A pilot project was launched in September 2013 to expand the service to include an experimental preschool/kindergarten for children aged 3 to 6 years, in order to

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served
Suppliers
Institutions and local communities

Statement of compliance

provide them with a continuous educational experience in the same setting. In 2013, 19 children of Group employees attended the facility.

"Volunteers for a day" campaign

A2A implements a number of initiatives tied to Diversity Management. In 2013 the A2A Social Policies team supported the "Volunteers for a Day" campaign, promoted by the Sodalitas Foundation and sponsored by the City of Milan, by using company communications channels to publicize a **volunteer day devoted to over 150 non-profit associations** in the city and province of Milan.

A2A's employees, retirees and family members are offered interesting ways to spend their free time through the **Group's Recreational Clubs**: CRAEM Milan, CRASM Brescia, FIDAS Amsa, CRAL ASM Bergamo, CRAL Beni Culturali Naples and Arca Fisde. The first two clubs have the widest membership and go back to the two companies, AEM Milano and ASM Brescia, that merged on January 1, 2008, creating the A2A Group. The A2A Group made **contributions totaling 4.7 million euro** to the recreational clubs in 2013.

Craem and Crasm: an activity-packed 2013

CRAEM organized more than 45 cultural, tourism, sporting and recreational activities in 2013. The tourism offerings were particularly popular: over 35,000 visitors were registered in CRAEM's 4 hotels and 2 holiday camps, 178 children took part in campus holidays and approximately 1,500 members participated in group trips and outings. 84% of club members used at least one of the services offered by CRAEM and 38% of contributions were disbursed in the form of school, sports and cultural grants and for sustainable mobility. Over 2,200 members took part in the renewed agreement with the Insieme Salute mutual health program.

Members made approximately 800 orders for products (food, cosmetics, etc.) at discounted prices, using the Online Shopping section of the Club's website. In 2013 **CRASM** organized outings, trips and vacation stays, participation in exhibitions and musical events, parties, English language courses and study holidays abroad for older children, and holiday camps and trips with nature or English-language themes for younger children. There are 15 specific groups in CRASM. They organize cultural outings, sports tournaments, tennis, ski and computer lessons, and loans of movies and music CDs.

5.1.10 Tables: A2A people numbers

118 Personnel by category and type of contract

		20			20	12		2013					
	Men	Women	Total	%	Men	Women	Total	%	Men	Women	Total	%	
Senior managers	106	18	124	1.4%	111	21	132	1.5%	136	25	161	1.6%	
Middle managers	287	83	370	4.1%	293	90	383	4.3%	358	115	473	4.8%	
White-collar workers	2,590	1,037	3,627	39.9%	2,577	1,076	3,653	41.0%	3,050	1,118	4,168	41.9%	
Blue-collar workers	4,432	202	4,634	50.9%	4,400	202	4,602	51.7%	4,777	205	4,982	50.1%	
Permanent workers	7,415	1,340	8,755	96.2%	7,381	1,389	8,770	98.5%	8,321	1,463	9,784	98.4%	
Fixed-term contract workers	78	51	129	1.4%	74	24	98	1.1%	129	27	156	1.6%	
Job training and work entry contracts	42	9	51	0.6%	24	7	31	0.3%	3	0	3	0.0%	
Fixed-term workers	120	60	180	2.0%	98	31	129	1.4%	132	27	159	1.6%	
Workers with non- Italian contracts	132	33	165	1.8%	1	1	2	0.0%	1	1	2	0.0%	
Of whom fixed-term workers	5	3	8	0.1%	0	1	1	0.0%	0	1	1	0.0%	
Total	7,667	1,433	9,100	100.0%	7,480	1,421	8,901	100.0%	8,454	1,491	9,945	100.0%	
Of whom part-time contracts	104	264	368	4.0%	94	259	353	4.0%	98	253	351	3.5%	

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A2A people

The customers and public served
Suppliers
Institutions and local communities

Statement of compliance

119 Personnel by workplace

	2011					201	12		2013				
Region	Men	Women	Total	%	Men	Women	Total	%	Men	Women	Total	%	
Abruzzo	52	6	58	0.6%	52	6	58	0.7%	52	5	57	0.6%	
Calabria	89	2	91	1.0%	86	2	88	1.0%	83	1	84	0.8%	
Campania	192	11	203	2.2%	193	13	206	2.3%	194	15	209	2.1%	
Emilia Romagna	10	10	20	0.2%	8	3	11	0.1%	51	7	58	0.6%	
Friuli Venezia Giulia	147	4	151	1.7%	145	4	149	1.7%	209	4	213	2.1%	
Lazio	2	1	3	0.0%	1	2	3	0.0%	2	2	4	0.0%	
Lombardy	7,006	1,352	8,358	91.8%	6,960	1,376	8,336	93.7%	7,504	1,432	8,936	89.9%	
Piedmont	24	10	34	0.4%	23	10	33	0.4%	62	13	75	0.8%	
Puglia	-	-	-	0.0%	-	-	-	0.0%	81	3	84	0.8%	
Sicily	-	-	-	0.0%	-	-	-	0.0%	206	4	210	2.1%	
Veneto	13	4	17	0.2%	11	4	15	0.2%	9	4	13	0.1%	
Abroad	132	33	165	1.8%	1	1	2	0.0%	1	1	2	0.0%	
Total	7,667	1,433	9,100	100.0%	7,480	1,421	8,901	100.0%	8,454	1,491	9,945	100.0%	

120 Personnel by age range

				2011						2012						2013		
Age range	Senior managers	Middle managers	White-collar workers	Blue-collar workers	TOTAL	%	Senior managers	Middle managers	White-collar workers	Blue-collar workers	TOTAL	%	Senior	Middle managers	White-collar workers	Blue-collar workers	TOTAL	%
Up to 30	0	12	293	476	781	8.6%	0	0	299	458	757	8.5%	0	1	266	493	760	7.6%
From 31 to 40	12	75	751	1,073	1,911	21.0%	14	69	708	1,058	1,849	20.8%	12	83	742	1,078	1,915	19.3%
From 41 to 50	55	172	1,603	1,833	3,663	40.3%	62	159	1,557	1,830	3,608	40.5%	75	183	1,621	1,900	3,779	38.0%
Over 50	65	156	1,191	1,333	2,745	30.2%	59	157	1,167	1,304	2,687	30.2%	76	207	1,581	1,627	3,491	35.1%
Total	132	415	3,838	4,715	9,100	100.0%	135	385	3,731	4,650	8,901	100.0%	163	474	4,210	5,098	9,945	100.0%

121 Personnel by seniority in the Group

				2011						2012						2013		
Age range	Senior managers	Middle managers	White-collar workers	Blue-collar workers	TOTAL	%	Senior managers	Middle managers	White-collar workers	Blue-collar workers	TOTAL	%	Senior managers	Middle managers	White-collar workers	Blue-collar workers	TOTAL	%
Up to 10 years	63	143	1,089	2,022	3,317	36.5%	67	106	1,064	2,066	3,303	37.1%	68	149	1,081	2,281	3,579	36.0%
From 11 to 20 years	32	66	803	1,206	2,107	23.2%	34	66	734	1,052	1,886	21.2%	51	69	613	871	1,604	16.1%
From 21 to 30 years	32	152	1,407	1,168	2,759	30.3%	28	159	1,425	1,240	2,852	32.0%	37	185	1,797	1,568	3,587	36.1%
Over 30 years	5	54	539	319	917	10.1%	6	54	508	292	860	9.7%	7	71	719	378	1,175	11.8%
Total	132	415	3,838	4,715	9,100	100.0%	135	385	3,731	4,650	8,901	100.0%	163	474	4,210	5,098	9,945	100.0%

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A2A people

The customers and public served
Suppliers
Institutions and local

Institutions and local communities

Statement of compliance

122 Personnel by educational qualification

	2011			2012				2013				
	Men	Women	Total	%	Men	Women	Total	%	Men	Women	Total	%
University degree	510	298	808	8.9%	536	320	856	9.6%	590	343	933	9.4%
High school diploma	2,597	719	3,316	36.4%	2,619	729	3,348	37.6%	3,286	775	4,061	40.8%
Professional qualification	584	93	677	7.4%	577	91	668	7.5%	595	91	686	6.9%
Compulsory schooling	3,845	291	4,136	45.5%	3,748	281	4,029	45.3%	3,983	282	4,265	42.9%
Information not available*	131	32	163	1.8%	-	-	-	0.0%	-	-	-	0.0%
Total	7,667	1,433	9,100	100.0%	7,480	1,421	8,901	100.0%	8,454	1,491	9,945	100.0%

^{*}Information refers A2A Coriance, a company sold in 2012.

123 Hiring during the year by category and type of contract

		2011			2012			2013	
ITALY	Men	Women	Total	Men	Women	Total	Men	Women	Total
Senior managers	3	1	4	5	2	7	1	0	1
Middle managers	4	2	6	7	2	9	3	1	4
White-collar workers	14	13	27	28	22	50	20	10	30
Blue-collar workers	95	8	103	68	2	70	236	1	237
Permanent workers	116	24	140	108	28	136	260	12	272
Fixed-term contract workers	184	47	231	193	34	227	228	28	256
Job training and work entry contracts	17	5	22	17	6	23	0	0	0
Fixed-term workers	201	52	253	210	40	250	228	28	256
Total	317	76	393	318	68	386	488	40	528

124 Separations during the year by gender

		2011			2012			2013	
ITALY	Men	Women	Total	Men	Women	Total	Men	Women	Total
Retirement	149	8	157	141	11	152	44	16	60
Voluntary termination	66	14	80	68	14	82	65	12	77
Deceased	11	2	13	16	0	16	12	1	13
Dismissals	18	1	19	18	1	19	64	14	78
Other (e.g. end of fixed-term contract)	216	30	246	134	22	156	247	19	266
Total	460	55	515	377	48	425	432	62	494
Turnoverrate	6.10%	3.93%	5.76%	5.04%	3.38%	4.78%	5.11%	4.16%	4.97%
ABROAD									
Retirement	1	0	1	0	0	0	0	0	0
Voluntary termination	12	2	14	0	0	0	1	0	1
Deceased	1	0	1	0	0	0	0	0	0
Dismissals	7	1	8	0	0	0	0	0	0
Other (e.g. end of fixed-term contract)	3	2	5	0	0	0	0	0	0
Total	24	5	29	0	0	0	1	0	1
Turnoverrate	18.18%	15.15%	17.58%	0.00%	0.00%	0.00%	100.00%	0.00%	50.00%

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A2A people

The customers and public served Suppliers

Institutions and local communities

Statement of compliance

125 Separations during the year by age range

			2011					2012					2013		-
	up to 30	31-40	41-50	over 50	Total	up to 30	31-40	41-50	over 50	Total	up to 30	31-40	41-50	over 50	Total
ITALY															-
Retirement	0	0	0	157	157	0	0	0	152	152	0	0	0	60	60
Voluntary termination	12	17	15	36	80	17	17	14	34	82	15	24	6	32	77
Deceased	0	0	3	10	13	0	2	5	9	16	0	1	4	8	13
Dismissals	4	9	1	5	19	6	6	4	3	19	5	4	8	61	78
Other (e.g. end of fixed-term contract)	86	97	46	17	246	64	52	33	7	156	89	34	39	104	266
Total	102	123	65	225	515	87	77	56	205	425	109	63	57	265	494
Turnover rate	13.84%	6.60%	1.79%	8.31%	5.76%	11.49%	4.17%	1.55%	7.63%	4.78%	14.34%	3.29%	1.51%	7.59%	4.97%
ABROAD															
Retirement	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Voluntary termination	3	7	1	3	14	0	0	0	0	0	0	1	0	0	1
Deceased	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Dismissals	2	1	2	3	8	0	0	0	0	0	0	0	0	0	0
Other (e.g. end of fixed-term contract)	0	1	2	2	5	0	0	0	0	0	0	0	0	0	0
Total	5	9	5	10	29	0	0	0	0	0	0	1	0	0	1
Turnoverrate	11.36%	19.57%	13.89%	25.64%	17.58%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	50.00%

126 Average stay of job separators who left the Group during the year

	201	1	2012	2	2013		
Age range	Men	Women	Men	Women	Men	Women	
Up to 30	1.3	0.3	0.6	0.0	0.7	0.6	
From 31 to 40	0.3	0.9	2.1	2.5	3.4	2.6	
From 41 to 50	0.4	0.1	5.3	8.0	14.5	8.6	
Over 50	11.6	8.9	26.6	29.1	29.5	33.2	
				(

127 Training provided by category

_	2	011	20	12	2013			
	Number of hours	Average annual hours of training by employee	Number of hours	Average annual hours of training by employee	Number of hours	Average annual hours of training by employee		
Senior managers	1,915	14.5	1,651	12.2	7,377	45.8		
Middle managers	12,616	30.4	10,464	27.2	22,452	47.5		
White-collar workers	63,122	16.4	71,980	19.3	105,171	25.2		
Blue-collar workers	42,908	9.1	39,308	8.5	84,541	17.0		
Total	120,562	13.2	123,403	13.9	219,540	22.1		

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A2A people

The customers and public served
Suppliers
Institutions and local

communities

Statement of compliance

128 Training provided by gender

		2011		2012	2013		
	Number of hours	Average annual hours of training by employee	Number of hours	Average annual hours of training by employee	Number of hours	Average annual hours of training by employee	
Men	103,808	13.54	101,553	13.58	197,677	23.38	
Women	16,755	11.69	21,850	15.38	21,864	14.66	

129 Training provided by course content

	2011		2012		2013	
Course content	Number of attendances*	Number of hours	Number of attendances*	Number of hours	Number of attendances*	Number of hours
Environment	979	4,634	466	2,233	1,890	9,003
Administrative	1,555	4,793	1,292	4,730	1,968	3,463
ICT	1,292	10,288	2,874	20,170	1,559	7,712
Quality	56	153	232	382	11	15
Safety	8,125	35,721	12,065	57,781	28,133	136,795
Technical	3,483	32,169	2,108	13,810	4,702	37,293
Training with high professional content	65	1,337	8	285	562	6,740
Managerial training	2,550	25,752	1,421	17,078	1,583	11,449
Foreign languages	191	5,193	277	6,934	422	7,071
Total	18,411	120,562	20,742	123,403	40,830	219,540

^{*} People may be counted more than once depending on the number of courses they have attended.

130 Internships for students, new university graduates and new high school graduates

Туре	Length	Contents	Provided in 2011	Provided in 2012	Provided in 2013
High school students	4 weeks	Consistent with qualification	61	103	150
Post high school diploma/bachelor's or master's degree	3/6 months	Trading, engineering, quality/environment/safety, sales/marketing, administration/finance/control, human resources, legal	36	26	31
Curricular and preparation of dissertation	3/6 months	Consistent with the university course	17	12	21
Obtaining license for operating steam generators	from 180 to 240 working days	Technical training at the Group's plants	14	11	78
		TOTAL	128	152	280

131 Accident data*

_	ENEF	RGY SECTO	R	ENVIRO	NMENT SE	CTOR
	2011	2012	2013	2011	2012	2013
N° of accidents (excluding while traveling)	91	67	90	523	512	521
N° days absence (excluding while traveling)	3,721	1,931	2,347	14,022	11,385	11,965
Average duration (days)	41	29	26	27	22	23
Frequency rate (FR)	12.5	8.9	10.4	74.5	71.9	69.4
Severity index (SI)	0.5	0.3	0.3	2.0	1.6	1.6
Occurrence rate (OR)	20.7	14.9	16.8	116.2	116.3	111.7
Accidents while traveling	46	57	42	73	59	76

 $^{^{\}ast}$ 2012 figures have been recalculated.

When calculating the indices only **occupational accidents** which lead to at least one day's absence excluding that of the event are considered; medications and precautions are excluded, as are accidents which are not recognized as occupationally related.

Occupational accidents also include those which occur due to a simple transfer, with or without the use of a vehicle.

All accidents happening to workers, regardless of the type of work relationship (e.g. staff leasing) are taken into account.

FR = frequency rate (n° of accidents x 1,000,000: hours worked)

SI = severity index (n° days absence x 1,000 : hours worked) total hours worked)

 $\label{eq:occurrence} OR = occurrence \ rate \ (n^o \ of accidents \ x 1,000: workforce)$ Accidents while traveling: accidents happening to workers on the way to and from work (and in any case outside working hours)

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

132 Health and safety training

SUBJECT	2011	2012	2013
First aid	3,644	4,287	4,424
Fire prevention	6,848	2,934	13,629
Prevention	24,539	46,355	106,480
Equipment	9,467	2,949	12,262
TOTAL	44,498	56,524	136,795
			\

133 Health supervision program

HEALTH EXAMINATIONS AND TESTS	2012	2013
Periodical examinations established by the health protocol	4,598	5,403
Preventive examinations on hiring/entry	427	560
Examinations requested by workers, on job changes, following absences > 60 days for health reasons, health promotion examinations, heart project, etc.	1,553	827
Total examinations	6,578	6,790
Blood tests	3,670	4,483
Hearing tests	686	1,384
Spirometry	1,542	2,485
Electrocardiograms	1,936	2,050
Occupational vaccinations (anti-tetanus, anti-hepatitis A-B, anti-typhoid)	1,592	776
Tests using instruments (X-rays, eye screening, scans, etc.)	1,490	287
Specialist consultations (eye, cardio, orthopedic, etc.)	1,158	1,417
Testing for the absence of drug dependence	1,652	1,854
Testing for the absence of alcohol dependence	144	348
Total additional investigations	13,870	15,084

134 Absences from work

	2011				2012			2013	
	n° of days	%	working days per employee	n° of days	occurrence	working days per employee	n° of days	occurrence %	working days per employee
Illness	103,885	4.5%	11.4	98,786	4.4%	11.0	110,108	4.4%	11.0
Maternity leave (compulsory, optional, breast feeding)	13,673	0.6%	1.5	16,353	0.7%	1.8	14,642	0.6%	1.5
Trade union leave	10,983	0.5%	1.2	11,643	0.5%	1.3	13,969	0.6%	1.4
Paid leave (medical visits, etc.)	4,575	0.2%	0.5	4,364	0.2%	0.5	6,358	0.3%	0.6
Unpaid leave	7,691	0.3%	0.8	7,069	0.3%	0.8	6,825	0.3%	0.7
Other absences (wedding leave, study leave, etc.)	48,542	2.1%	5.3	49,268	2.2%	5.5	51,303	2.0%	5.1
Company strikes	894	0.0%	0.1	0	0.0%	0	110	0.0%	0.0
National strikes	2,454	0.1%	0.3	3,523	0.2%	0.4	2,978	0.1%	0.3
Accidents	17,447	0.8%	1.9	16,158	0.7%	1.8	16,188	0.6%	1.6
Solidarity contract	0	0.0%	0	0	0.0%	0	1,101	0.0%	0.1
Redundancy	0	0.0%	0	0	0.0%	0	3,761	0.1%	0.4
Total	210,145	9.0%	23.0	207,165	9.3%	23.1	227,343	9.0%	22.7

	2011	2012	2013
Average number of employees	9,153	8,974	10,013
Total working days	2,324,778	2,234,151	2,516,085
Total hours worked	14,872,091	14,634,946	15,981,607
Days of absence per person as a percentage of working days	8.8%	9.3%	9.0%
Average annual days absence per person	22.96	23.09	22.71

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A2A people

The customers and public served
Suppliers

Institutions and local communities

Statement of compliance

135 Absences from work – number of working days lost, by gender

	2011		2012	2	2013	3
	Men	Women	Men	Women	Men	Women
Illness	87,350	16,535	83,247	15,539	92,361	17,748
Maternity leave (compulsory, optional, breast feeding)	1,743	11,931	2,522	13,831	2,226	12,417
Trade union leave	10,241	742	10,895	748	13,143	825
Paid leave (medical visits, etc.)	3,791	784	3,246	1,118	4,966	1,391
Unpaid leave	5,776	1,915	5,032	2,037	5,183	1,642
Other absences (wedding leave, study leave, etc.)	42,580	5,961	42,526	6,742	43,903	7,400
Company strikes	833	62	0	0	108	2
National strikes	2,060	393	3,170	353	2,706	272
Accidents	15,734	1,713	14,421	1,737	14,635	1,553
Solidarity contract	0	0	0	0	931	170
Layoffs	0	0	0	0	3,240	521
Total	170,109	40,037	165,059	42,105	183,401	43,941

Rate of days lost* (total number of days lost for occupational accidents or illness as a percentage of the total hours worked by the workforce in the year)

Absenteeism	2011	1	2012	2	2013	3
(number of workdays missed per employee)	Italy	Abroad	Italy	Abroad	Italy	Abroad
Hours lost for occupational illness	0	0	0	0	0	0
Hours lost for accidents	109,141	1,407	105,109	0	104,545	0
Rate of days lost	0.75%	0.00%	0.72%	0.00%	0.65%	0.00%
Rate of days lost	0.75%	0.00%	0.72%	0.00%	0.65%	_

^{*} Days lost means days on which work cannot be performed due to an occupational accident or occupational illness. These are not counted if there is a partial return to work.

137 Absence rate (days lost for absence as a percentage of the total days worked by the workforce in the year)

2011	2011		2	2013	
Italy	Abroad	Italy	Abroad	Italy	Abroad
141,915	1,440	137,180	0	150,178	0
6.21%	3.80%	6.14%	0.00%	5.97%	0.00%
	Italy 141,915	Italy Abroad 141,915 1,440	Italy Abroad Italy 141,915 1,440 137,180	Italy Abroad Italy Abroad 141,915 1,440 137,180 0	Italy Abroad Italy Abroad Italy 141,915 1,440 137,180 0 150,178

138 Return to work and retention rate after parental leave, by gender

	20	011		1 2011 k in 2012	20	12		1 2012 k in 2013	20	013
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Parental leave taken	128	169	-	-	194	283	-	-	179	257
of whom returned to work	115	158	10	16	187	264	7	23	167	234

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

139 Workers by type of employment contract

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	20	2011		2012		13
	N°	%	N°	%	N°	%
Managerial contract	125	1.4%	135	1.5%	163	1.6%
Electricity-sector contract	2,796	30.7%	2,805	31.5%	3,559	35.8%
Gas and water sectors contract	1,305	14.3%	1,292	14.5%	1,300	13.1%
Commercial contract	254	2.8%	272	3.1%	279	2.8%
Urban sanitation contract	4,092	45.0%	4,030	45.3%	4,087	41.1%
FISE contract	170	1.9%	176	2.0%	390	3.9%
Chemical-sector contract	174	1.9%	169	1.9%	166	1.7%
Other contracts	21	0.2%	20	0.2%	0	0.0%
Foreign contracts	163	1.8%	2	0.0%	1	0.0%
Total	9,100	100.0%	8,901	100.0%	9,945	100.0%
					\[\]	

140 Trade union membership

				/		<u> </u>
	2011		2012		2013	
	N°	%	N°	%	N°	%
Italy - Members of federal organizations	3,624	39.8%	3,677	41.3%	4,085	41.1%
Italy-Members of other trade union organizations	1,318	14.5%	1,282	14.4%	1,381	13.9%
Employees not members of trade unions	3,993	43.9%	3,940	44.3%	4,477	45.0%
Abroad - members of other trade union organizations	1	0.0%	0	0.0%	0	0.0%
Abroad - employees not members of trade unions	164	1.8%	2	0.0%	2	0.0%
Total	9,100	100.0%	8,901	100.0%	9,945	100.0%

141 Strike hours

	201	1	2012		2013	
	Strike hours Total	Strike hours per person*	Total strike hours	Strike hours per person*	Total strike hours	Strike hours per person*
Italy	24,155	2.64	18,769	2.09	19,197	1.92
Abroad	0	0	0	0	0	0

 $^{^{*}}$ The per person hours are calculated on the basis of the average workforce.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A2A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

5.2 The customers and public served



IDENTITY CARD AT DECEMBER 31, 2013

A2A operates mainly in Lombardy but also in other Italian regions and in a number of European countries.



A2A Energia sold **456 GWh** of green energy



Customers enrolled in the "Chiara2a" loyalty program doubled in one year **(now numbering 120,000)**



Began working with the consumer associations to prepare the **Charter of Services** for District Heating

142 Customer distribution by sector

A2A Group	2011	2012	2013
Electricity customers (supply points)	1,023,599	1,007,978	990,098
Electricity sold ⁽¹⁾ (GWh)	23,646	23,664	24,519
Gas customers (supply points)	1,195,568	1,171,722	1,140,112
Gas sold (1) (millions of cm)	4,157	3,891	2,465
Water customers (aqueduct service users)	277,014	278,366	285,530
Water supplied to users (millions of cm)	76	74	68

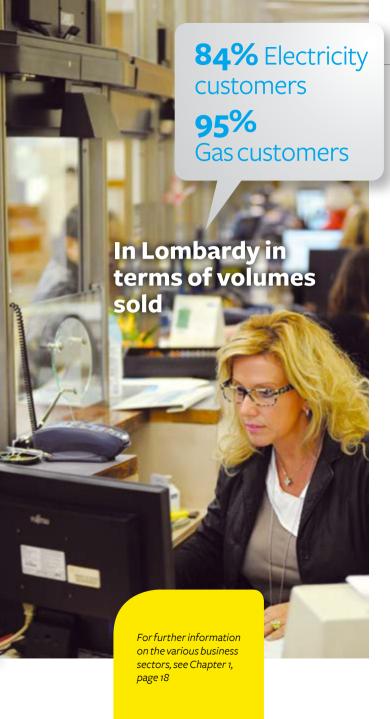
A2A Group	2011	2012	2013
District heating customers (users served)	22,448	23,511	23,800
Heat sold (GWht)	2,078	2,217	2,382
Municipalities served for environmental hygiene	86	89	88
Waste collected (2) (thousands of metric tons)	1,967	1,759	1,543
Electricity networks (kilometers)	12,815	13,052	13,254
Gas networks (kilometers)	8,067	7,980	7,838

^{***} Waste collected means urban waste collected for the environmental hygiene service and special waste collected by Amsa and Aprica with a charge for the service.



All numbers taken from tables on pages 189 to 199

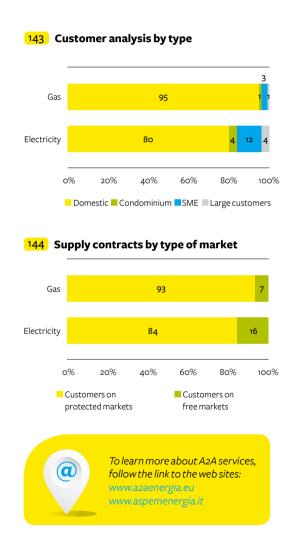
^{*}Energy and gas sold to wholesale and retail customers.



5.2.1 Selling electricity and gas

A2A sells electricity and gas through the companies A2A Energia and Aspem Energia, which operate primarily in northern Italy, especially in the region of Lombardy.

The business unit involved in the protected electricity service provided by the subsidiary **Camuna Energia** was transferred, as from July 1, to Valle Camonica Servizi Vendite S.p.A., a wholly owned subsidiary of Valle Camonica Servizi S.p.A..



Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

The **commercial policy** of the Group is characterized by a few main elements, which underlie the way the entire organization operates and how each individual handles its relationships with the customers:



- fair business practices and transparency;
- accessible services and personalized offers for the various market segments;
- specific training and professionalism of the operators in direct contact with customers;
- constant monitoring of the levels of service, to ensure the highest quality;
- utmost attention in listening to customers and quick and effective claims management;
- tracking contact with every customer, through the use of the latest technologies;
- attention to the multicultural nature and situations of social hardship;
- research into customer loyalty, by building a relationship of mutual trust.

The Group manages customer data and information in compliance with prevailing **privacy protection legislation** (Legislative Decree No 196/2003, by putting into place the information notices aimed to guarantee the utmost security in treating and in preserving personal data. Furthermore, A2A makes a careful monitoring of all the third parties that can be found in the condition to use our customers' personal data and provides for appropriate training of our employees on the matter, in order to ensure the respect and safeguarding of our communities.

In 2013, A2A Energia launched an intensive **commercial campaign** aimed at strengthening our identity as a company leader in the Lombardy region; the campaign was carried out by installing billboards in the regional capital cities, radio announcements, video clips on local and web broadcasters, and advertisements in the main newspapers.

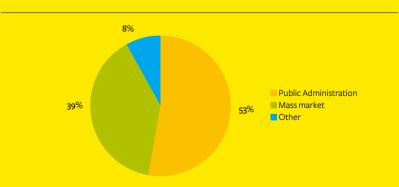
Green energy 100% guaranteed

A2A Energia promotes the use of "green energy" from renewable sources with our customers. The "green energy" choices it offers are identified by the **ENERGIA A2A Rinnovabile 100%**® brand, which ensures respect for the environment.

As from 1 January 2013, electricity suppliers can use the exclusive certificate of origin (CO) as proof of the quantity of energy generated by renewable sources in our energy mix. The certificate of origin guarantees that the energy sources used are strictly from renewable sources generated by IGO qualified plants. The certificate of origin is issued by the Energy Services Manager (GSE) on the electricity put into the network, in compliance with the Directive 2009/28/EC.

In 2013, A2A Energia sold **456 GWh** of green energy.

145 Distribution of green energy by market segment



Costs and methods of payment

The tariffs charged to customers on the protected market are regulated by the Electricity and Gas Authority (AEEG) on a periodic basis, while prices for customers on the free market are suggested by the seller with specific offers.

Regulated tariffs are periodically updated.

The main components of the bill include:

- **Sales Service**, costs incurred to purchase and sell the electricity and gas supplied; these costs are split into a fixed portion (charged regardless of use) and an energy portion (charged depending on the amount of energy used).
- **Network Service**, costs incurred for transportation of energy to the meter; these costs are also split into fixed portion (charged regardless of use) and a variable portion (charged depending on the amount of energy transported through the network).
- **Taxes**, which item includes a tax on use, but also any charges other than supply or not directly connected to the energy supplied (e.g. labor).
- **VAT**, calculated on all the bill items to which it is applicable, including excise taxes.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

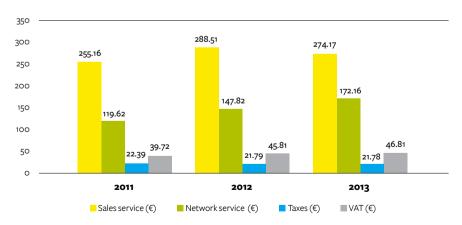
Statement of compliance

The graphs below **show the trend over the past three years in the various cost components that make up the bill for electricity and gas**, taking as a reference point the usage of a "typical" household.

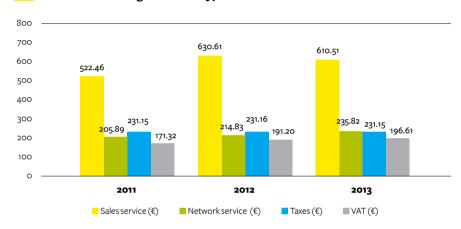
For electricity, a resident domestic use contract was taken for example, having $3 \, kW$ of available power and an average annual use of 2,700 kWh. For gas, domestic use with independent heating and an annual use of 1,400 cm was taken as the example.

The composition of the costs making up the bill has shown a growth trend over the period in question, chiefly due to the steady increase in the tax component and the network services, while sales show a decrease in 2013 over the previous year.

146 Cost trends in the electricity bill for a typical household



147 Cost trends in the gas bill for a typical household



Energy mix in the bill

A2A satisfied its disclosure requirements concerning the composition of the energy mix of generated electricity supplied, along with the average national generation of electricity put into the Italian electricity system (Fuel Mix Disclosure).

The disclosure to customers is communicated in the bill, in the commercial offers and over the web site. In 2013, A2A Energia satisfied its disclosure requirements for 2012: it stated that the percentage of energy sold which came from renewable sources was 31.54% for the free market (29.8% Italian average) and 23.5% for the protected market.

A2A issues our customers approximately 12.5 million bills each year for the supply of electricity and gas on a monthly, two-monthly or quarterly basis, depending on the type of customer and service provided.

At year-end 2013, **196,000 customers** took advantage of the **online bill** service, marking an increase of 26.5% compared to a year earlier.

148 Online bill penetration

Percentage at 12/31/2012	Percentage at 12/31/2013
7.7%	9.5%

The bollett@mail service takes all the paper out of the bill: there is no printing, not even to ensure archival obligations, since the bill history is available for review for 5 years at the online portal, in the area reserved to each customer.

With bollett@mail in 2013, at least fifty-three 15-metre tall trees were saved, estimating that a single tree provides 80,000 sheets of paper'! Furthermore, it eliminated the pollution caused by the delivery trucks that travel to ensure the production and distribution of some 1 million documents.

For customers who have not joined the **bollett@mail** service, A2A Energia and Aspem Energia use a **"certified" means of delivery**, which enables the document delivery to be tracked to end customers using a global positioning via satellite system that is able to record the date, time and place of the delivery of each individual bill. This service has considerably reduced the number of complaints about the non-delivery of documents as it monitors every delivery step by step.

The number of documents (bills, contracts, letters) delivered by certified means reached 94% as a proportion of the total number of bills sent by post in 2013, with just 4.3% delivered late.



Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

To assist customers in reading their electricity and gas bills, A2A continued to offer the **"Guide to reading your bill"**, now in its third year. It was sent to all customers and it has always been available at the desks of the consumers' associations involved in the initiative as well as for distribution at the sales desks of A2A Energia. In addition to Italian, the Guide is available in six foreign languages: English, French, Spanish, Arabic, Chinese and Romanian. **As many as 530,000 copies were mailed out in 2013.**





A2A customers can choose to choose to **pay their bills** in a whole variety of different ways. The most popular payment method is the direct payment from the customer's current account (**direct debit**, recently changed pursuant to the European SEPA method), followed by the pre-printed post office giro, but customers may also pay at their bank with a pre-printed payment form or one-time wire transfer, at the post office with a blank payment form, at A2A Energia and Aspem Energia counters, or using Sisal or Lottomatica payment methods at the grocery store.

A pilot program was launched in 2013 with Poste Italiane to offer customers a free payment service of bills at post office counters, with charges paid by A2A Energia.

The municipalities involved in the project, which will end in 2014, are Sarezzo and Gardone Val Trompia, located in Brescia.

149 Method of payment preferred by A2A customers*

	Direct debit	Pre-printed post office giro forms	Bank transfers and pre-printed forms	Sisal	Counters	Post office giros on blank forms	Other (supermarkets, Lottomatica,)
A2A Energia	62%	21%	5%	5%	2%	3%	2%
Aspem Energia	56%	28%	14%	0%	0%	2%	0%

^{*} Aspem Energia does not provide the possibility of paying through Sisal or Lottomatica, at the counter or via the portal.

Energy discounts with the social bonus

As required by the AEEG, A2A provides specific "bonuses" for purchasing electricity and gas to people in difficult economic or social conditions or those with household members who have serious problems of health and are kept alive by home-based electro-medical equipment. These bonuses are funded by the State and through the use of specific tariff components determined by the AEEG and are provided to all qualifying domestic customers who have submitted an application to the municipality in which they live for admission to the social tariff.

In 2013, the bonus for electricity varied from 71 to 155 Euro per year, depending on the number of family members and the income level (ISEE); for gas tariff discounts, the local climate and type of use were also considered (heating, hot water; cooking and hot water; cooking and heating) and in 2013, the results varied from 39 to 273 euro.

150 A2A customers who have used the social bonus

	2011*	2012*	2013
Gas Bonus	18,942	21,715	21,863
Electricity Bonus	19,549	17,897	18,717

^{*}Aspem Energia is not included.

Channels of dialogue and customer assistance

A2A Energia and Aspem Energia spend a lot of time thinking about accessibility and the quality of the **contact channels between company and customer**, with a view to constantly ensuring the highest level of efficiency and effectiveness of its services.

The bill is also frequently used to communicate information by including messages or attaching informational memos. In addition to this, A2A customers have:

- desks available to the public throughout the local area;
- online access through the commercial websites www.a2aenergia.eu and www.aspemenergia.it, available round the clock;
- call centers accessible through operators at toll-free numbers during office hours;
- interactive automatic answering services, available round the clock;
- supplier networks and specialized retailers.



More information about phone numbers are available at the web sites

www.azaenergia.eu/area_clienti/contatti_aza_energia/ index.html

www.aspemenergia.it/gruppo/cms/aspem/area_clienti/ contatti/index.html Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

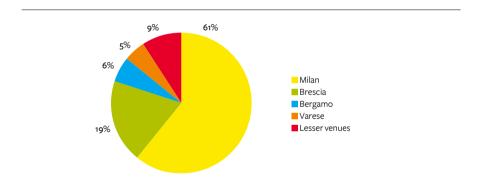
Suppliers

Institutions and local communities

Statement of compliance

In 2013, the sales desks of the Group's companies received approximately 320,000 visitors⁽²⁾, with an average waiting time of 20 minutes for A2A Energia, showing improvement versus last year, and just 22 minutes for Aspem Energia. Among the issues handled there was a gradual increase in those relating to requests to pay bills in installments.

151 Customers served at the counter, arranged by province



320,000

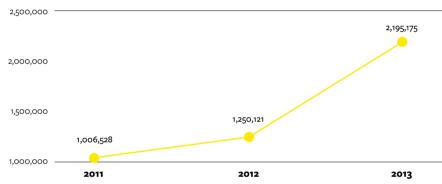
In Milan and Brescia, A2A has been running **desks for free market contracts** with dedicated representatives since 2011. These representatives ensure that customers receive accurate and detailed information of the offers available pursuant to liberalization of the market, as well as establish a direct and transparent relationship that complies with the Commercial Code of Conduct and Use. A similar service was set up in 2013 in Vobarno (Brescia).



(2) Includes the bill payment service at the Milan desk.

A2A Energia and Aspem Energia offer many services through their **web portals**, where the information concerning the number of visits reports steady growth. **The percentage of registrations at the online desk in 2013 was 19.07% of total customers.**

152 Visits to the commercial web site*



^{*}Number of individual sessions started by all web site visitors.

Through the **online desk**, customers can complete a number of transactions. In particular, the new functionalities provided in 2013 include: the ability to view past bill and usage history, request to move the meter by filling out a designated form, and request to change personal account information.

A new web-based service was set up so that customers can **read their own meter** (as opposed to calling in the reading or submitting the reading by text message): the use showed steady increases compared to the previous year and nearly 40% of the total readings reported annually were made online.

153 Read your own meter

	2012	2013
Total readings	348,456	397,825
Total on line readings	112,965	157,201

In 2013, the A2A Energia **call center services** dealt with more than 1,250,000 calls with an average wait time of 92 seconds, which includes the time set aside to answer questions from the navigation menu. Aspem Energia is not under the obligation of monitoring by the AEEG, yet still had an average wait time of just 35 seconds.

In managing **large customers and small business**, A2A Energia and Aspem Energia have a direct sales network that handles all aspects of customer relations, from contract negotiation to post-sales services.

Customer service is provided on the basis of equality, impartiality, continuity and efficiency. A2A is careful to ensure that it provides the best conditions so that every customer has **equal access to the services**, thus overcoming any cultural, language or disability barriers.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

The A2A Group has undertaken a whole series of initiatives in this respect, such as:

- the availability of multilingual information leaflets at the commercial desks of A2A Energia;
- hiring representatives capable of dealing with **multilingual relations**;
- availability of DPS telephones (telephone devices for the hard of hearing) at the call centers:
- desks with **priority access** for people with specific needs (the disabled, pregnant women, the elderly and the needy);
- bills issued in Braille for the **visually impaired**, which were available to all who asked for them.

Fairness and transparency against fraudulent commercial practices

A2A Energia and Aspem Energia have always stood apart on the energy market as organizations interested in **fairness** and **transparency** in their relationships with their customers. The companies have undertaken a collaborative approach with Consumer Associations, with which the Group has initiated proactive cooperation on topics including, in particular, **prevention of unfair practices and consumer protection**. On this topic, at year-end 2013, A2A Energia and Altroconsumo launched a partnership to compare the contract language used for domestic electricity customers. The evaluation achieved by A2A Energia was "excellent", standing

For our customers: Clarity Transparency Sharing as a benchmark for the market in terms of transparency of the contract language.

The dimensions object of observation and analysis by Altroconsumo were: irrevocable offer, withdrawal from the contract, right to reconsider, unilateral changes, claims, venue, suspension of the service, termination of the contract, automatic indemnity, security deposit, and suspension of the supply service due to arrears.

A2A Group companies are especially committed to ensuring that the customer receives a service that provides the maximum in terms of transparency and correctness. The discovery of **unfair commercial practices** being carried out by competitors to the detriment of A2A Energia's customers, providing false and deceptive information having the sole aim of making customers sign a supply contract even if they are not fully aware of what they are doing, has led the company to request the consumers' associations and the AEEG to keep a careful watch on the situation and to take steps designed to prevent unfair practices. In 2011, A2A Energia signed an agreement setting up the "Observatory on unfair commercial practice". The aim of the Observatory is to protect and inform customers through dedicated campaigns and initiatives about the spreading of unfair commercial practices and the potential costs for users.

On 1 March 2013, A2A Energia and the Consumer Associations recognized by the Region of Lombardy signed the "Self-Regulation Protocol" to prevent the spread of unfair commercial practices and to protect the consumer. The protocol includes more rigorous

Toll-free number for fraud prevention

In September 2012, the Observatory on unfair commercial practice, with the assistance of A2A Energia, set up a toll free **"fraud prevention" hotline at the number 800.912.760** which is accessible from Monday to Friday between 9.00 a.m. and 3.00 p.m. The phone line allows customers to report any matters regarding unfair practices. The aim of the service is to protect customers by providing information and legal assistance to anyone who may be the victim of deceitful or aggressive behavior by other electricity suppliers. Over 664 reports were called in in 2013 using the hotline while another 71 reports reached A2A Energia through its own channels.



To learn more, check out the web site: www.aza.eu/it/clienti/tutela/index.html

rules than the AEEG standards, settlement for customers and penalties for companies that do not comply, as well as extension of the terms for the right to reconsider and a joint Control Committee for compliance with the regulations. The joint Equivalent Committee, composed of three members designated by the Consumer Associations and three from A2A, began in May 2013.

To promote the activities with domestic and micro-business customers, A2A Energia and Aspem Energia use selected commercial partners (agencies, telephone sales, buyers/brokers on the web) with whom its relationships are governed by the Self-Regulation Protocol, which sets strict restrictions on its operating methods, with management directives and constraints inserted in specific clauses of the agency contacts. Specifically, the operator's activity is performed with strictly defined and monitored methods, such as:

- technical and commercial training by internal functions;
- support on the field;
- Mystery Call, a survey service which makes it possible to identify any
 abnormality in the relationship process with the end customer, by means
 of objective indicators that evaluate the respect for established criteria
 established by the company;
- Quality Check, carried out with calls to customers after contract signing, according to the matters set forth in the Self-Regulation protocol, to monitor the quality of the contract and ensure the ability to exercise the right to reconsider.

Quality of the electricity and gas service

A2A Energia is committed to quality and safety and has therefore come up with the new Policy of Management, issued in July 2013: "Strengthen the role of the reference company in its region for the sale of natural gas and electricity to domestic customers, condominiums,

companies and the public administration, while increasing the commercial fairness and transparency and excellence of the service".

A2A Energia obtained **ISO 9001certification** again in 2013, with validation being carried out by an internationally recognized outside certification body and no non-compliance matters noted. It also worked to reach the objective of safety certification under OSHA 18001 standards, related to health and safety aspects.

The table below shows the key quality indicators in 2013 with respect to the milestones that the company set out to achieve and explains the new objectives for 2014.

Indicator	Objective 2013	Results 2013	Objective 2014				
Ability to access the Call Center	> 96%	100%	>97%				
Percentage of calls processed (net of abandoned calls)	>96%	96.1%	>97%				
Effectiveness of the management system of automatic services requests (IVR)	>85%	88.6%	>87.5%				
Average wait time at the counter in Milan	<25'	23' 02"	23'				
Average wait time at the counter in Brescia	<20'	20'24"	18'				
Average wait time at the counter in Bergamo	<5'	4'24"	4'				
Timely response to written claims (free and protected market) received during the year	>85%	96.38%	>85%				

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

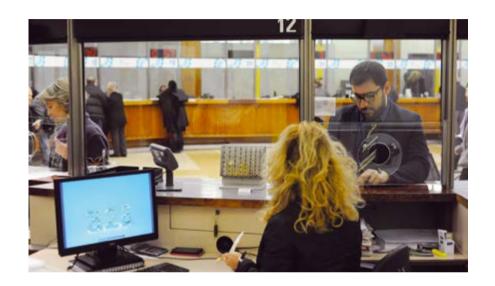
Institutions and local communities

Statement of compliance

In 2013, A2A Energia was again sanction free from AEEG and from national or regional control bodies for nonconformities related to laws or regulations inherent to energy supply and related services. As part of the marketing activities, no abnormalities or incidents were reported that might represent cases of nonconformity with respect to regulations or voluntary codes, with reference to promotions, sponsorships and notifications.

Furthermore, all the A2A Energia personnel where involved in a project, which began in November 2013 and whose results will be available from the first semester 2014, to gather new ideas and useful proposals toward the continuous improvement of the services provided.

As to **Call Center services**, A2A Energia complies with the quality standards defined and monitored by AEEG, with respect to which, it offers widely better quality levels, as does Aspem Energia, which is not subject to mandatory monitoring.



154 Call Center services quality levels*

Indicators monitored by	Minimum standard	A2	A2A ENERGIA			ASPEM ENERGIA		
AEEGSI	AEEGSI	2011	2012	2013	2011	2012	2013	
Percentage of successful calls	>=80%	99%	98%	96%	98%	90%	95%	
Accessibility of the lines and the service (free line time compared to the time when the operator is present)	>=80%	100%	100%	100%	99%	100%	100%	
Average waiting time on the telephone (seconds)	<=240"	79	91	92	20	36	35	

^{*}Aspem Energia is not required to monitor the data as it has fewer than 50,000 customers.

Chiara2a: A2A energia's loyalty plan

Launched in 2012, the "Vantaggi Chiara2a" loyalty plan was further strengthened in 2013. At year end, the **number of program users doubled** compared to a year earlier and numbered **119,219**.

One of the new features was the mobile phone app
"App Chiara2a", whose main features included information on program use, the ability to check point balances, information on A2A partners, viewing the virtual bulletin board with offers and the ability to register for any A2A customers not already members.

Related to the Vantaggi Chiara2a were **two competitions**, which included the registration of more than 36,000 participants and awarded 46 prizes for a total value of 22,000 euro.



Customer satisfaction

A2A Energia has implemented a highly developed monitoring plan of its services and sales channels which aims to obtain constant feedback from its customers and measures the level of perceived satisfaction.

Databank survey on the protected market Databank-Cerved Group conducted its sixth consecutive **customer satisfaction survey on** a sample of free market domestic and micro-business customers (enterprises with VAT registration number and small businesses) supplied with electricity and gas.

A2A Energia's customers expressed a decidedly superior level of satisfaction in 2012, especially in domestic customers. In terms of electricity, the trend in the Customer Satisfaction Index (CSI) for A2A Energia surveyed in the last four years reports an increasingly growing trend, compared with the waning CSI on the Italian market.

A2A Energia notified its domestic market of the exceptional results attained in 2012 by affixing a quality stamp on the bills issued in 2013.



Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

155 Databank 2013 survey on the level of satisfaction of the customers on the protected market

	Type of customer		2011			2012			2013	
		A2A Energia score	Industry average	A2A Energia ranking	A2A Energia score	Industry average	A2A Energia ranking	A2A Energia ranking	Industry average	A2A Energia ranking
	Domestic	93.1	88.0	1 st of 9	91.7	87.1	1 st of 9	90.1	87.0	1 st of 7
Gas	VAT and small business	88.6	85.2	1 st of 9	87.9	84.3	2 nd of 6	87.0	86.3	3 rd of 6
Electricity	Domestic	91.0	89.6	3 rd of 11	92.0	87.2	1 st of 9	93.1	85.2	1 st of 8
	VAT and small business	89.3	84.8	2 nd of 11	92.0	80.8	2 nd of 10	92.2	82.5	2 nd of 10

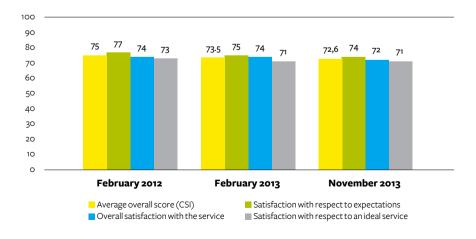
^{*}Survey: Databank-Cerved Group Energy Observatory.

CFI survey free market

In 2013, the CFI Group was tasked by A2A Energia to conduct two **telephone surveys of its mass market customers** on the free market (one conducted in February and a second in November) with a view to measuring the quality perceived by the customers related to different features of the service: sales channels, offer, convenience, contact channels, etc. each described with different aspects. The sample selected to interview was of 1,500 domestic and micro-business customers to which A2A supplies electricity or gas.

In addition to the overall CSI on customer satisfaction, the survey conducted by the CFI Group also identified aspects, customer satisfaction aspects relating to numerous features of the customer expectations toward the supplier and with respect to an ideal service.

156 Free market customer satisfaction (figures in the hundredths)



The results of both surveys and a similar survey conducted in 2012 reported a slight downturn in a number of indicators which remained above **good satisfaction (score of 70)** out of nearly all the aspects, as regards the sales channels, and contact channels (Call Center, Desk, Customer Care, Website). The reliability of the service, perceived as the lack of unexpected interruptions, has suffered a worsening on both targets, while there was a general improvement in the area related to membership in the service. The assessments regarding the bill were lower as were other parameters reached for the web site and desk.

Customer satisfaction was gauged and monitored on specific issues. As of September 2013, a **survey was conducted** (as it has been each year) **on online services provided through the A2A Energia website.**

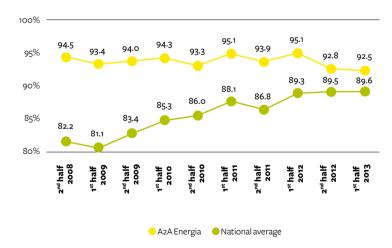
Call Center Survey

Since 2008 the Electricity and Gas Authority (AEEG) has been conducting six-monthly surveys into the quality of commercial telephone services as perceived by energy end customers who use the call centers of sales companies with more than 50,000 customers, and, in the case of A2A, only involves A2A Energia's customers. In the first half of 2013, A2A Energia's customers once again confirmed their appreciation for the company's call center service. The general satisfaction index was 92.5%, nearly 3 percentage points higher than the national average. In further detail, especially positive were the figures relating to the politeness of operators (almost 98.2%), to the ability to resolve questions swiftly and the clarity of answers (both of which were 5% over the national average).

The most recent survey by AEEG was changed slightly compared to the past, as regards the weight of a few indicators on the global score and namely, making it non-uniform and less meaningful compared to previous years.

In any event, the CSI trend of A2A Energia, as from the first survey done in 2008, confirms the positioning well above the national average, while compared to a general improvement of this score over time. The slight downturn on the CSI index in the last two surveys relates to the impact arising from significant changes in the commercial disclosure policy, implemented in the first half of last year.

157 Customer Satisfaction on Call Center operations



After call survey

In the first quarter 2013, A2A Energia continued to use the after call survey method to measure customer satisfaction at the conclusion of a customer assistance phone call. This method allows the customer to express their degree of satisfaction, with a score of 1 (least satisfied) to 4 (most

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

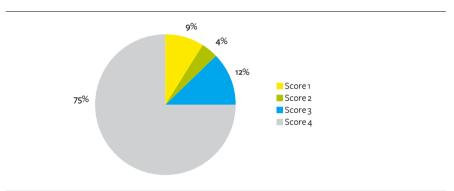
Suppliers

Institutions and local communities

Statement of compliance

satisfied), on the following aspects: courtesy of the phone representative, wait time, clarity and ability to resolve the issue. The results were very positive for the company, whereby respondents gave the **highest score (4) 75% of the time.**

158 Customer satisfaction after a call - percentage of the scores reported



Furthermore, more than 44% of the interviewees reported that the service exceeds expectations and 52% found that the company performance in resolving problems was better than expectations.



"Cloud Innovation Award" prize

In 2013 A2A Energia was awarded the prize for the "Cloud Innovation Award" by the School of Management of the Politecnico di Milano for its "Sales Force Automation". A2A was the winner for "support to the commercial development strategy based on integrated management of the sales processes" of electricity and gas on the



mass market segment (domestic and micro-business customers), through a single application that also includes mobile sales support solutions. The final phase of the prize, now in it second edition, included the participation of more than 100 companies and is awarded to companies that have shown a capacity to innovate their processes or the ICT infrastructure through "Cloud" based tools, which is IT speak for "centralized and virtual" at the same time.

Safety of the gas and electricity service

A2A Electric and Gas Network customers can report any unusual matters or breakdowns in the electricity or gas service by using a **toll-free number at any time round the clock 365 days a year**. If gas leaks are noticed on plant owned or managed by an end customer downstream from the delivery point, the company may suspend or cut-off the supply to ensure public safety until the end customer has resolved the problem of the leak and documented that the equipment is working properly. If the energy supply is suspended due to an emergency situation, the request for the supply to be reinstated must follow a specific procedure.

Milan: 140,000 LED lights by Expo 2015

In 2013, the Municipality of Milan, for which the A2A Reti Elettriche manages the public lighting service, has decided to replace 140,000 public light fixtures in Milan. The 91 million euro investment was 93% paid for by A2A. The municipality estimates it will save 10 million euro in annual expenses in public lighting, decreasing the expenditure from 38 to 28 million euro by 2016.

The plan includes replacing the entire existing lighting system (mercury vapor luminaires, incandescent lights, and old low and high pressure sodium systems) with new **LED (light emitting diode) systems**, which will allow the city to lower electricity consumption and will improve operation.

The investment will play out in two phases: **80% of the replacements will take place by April 2015**, just prior to the start of Expo 2015 (May 1) and will cover the entire historic center, the northwest quadrant (most involved in Expo) and all the access routes to the city. **The remaining 20% will be replaced by August 2015.**



5.2.2 District heating and heat management

A2A is a leader in Italy in the production, distribution and sale of heat, a sector in which it operates in Milan, Brescia, Bergamo and Varese and a number of municipalities in the Brescia and Milan hinterland through A2A Calore & Servizi and Varese Risorse.

This service, which continues to grow, is currently delivered to **23,800 users** (individual residential units in the case of independent heating or whole buildings in the case of centralized heating), for a total served volume of **89.2 million cubic meters**.

40 Years of district heating

Forty years after the first pipes were laid in Brescia, district heating and its benefits were remembered in a presentation at a **convention held in January, 2013**. Brescia was the first city in Italy to equip itself with a district heating system, in 1972, working from examples in Northern Europe, and before the great energy crisis of 1973. District heating began in a newly constructed neighborhood (Brescia 2), and then extended into the city, where today it serves 70% of the buildings.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

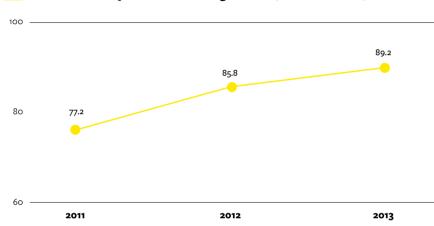
The customers and public served

Suppliers

Institutions and local communities

Statement of compliance



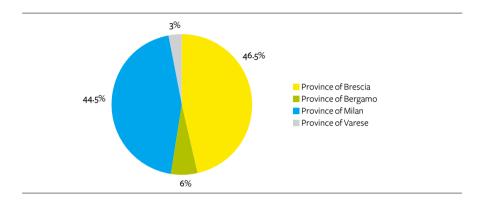


Volume served by the district heating network

+4%



160 Geographical distribution of the volume served by district heating



A2A Calore & Servizi and Varese Risorse also have specific skills in rationalizing the **energy management of buildings** through measures to improve efficiency, such as:

- the conversion of heating plants fueled by liquid fuels to methane;
- condominium heat management;
- energy management for large property complexes and public administrations.

In 2013, A2A Calore & Servizi converted 15 plants for a total installed power of 14,860 kW.

Varese Risorse began working in this sector in 2013, converting 24 heating plants in the city of Varese (one of which will be completed in 2014) from diesel to gas, and two heating plants from diesel to pellets. It also assumed the role of third party responsible for managing these plants.

Channels for dialogue and customer support

The expansion of district heating in cities proceeds by employing **precise** and effective communications in a number of phases, including:

- a letter to condominium administrators (sent as soon as the network expansion is planned);
- the "District heating is on its way" leaflet for residents in network development areas;
- worksite notices, sent out to all residents and business owners two weeks before work begins;
- the business leaflet "Choose district heating", sent to residents in the area in question.



In 2013 A2A Calore & Servizi sent out 101 letters to administrators and 6,000 "District heating is on its way" leaflets, placed 31,750 worksite notices and sent out 1,200 "Choose district heating" leaflets.

Worksite notices and the corresponding layout are published punctually in the "Work in progress" section of A2A Calore & Servizi's website to enable residents to stay informed about developments in the district heating service in their city. The homepage offers a "Direct line" section, which allows current and future district heating customers to ask for specific information over the internet, about business and contracts, technical support, and general information about the service. In addition, a toll-free number is available to get information and for reporting other matters.

During the year, A2A Calore & Servizi attended **fairs and events** and organized **visits to district heating production plants** for condominium administrators and citizen groups and their representatives, as well as courses for sub-plant technicians.

For the citizens of Bergamo, A2A Calore & Servizi provided an **information desk** about district heating right downtown, on a major thoroughfare, the "Sentierone". This gave citizens direct access to information on the progress of the project, the advantages and environmental benefits it will provide, and which areas are already reached by the service. The initiative continued for a number of weeks in May and June, and again in September and October 2013.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

District heating: we can finally breathe

The partnership between A2A and the non-profit association Movi&Co – which for years has offered an opportunity for the world of corporate communications to meet and collaborate with the creativity of young talents – led to the TV ad "District heating: finally we can breathe", which Fabio Valle created for A2A. The ad won the **Prize for**

Best Emerging Videographer 2012 offered by Assolombarda, and placed second in the 2013 Movi&Co Awards.

The video effectively portrays the transformation of a city, gloomy with chimney smoke, as it decides to switch to district heating and can once again breathe and recover its natural color. Thirty seconds



that convey how district heating can help the environment by reducing the use of fossil fuels, resulting in enormous benefits for the quality of the air we breathe.

The video was broadcast on the local Bergamo TV station in February and
September 2013.



It can be viewed here:

www.a2a.eu/it/comunicazione/primo_piano/anno_2012/movieco.html

Quality of the district heating service

The two Group district heating companies, A2A Calore & Servizi and Varese Risorse, provide a service for which they guarantee quality, precision and punctuality, and energy savings. Both of these companies **monitor and measure the parameters of their services** to consistently monitor compliance with all technical, commercial, quality, environmental and safety specifications. The indicators are then inspected by the Quality, Environment, and Safety Committee.

The district heating Service Charter is being prepared

launched with consumer associations with the goal of drafting a 2014

Charter of District Heating

Services valid for all areas in which

A2A Calore & Servizi operates.

The Charter of District Heating

Services is part of A2A Calore &

Servizi's framework of close attention

In 2013 a series of meetings was

to its customers, and is a crucial

element of an approach focused on the quality of the service it delivers. In particular, the Charter:

- establishes the principles and criteria for managing the service;
- ensures the participation of citizens, recognizing their right to access information and to opinions on the work performed;
- establishes standard times for the various types of jobs and situations;
- provides precise information for citizens to submit reports.

Safety of the district heating system

In addition to saving money and reducing the emission of fumes, district heating offers other advantages in terms of **safety, convenience, and plant efficiency**.

Boilers are in fact replaced by simple heat exchangers, which ensure:

- a lack of combustion and open flames;
- the elimination of any danger of gas leaks or poor combustion, and any risks of explosion or fire;
- easy management and maintenance;
- longer durability of the plants

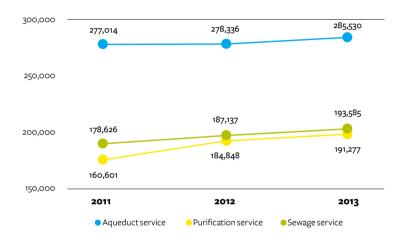


Rigorous controls are carried out in connection with the way sites are managed for infrastructure construction and network and plant extension work, as well as for subcontracted maintenance, in order to ensure that the work commissioned has actually been performed, that the timetable has been adhered to, that the agreed materials have been used, and that the requested testing has been carried out, along with everything else included in the contract specifications.

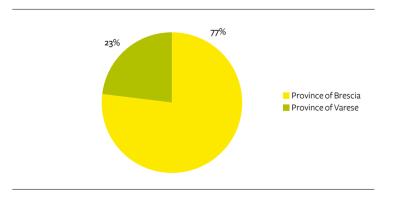
5.2.3 Integrated water service

The integrated water service (aqueduct, purification, sewers) in the Group is managed by a company called **A2A Ciclo Idrico**, which operates in Brescia and its province, while the subsidiary **Aspem** distributes drinking water in Varese and the surrounding province.

161 Integrated water service users



162 Geographical distribution of aqueduct service users



Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

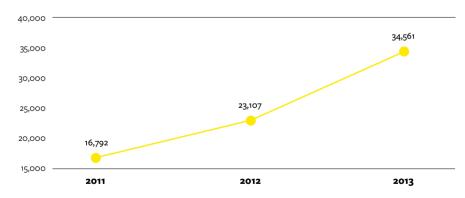
Institutions and local communities

Statement of compliance

Channels for dialogue and customer support

A2A Ciclo Idrico offers its customers **7 desks around its territory** where they can conduct business or ask for information. Customers can also contact the company using a **dedicated toll-free number and local number** (in 2013 more than 80,000 users took advantage of this communications channel). An **online desk** is also available, which can be used to pay bills, a service that is garnering growing success among customers and which recorded approximately 35,000 operations in 2013, a 50% increase over the previous year. The company has offered **electronic billing** for some time, a delivery method that 758 users activated in 2013.

163 Online desk services for A2A Ciclo Idrico - Online payments



The A2A Ciclo Idrico call center continued to achieve very high quality levels again in 2013, with 83% of calls being successful and wait times never exceeding 2 minutes.

Aspem customers have at their disposable a **desk** open to the public, **an online desk**, and a dedicated **toll-free number**.

Quality of the water service

The quality of the integrated water service is **governed by a Charter of Services**, which sets out the commitments the company must maintain with its customers regarding various aspects, such as: methods and times for preparing estimates, and how long it takes to obtain a water connection, etc.

Both group companies offer their customers the option to subscribe to **insurance policies** at promotional rates (for domestic customers only) against the risk of concealed drinking water leaks.

In 2013, A2A Ciclo Idrico also offered a contribution toward expenses sustained to relocate water meters as part of the **Acquasicura** program.

A round-the-clock emergency service is available for reporting any faults noted in the public sewage system.

Law No. 214/11 transferred "functions pertaining to the regulation and control of water services" to the Authority for Electrical Energy and Gas.



The A2A Ciclo Idrico and Aspem charters of services are available on their websites:

www.azacicloidrico.eu/home/export/sites/default/ldrico/sostenibilita/ documenti/Carta_dei_Servizi.pdf www.aspem.it/asp/cms/aspem/azienda/attivita/acqua/carta.html

Brescia's Water

In Italy, the **regulation** that governs potable water distributed for human consumption is Legislative Decree No 31/o1, **which defines the characteristics the water must have** to be considered suitable for human consumption, and establishes the tests that must be performed. In Brescia, tests on potable water are performed directly by the Brescia Local Health Authority as the controlling agency, and by A2A Ciclo Idrico as supplier of the service.

As in previous years, the analyses conducted in 2013 consistently confirmed the potability of the water distributed from the Brescia aqueduct; in fact, the values measured fall well below the limits set by the regulation.

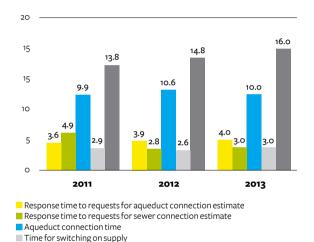
164 Concentrations of certain significant substances between November 2013 and February 2014

Substance	value	Maximum value detected	Legal limit
Chromium (gg/l)	< 5	11.6	50
Hexavalent chromium – included in total chromium (gg/l)	<2	11.5	-
Total Trichloroethylene and Tetrachloroethylene	<0.1	5.3	10
Carbon tetrachloride	<0.1	0.2	4

In over 20 years of analyses, **the presence of PCBs has never been found** in wells of the Brescia aqueduct, and Cesium 137 has always been absent or at least below the minimum detectable quantity (0.2 Bg/kg).

Throughout 2013, representatives of A2A Ciclo Idrico attended numerous meetings of committees, associations, citizens, and journalists, in order to provide clear and detailed information with the utmost transparency about issues related to the safety of water in Brescia. They also responded to 75 requests for clarification from citizens and institutions regarding water quality; 60 of these specifically concerned chromium. In April 2014, an informational leaflet on this subject was distributed to all families.

165 Quality indicators of A2A Ciclo Idrico service (data in days)



Satisfaction and listening to customers

■ Sewer connection time

In May 2013, A2A Ciclo Idrico conducted a **customer satisfaction survey** focusing on public and private users of the integrated water service (aqueduct, sewers, purification). The survey involved public administrators and city technicians from all municipalities served (mayors, council members, technicians from the Office of Public Works, etc.) as well as citizen-customers who receive domestic or other (business, craftwork, industrial) services.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

Evaluations were very positive among private customers, with an average score of 8.00 (on a scale of 1 to 10). Customers particularly appreciated the lack of problems, the quality of the technical services, and support through the contact channels. Those who were unsatisfied complained about issues such as: cost of the service (fees), quality of the water, and a lack of clarity in the bills.

Public customers also gave good evaluations, with an average rating of 7.95. Especially popular were the speed of response, efficiency, quality of the service, and the skill and helpfulness of personnel. The few respondents who were not entirely satisfied complained mostly of high costs and little investment in their areas.

Safety of the water service

Supplying quality water is the primary objective of the Group companies **providing the aqueduct service**. Therefore, quality checks are performed along the entire production chain in accordance with the law. The water undergoes special tests and disinfecting treatments, and chemical-physical or biological purification treatments where necessary before it is fed into the network and reaches the tap.

The Mompiano Spring - Brescia

Samples are drawn monthly at the treatment plants and network check points; once a year at the procurement sources; and at narrower intervals in the event of any risk situations in terms of the quality characteristics of the water drawn from a specific source. In addition to these analyses, there are other tests conducted directly by the local health authority at schedules that are not provided to the water company to ensure maximum effectiveness for testing.

In 2013 A2A Ciclo Idrico took 7,394 samples of drinking water, analyzing 206,662 parameters.

Aspem drew a total of **1,577 samples**, of which 1,449 were for testing quality on the plants and networks that distribute water to the municipalities served, and 128 to analyze the capitation points that feed the distribution plants, analyzing **13,183 parameters**.

Some 220,000 water-quality parameters analyzed in 2013

Overall, the water delivered to customers was fully compliant with legal parameters. Over the course of 2013, six non-conformities were detected, one of which was reported by a private individual, and five by the local health authority.



Data about concentrations of the typical parameters of the water distributed are published on the website:

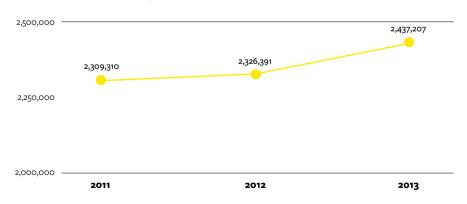
www.azacicloidrico.eu/home/cms/idrico/sostenibilita/analisi_acqua_bs.htm www.aspem.it/asp/cms/aspem/azienda/attivita/acqua/livelli_qualita_ raspiunti.html

5.2.4 Environmental services

On July 1, 2013, **A2A Ambiente** was founded with the goal of channeling into a single entity all the skills acquired by A2A's Environment Sector in the design, execution, and management of waste-to-energy plants and environmental services. A2A Ambiente owns 100% of urban sanitation companies Amsa and Aprica. Another company in the field of urban sanitation is Aspem, which is directly controlled by A2A.

Within the A2A group, **the urban sanitation service is currently delivered by Amsa** (Milan and province), **Aprica** (Brescia and provinces of Brescia, Bergamo, Como, and Mantua), **and Aspem** (Varese and province), which in all cover 88 municipalities, for a total of over 2.4 million citizens served.

166 Population served by the urban sanitation service



Population served in 2013 by the Group's urban sanitation service

+5%

In 2013 Aprica was awarded 10-year management of the environmental sanitation services in eight associated municipalities in the provinces of Brescia and Bergamo: Rudiano, Urago d'Oglio, Pontoglio, Castrezzato, Comezzano Cizzago, Torre Pallavicina, Barbata and Fontanella.

Amsa was awarded the tenders for management of environmental services issued by the municipalities of San Donato Milanese, Cormano, Buccinasco, and Bresso, and also provides services in the municipality of Rho.

Over the course of the year, **the extension of food waste collection continued in Milan**, extending to the southeast and northeast areas of the city, after the 2012 launch which targeted the southwest. Amsa gave all residents receiving the extended service (560,000 including families and other users that produce food waste) a 10-liter aerated basket, a brochure with all the instructions necessary for proper separated collection of food waste, and thanks to

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

an agreement between the city administration and the Novament company, a free supply of compostable bags made of Mater-Bi. Service extension into the final area, the northwest, is anticipated by June 2014, thus bringing the entire city on board.

In particular, in 2013 meetings were organized that received participation from the Counselors for Mobility, Environment, Subways, Public Water, and Energy, along with Amsa management, at the Area Councils in the southwest to inform citizens of the results of the new separated collection of domestic food waste, and to announce activation of the service in the southeast and northeast zones.



In collaboration with the Lombardy Region, Aprica conducted 11 pilot programs in the City of Brescia aimed at waste prevention, as part of the Urban Waste Reduction Action Plan (PARR). One of the programs aims to reduce consumption of graphic paper and office supplies, and was conducted in the Aprica offices. The program generated a weighted per-capita reduction of 41%, an **overall reduction in paper waste of more than 2.8 metric tons in one year**, and a reduction of 34 kg/year per employee.

In 2013, **Aprica** conducted **an awareness raising campaign in Brescia on collecting used oil**. The campaign was paired with information sharing in the schools participating in A2A's environmental education program, "The environment I have in mind". All students in these schools were given a pamphlet and a card for collecting stamps to use with their families. To get a stamp on their card, participants needed to bring a liter of used oil to the



Eco Island or to Eco-car, a van specially equipped for this type of collection. Fifteen schools took part in the campaign and the one that earned the most stamps won a complete PC workstation.

In addition to the normal service it offers, **Amsa also has additional services for a fee**, such as: container rental, collection, transport, and processing of urban and special waste, graffiti removal, asbestos removal, oversize waste pickup on the customer's floor, secure document destruction, management of mobile hygienic services, and more. In 2013, approximately 8,300 customers, including private citizens and companies, used these services. **Aprica also offers some services for an additional fee, and** 2,270 customers used these services in 2013.

A2A Ambiente works for local authorities and businesses guaranteeing advanced efficiency in the management of urban waste and hazardous and non-hazardous industrial waste, as well as environmental reclamation of water and soil on industrial sites, whether or not they are still in operation. In addition to managing the processes of recovering energy and materials from waste, **it also designs, executes, and manages integrated waste-to-energy systems**, including for third parties. In 2013, the job to design and build

a Biocubi plant in England was launched. A few reclamation worksites were also opened in the Milan area.

Partenope Ambiente, an A2A Ambiente subsidiary, **runs the Acerra waste-to-energy plant**, which in 2013 worked at 100% of production capacity, processing 600,000 metric tons of waste. As a result, 592 million kilowatt hours of electricity were generated and fed to the grid, equal to the annual needs of around 200,000 households.

Channels for dialogue and customer support

Amsa maintains a direct relationship with residents and customers using various channels: physical and online desks, call centers, toll-free numbers, e-mail, Puliamo applications for mobile devices, etc. Despite the growing use of the Internet to find information and reserve services (in 2013, 31% of reservations for oversize waste pickup were made online), in Amsa's interactions with its citizen-customers, contact through its toll-free number remains important, and in fact grew by 6% in 2013 over the previous year. Correspondence by e-mail also increased (+16%), and App reports are growing quickly although the numbers are not yet significant.

167 Quality levels of the Amsa Call Center

			(
	2011	2012	2013
Percentage of successful calls	94%	95%	93%
Accessibility of the lines and the service (free line time compared to the time when the operator is present)	100%	100%	100%
Average waiting time on the telephone (seconds)	59	61	84

Aprica's customers can contact the company using a toll-free number or an online desk service, through which it is possible to request information and submit reports and complaints.

Aspem has a desk open to the public from Monday to Friday from 8:30 to 12:30 p.m. **and dedicated numbers** for the urban sanitation service, depending on the type of information requested.

At **A2A Ambiente**, the leading contact channels for customers consist mostly of the **direct relationship between sales agents and customers**.

Quality of the environmental services

Amsa and Aprica govern their service to citizens with the Charter of Services, which describes the methods, timelines, and quality of the services the companies commit to guarantee.

In July 2013, the 2013 edition of the **Amsa Services Quality Charter** was published, illustrating the services provided to the city, based on the Service Contract signed with the city of Milan. The document, intended for citizen-users, was shared and created in conjunction with 17 consumer associations, and explains clearly and transparently the commitments that bind the company to the city, detailing the quality standards for their services, ways the company listens to citizens, and the tools available to safeguard users.



Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

In the last trimester of 2013 a process was launched to create the **Aprica Services Charter** for the municipalities that the company serves in the province of Brescia.

The document will be adapted to the characteristics of the services provided in each municipality, while the general foundation – meaning the quality standards guaranteed, the rights available to all interested parties, and how to exercise those rights – was reached in consultation and agreement with the leading Consumer Associations.

Aprica Service Charter is being prepared for all of Brescia's municipalities

For **Aspem**, the urban sanitation service is governed by the city of Varese's urban sanitation service **regulation**.

Customer satisfaction

Amsa periodically conducts customer satisfaction surveys to monitor how satisfied citizens of Milan and surrounding municipalities are with the company's services, as well as to ensure ongoing improvement in the quality of the services delivered and to offer its customers innovative services.

In 2013 the survey was conducted in March, through **2,000 telephone interviews**: 1,000 families living in Milan, 800 families in surrounding municipalities, and 200 people who own businesses in Milan. Some of the most important aspects analyzed included waste collection, street cleaning service, relationships with citizens, special services, and services provided on request. In terms of Milan, those interviewed offered a **good overall assessment of the services provided**, with an average grade of 7.57 (on a scale of 1 to 10), an improvement over the 2012 grade of 7.29.



Looking more closely, **waste collection was the most popular service provided**, and 82.5% of people reported that it was clear or very clear to them how the waste is sorted (rating of more than 7 on a scale of 1 to 10).

Regarding the channels for dialogue between the company and citizen-users, the average grade was higher than 8, and **users particularly appreciate the Call Center with its**

Rating of the services provided by Amsa in Milan

7.57



toll-free number (8.45), the option to make online reservations for oversize waste pick-up (8.32), the PULIamo application for smartphones and tablets (8.08), and the website www.amsa.it (7.90).

In 2013, Aprica conducted two customer satisfaction surveys: one in Vallesabbia and one in the city of Como.

In Vallesabbia the survey covered the 26 municipalities served by Aprica, for approximately 69,000 residents, and was conducted using a sample of 600 domestic users and 100 business owners. The general opinion of urban waste collection was very high, with an average grade of 8.20 (on a scale of 1 to 10).

Among the specific aspects of urban waste collection, the most positive responses concerned the low noise level of the service and/or the vehicles at work, and the overall organization of waste collection and how often dumpsters and containers are emptied. The aspect with the most room for improvement was the cleaning of areas surrounding the dumpsters and containers. **Overall satisfaction with Aprica is good, with an average grade of 7.81.**

In Como the goal was to find out how satisfied resident citizens are with the city cleaning and waste collection service delivered by the previous **provider**. The survey was conducted in June, contacting 800 home users and 230 business owners. It made it possible to establish a starting point in order to understand the current level of user satisfaction, obtain a benchmark to reference in the upcoming period with Aprica as the provider, and to identify aspects of the service that may require improvement. In fact, the citizens of Como were not satisfied with the service they had been offered up to that point: the average rating given was 5.87 (on a scale of 1 to 10). The waste collection service, cleaning in market areas, and management of the ecological platform are the most popular services, but in general the citizens requested better management of the service offered to the city. The most important aspects in determining overall satisfaction are waste collection and street cleaning, especially in outlying areas.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

5.2.5 Management of complaints and disputes

Management of customer complaints

In 2013 **A2A** extended its monitoring of written complaints in the various group companies; overall, 5,923 written complaints were recorded in the A2A group companies (excluding Selene).

For **A2A Energia and Aspem Energia**, complaint management is handled based on the levels of service set by the AEEGSI (the Electricity, Gas and Water Authority), which defines a complaint as "a communication from a customer in written form".

The Integrated Consolidated Regulation on Sales Quality (TIQV) sets the time for providing replies to written complaints at 40 days from receipt, obliging the supplier of the service to pay an automatic penalty to customers if the standard is not met. In 2013 the percentage of written complaints received was 0.18% of the number of electricity and gas customers: this level is low, and below the market average. Approximately two thirds of complaints were due to reasons such as: contesting consumption and/or meter reading, contractual and rate issues, aspects related to handling of payments and payment delays, and payment by direct debit or standing order.

At **A2A Calore & Servizi**, reasons for complaints are analyzed and grouped by type, so that the most frequent weaknesses reported can be identified and the necessary corrective actions can be taken. The main classification categories for complaints are: breakdowns, contractual aspects, performance of work, time to provide/execute the service, invoicing, service deficiencies, and behavioral aspects of the companies. In 2013, two complaints were received related to safety issues regarding restoration of the road surface when a depression formed after district heating pipes had been laid.

Amsa recorded an increase in written complaints (especially by e-mail), due to the

introduction of the new "door to door" domestic food waste collection service, which had a driving effect on other separated collection services. While the results in terms of the percentage of waste sent on for recovery are extremely positive, the new service did require an increase in the overall number of pickups from users, and therefore an increase in possible delays or minor collection problems.

Joint settlement

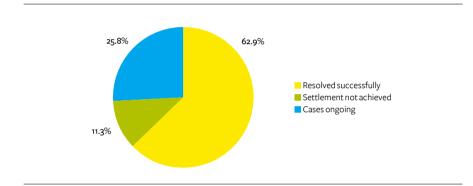
The **joint settlement service has been available since February 1, 2009, to settle disputes with consumers quickly and free of charge**, thanks in part to the protocol signed by A2A Energia and 17 consumer associations, and which was extended to Aspem Energia on January 1, 2012. A similar protocol was signed in 2011 with the Business Federations to resolve disputes with small and medium businesses.

A consumer who has not received a response to their complaint within the set deadline, or who receives an unsatisfactory response, can access the joint settlement service, which offers the option of out-of-court resolution of disputes concerning the supply of electricity and gas, both on the protected market and the open market. The service makes it easier to handle cases of complex complaints, handling them quickly and saving on fees compared to using ordinary legal channels.

Customers can access the settlement procedure free of charge by contacting one of the consumer associations or business federations that have signed the agreements.

In 2013, A2A Energia received **54 new joint settlement requests** from home customers; there were 12 cases continuing from 2012, for a total of 66 cases handled. Sixty-three percent of cases handled during the year were successfully resolved, and 26% are still ongoing. Eighty-two percent of the cases that were closed had to do with invoicing problems, while 8% concerned contractual modifications, and the remaining 10% concerned measurements.

168 Result of joint settlement procedures



Management of complaints regarding roadworks

The protection of city dwellers and minimizing the disturbances that may be caused in the case of digging and pipe-laying is one of the unwavering elements of the way the A2A Group works. To this end, the methods adopted by the Group in dealing with roadworks are the least intrusive possible and include the following: a commitment not to perform work at night except for exceptional cases, the use of soundproofed machinery, prompt and widespread information provided to the areas affected by the work, and careful management of any complaints or reports from citizens and road users.

For subcontracted jobs, outside entities other than the subcontractor are assigned to audit the worksites in order to ensure an impartial judgment, and **the task of auditing is kept separate from the coordination of safety** (as dictated by Legislative Decree No 81/08.

Energy customer settlement service

The Energy Customer Settlement Service was established by AEEGSI in April, 2013, and is an additional tool available to consumers for simple and swift resolution of any disputes with providers. The service can be activated directly by the consumer or through the consumer associations, and involves the intervention of a mediator specially trained by AEEGSI who helps the parties reach an agreement without resorting to legal channels.

The service is managed by the Sole Buyer on behalf of AEEGSI. It is **voluntary, free, and conducted entirely online**, in accordance with European regulations on energy and on Alternative Dispute Resolution (ADR).

A2A responded to AEEGSI's request that it take part in the service, adopting a selective approach, through prompt support for individual requests. In 2013, three cases were sent to A2A: two were resolved with an agreement, and one was not accepted because it was not relevant to the service itself.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance



1,040

Reports of roadway anomalies in 2013

In 2013, 1,040 reports were received regarding street problems, and 605 of these were received through the CRM "Ambrogio" portal, an innovative technological system through which local police, worksite staff, and area councils are provided with PDAs and smartphones used to submit reports in real time direct to a single, shared focal point that sorts them, saving both time and paper. The matters raised most frequently in the reports are those classified as "components" (mainly lighting points which are not working or damaged street cabinets) and "potholes/manholes". The most frequent causes of complaints about roadworks concern delays in restoration work or restoration work that has not been performed properly or has deteriorated prematurely.

A2A Servizi alla Distribuzione took over management of these reports in November 2012, and has implemented a tracking system using a specific database in order to monitor reports received and resolve them promptly.

Disputes with customers/residents

At the end of 2013, 18 cases were ongoing with customers of various services offered by the Group, concerning contested invoice amounts or consumed amounts charged. In addition, 57 cases were underway or concluded in which citizens requested compensation, generally of a modest amount, for damage to property or possessions. Finally, on the same date, three cases were pending regarding alleged violations of citizens' property rights, and 31 cases regarding compensation for slight injuries suffered by individual residents while work was being performed, generally by subcontractors. One case concerned a fatal road accident in which a service vehicle driven by a Group employee was involved.

5.2.6 Tables: customer numbers

Marketing of electricity and gas

169 Number of supply points for the electricity service

Type of supply	2011	2012	2013
Domestic	828,419	812,290	797,033
SMEs	142,108	135,406	120,488
Large customers	26,888	33,420	38,967
Condominiums	26,184	26,862	33,610
Total	1,023,599	1,007,978	990,098

170 Number of supply points for the gas service

Type of supply	2011	2012	2013
Domestic	1,116,741	1,097,240	1,090,481
SMEs	61,102	57,752	33,065
Large customers	6,983	6,188	6,108
Condominiums	10,742	10,542	10,458
Total	1,195,568	1,171,722	1,140,112

171 Electricity supply contracts by type of market

	2011	2012	2013
Protected market	907,047	876,486	831,198
Free market	116,552	131,492	158,900
Total	1,023,599	1,007,978	990,098

172 Gas supply contracts by type of market

	2011	2012	2013
Protected market	77,980	1,105,203	1,063,484
Free market	65,017	66,519	76,628
Total	142,997	1,171,722	1,140,112

Introduction

The A₂A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

173 Customer satisfaction with the call center – AEEGSI survey

		1 st half 2011			1 st half 2012			1 st half 2013	
AEEGSI survey (% satisfied customers)	A2A Energia	National average	Difference	A2A Energia	National average	Difference	A2A Energia	National average	Difference
Time taken to find the line free	97.3	92.8	+4.5	96.3	93.2	+3.1	96.3	94.1	+2.2
Simplicity of the automatic answering system for being able to speak with the operator	92.4	92.2	+0.2	89.1	92.7	-3.6	95.1	93.5	+1.6
Waiting time to speak with the operator	97.9	93	+4.9	97.4	92.5	+4.9	96.6	93.2	+3.4
Politeness of operators	98.7	96.2	+2.5	98.9	96.3	+2.6	98.2	95.5	+2.7
Clarity of answers	97	90.6	+6.4	97.2	90.6	+6.6	95.6	90.4	+5.2
Ability to resolve the problem in the shortest time possible	95.5	83.7	+11.8	95	84.9	+10.1	90.1	84.8	+5.3
Customer Satisfaction Index (CSI)	95.1	88.1	+7	95.1	89.3	+5.8	92.5	89.6	+2.9

174 Trends in electricity and gas claims

	2011	2012	2013
Number of complaints	2,588	2,833	3,608
Simple Complaints as % of average number of customers	0.13%	0.14%	0.18%

^{*}The Electricity, Gas and Water Authority (AEEGSI) defines "simple complaints" as complaints which are the exclusive responsibility of the seller and for which providing a reply does not entail obtaining data that is the responsibility of the distribution company.

175 Technical quality of the electricity production process

Time of anomy course	Average availability factor (%)				
Type of energy source	2011	2012	2013		
Traditional - coal	85%	98%	86%		
Traditional - heavy fuel oil*	48%	49%	-		
Natural gas - combined cycle	76%	71%	71%		
Hydroelectric - flowing	84%	89%	85%		
Hydroelectric - dams	82%	86%	84%		
Hydroelectric - reservoirs	69%	84%	58%		

^{*} The figure refers to the fuel-oil groups at the Monfalcone thermoelectric plant, which were taken offline in 2013.

Electricity and gas distribution

176 Extension of the electricity distribution service

	2011	2012	2013
Km of electricity network	12,815	13,052	13,254
of which underground cable	10,732	10,905	11,192
Users connected	1,129,194	1,115,157	1,118,073
Municipalities served	52	54	54

177 Users of the electricity distribution service by geographical area

2011	2012	2013
1,129,194	1,115,241	1,119,348
883,694	881,906	883,250
245,500	233,251	236,098
0	0	0
0	0	0
	1,129,194 883,694 245,500	1,129,194 1,115,241 883,694 881,906 245,500 233,251 0 0

178 Extension of the gas distribution service

			·
	2011	2012	2013
Km of gas network	8,067	7,980	7,838
End users connected	1,367,405	1,344,373	1,259,457
Municipalities served	213	208	202

179 Users of the gas distribution service by geographical area

			<u>/</u>
	2011	2012	2013
Lombardy	1,323,765	1,288,106	1,203,780
Other northern Italian regions	14,044	27,427	26,741
The rest of Italy	29,596	28,840	28,936

Note: A2A owns around 400 km of high and medium pressure gas transportation network through the company Retragas, covering a total of 69 municipalities.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

2013

180 Technical quality - electricity

	Milan												
	High-	High-concentration environment				Medium-concentration environment				Low-concentration environment			
Service continuity indicator	2011	2012	2013	AEEGSI target 2013	2011	2012	2013	AEEGSI target 2013	2011	2012	2013	AEEGSI target 2013	
Average minutes of interruption per year for LV users due to long interruptions without notice	25.68	27.59	24.83	27	38.9	69.41	45.56	48	/	/	/	/	
Average number of interruptions per year for LV users due to long interruptions without notice	1.62	1.27	1.3	1.52	1.99	2.84	1.65	2.05	/	/	/	/	

						Bre	escia					
	High-	concentra	tion environi	ment	Mediun	n-concenti	ration environment Low			-concentration environment		
		,		AEEGSI target				AEEGSI target				AEEGSI target
Service continuity indicator	2011	2012	2013	2013	2011	2012	2013	2013	2011	2012	2013	2013
Average minutes of interruption per year for LV users due to long interruptions without notice	6.72	6.87	7.97	25	7.79	16.27	15.42	40	27.3	28.97	25.6	60
Average number of interruptions per year for LV users due to long interruptions without notice	1.07	1.09	1.08	1	1.19	1.63	1.63	2	2.27	2.51	2.34	4

181 Emergency electricity service

	MILAN		BRESCIA	·
	2012	2013	2012	2013
No. of MV customers with more than 6 interruptions a year for high-concentration environments	12	26	0	0
No. of MV customers with more than 8 interruptions a year for medium-concentration environments	0	0	0	0
No. of MV customers with more than 9 interruptions a year for low-concentration environments	na	na	5	4
			,	

In situations where there is a shortage of electricity, Terna - Rete Elettrica Nazionale SpA requests distribution companies to implement a scheduled rotational cut-off plan to avoid a general blackout. Five "severity" levels are envisaged which depend on the extent of the shortage of electricity, and these vary according to the numbers of users involved and the frequency of the cut-offs. Cut-offs for periods up to 90 minutes are communicated to Terna by giving 30 minutes notice and may occur at any time during the indicated bands and not necessarily at the beginning. The scheduled cut-off plan prepared by A2A Reti Elettriche, structured by day and time band, can be easily consulted on the company's website.

182 Commercial quality - electricity: specific indicators - Milan/Brescia area

		_	orovided v ame speci		Average time for servi provision		
	AEEGSI level	2011	2012	2013	2011	2012	2013
Time for making estimates for work on the LV network	20 working days	87.63%	94.19%	98.34%	11.53	10.32	7.88
Time for performing simple jobs	15 working days for LV 30 working days for MV	99.62%	99.25%	98.92%	7.48	6.83	5.28
Time for switching on supply	5 working days	99.65%	98.47%	99.49%	1.55	1.72	1.45
Time for switching off supply	5 working days for LV 7 working days for MV	99.52%	98.75%	98.86%	1.85	1.77	1.27
Time for switching on supply again after suspension for default	1 weekday	98.97%	98.34%	98.73%	0.21	0.25	0.26
Punctuality band observed for appointments	2 hours	99.92%	99.30%	99.73%	-	-	-
Time for reinstating supply following a fault in the measurement group on working days between 8.00 a.m. and 6.00 p.m. on the LV network	3 hours	95.50%	92.11%	90.69%	1.78	1.82	1.79
Time for reinstating supply following a fault in the measurement group on working days between 6.00 p.m. and 8.00 a.m. on the LV network	4 hours	97.29%	94.50%	95.92%	1.74	1.91	1.49
Time for communicating the result of measurement group checks	15 working days	94.45%	96.32%	99.66%	9.82	8.43	7.35
Time for communicating the result of voltage checks	20 working days	95.83%	95.00%	71.43%	15.25	18.16	17.50

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

2013

183 Commercial quality - electricity: general indicators - Milan/Brescia area

	AEEGSI	Service provided v	vithin the timefram	e specified (%)
Type of service	level LV	2011	2012	2013
Percentage of requests to perform complex jobs completed within a maximum of 60 working days	85%	99.19%	99.24%	99.42%
$Percentage \ of \ motivated \ replies \ to \ written \ complaints \ or \ information \ requests \ communicated \ within \ a \ maximum \ of \ 20 \ working \ days$	90%	87.82%	98.18%	91.74%

AEEGSI	Service provided w	ithin the timeframe	specified (%)
level MV	2011	2012	2013
90%	97.79%	100.00%	100.00%
95%	97.85%	100.00%	98.88%
	level MV 90%	level MV 2011 90% 97.79%	level MV 2011 2012 90% 97.79% 100.00%

184 Technical quality – gas

				Actual le	vel 2011		-	Actual le	vel 2012	2	Actual level 2013			
Type of service	Base level	Target level	Milan	Brescia	Bergamo	Varese	Milan	Brescia	Bergamo	Varese	Milan	Brescia	Bergamo	Varese
$\label{lem:continuous} Annual percentage of the network under high and medium pressure inspected$	30%	90%	100%	57%	99%	43%	100%	100%	99%	40%	100%	100%	100%	44%
Annual percentage of the network under low pressure inspected	20%	70%	86%	32%	40%	71%	87%	58%	25%	69%	89%	66%	36%	72%
Average number of leaks localized per km. of network inspected	0.8	0.1	0.027	0.083	0.01	0.25	0.07	0.12	0.01	0.28	0.023	0.06	0.12	0.25
Average number of leaks localized per km. of network following third party reports	0.8	0.1	0.35	0.1	0.07	0.31	0.32	0.13	0.05	0.24	0.308	0.13	0.6	0.25
Conventional number of measurements of the degree of odorization of the gas per thousand end customers	0.19	0.5	0.58	1.11	3.5	1.36	0.58	1.1	3.63	1.35	0.6	1.08	3.3	1.38
No. of end customers with notice greater than or equal to 3 days for interruption without notice	/	/	22,498	53	795	0	17,584	112	341	0	15,806	186	201	0
No. of end customers with notice of less than 3 days for interruption with notice	/	/	2,279	49	98	0	2,281	187	138	0	4,283	298	0	0

185 Emergency gas service

			Actual level 2011				Actual level 2012				Actual level 2013			
Type of service	Base level	Target level	Milan	Brescia	Bergamo	Varese	Milan	Brescia	Bergamo	Varese	Milan	Brescia	Bergamo	Varese
Annual number of calls to the switchboard where the team arrives at the location in <= 60 min	90%	95%	95.50%	99.50%	100.00%	99.20%	97.70%	99.60%	100.00%	98.84%	97.55%	99.41% 10	00.00%	99.75%

186 Commercial quality - gas: specific indicators - Milan area, Brescia, Bergamo and other provinces

		•	provided wi		Average time for service provision (in days)		
Type of service	AEEGSI level	2011	2012	2013	2011	2012	2013
Time for making estimates (simple jobs)	15 working days	95.20%	95.91%	97.36%	6.75	7.95	7.38
Time for performing work (simple jobs)	10 working days up to 25D 15 working days over 40D	96.28%	95.71%	96.68%	5.51	5.72	5.54
Time for making estimates (complicated jobs)	40 working days	98.44%	95.46%	93.35%	16.63	19.51	18.37
Time for switching on supply	10 working days up to 25D 15 working days over 40D	99.94%	98.66%	99.74%	3.73	4.44	3.48
Time for switching off supply	5 working days up to 25D 7 working days over 40D	99.94%	98.96%	95.92%	3.15	3.39	3.49
Time for switching on supply again after suspension for default	2 weekdays	99.68%	97.68%	97.35%	1.21	1.13	1.14
Punctuality band observed for appointments	2 hours	99.93%	99.83%	99.75%	na	na	na

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A2A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

2013

187 Commercial quality - gas: specific indicators - Varese

			provided wit ame specified		Average time for service provision (in days)		
Type of service	AEEGSI level	2011	2012	2013	2011	2012	2013
Time for making estimates (simple jobs)	15 working days	100.00%	100.00%	100.00%	3.9	7.3	8.2
Time for performing work (simple jobs)	10 working days up to 25D 15 working days over 40D	100.00%	100.00%	100.00%	2.34	1.85	2.2
Time for making estimates (complicated jobs)	40 working days	100.00%	100.00%	100.00%	4.9	17.7	5.1
Time for switching on supply	10 working days up to 25D 15 working days over 40D	100.00%	99.95%	100.00%	1.5	1.6	1.15
Time for switching off supply	5 working days up to 25D 7 working days over 40D	99.89%	100.00%	100.00%	1.3	2.1	1.9
Time for switching on supply again after suspension for default	2 weekdays	100.00%	100.00%	100.00%	0.13	1	0.84
Punctuality band observed for appointments	2 hours	99.78%	100.00%	100.00%	na	na	na

188 Commercial quality - gas: general indicators

	AEEGSI	Milan, Brescia, Berg and other province					
Service provided within the timeframe specified (%)	level	2011	2012	2013	2011	2012	2013
Percentage of requests to perform complicated jobs which were completed within a maximum of 60 working days	85%	98.93%	86.98%	96.82%	100.00%	100.00%	100.00%
Percentage of results of measurement group tests at the customer's request communicated within a maximum of 10 working days	90%	63.18%	83.71%	87.23%	100.00%	100.00%	100.00%
Percentage of motivated replies to written claims or information requests communicated within a maximum of 20 working days	90%	93.44%	92.27%	95.02%	100.00%	100.00%	100.00%

District heating and heat management

189 Geographical distribution of the district heating service

	2011		2012		2013	
	USERS* (no.)	VOLUME SERVED (Mm³)	USERS* (no.)	VOLUME SERVED (Mm³)	USERS* (no.)	VOLUME SERVED (Mm³)
Brescia and province	20,096	41.0	20,373	41.3	20,430	41.6
Bergamo and province	324	4.1	390	4.7	451	5.2
Milan and province	1,891	29.6	2,607	37.2	2,776	39.8
Varese and province	137	2.5	141	2.6	143	2.6
Total	22,448	77.2	23,511	85.8	23,800	89.2

^{*} Users may be a single residential unit in the case of independent heating or the whole building in the case of centralized heating.

Integrated water management

190 Extension of integrated water management

	Aqu	Aqueduct service		Purif	Purification service		Sewage service		
	2011	2012	2013	2011	2012	2013	2011	2012	2013
Municipalities served	108	108	108	66	66	66	69	69	69
Total users	277,014	278,336	285,530	160,601	184,848	191,277	178,626	187,137	193,585
Inhabitants	813,183	812,280	812,814	550,496	549,188	549,296	565,200	563,203	563,809

Note: BAS SII (Integrated Water Service Bergamo) no longer forms part of the above since 2011. In addition, Aspem SpA does not provide a purification and sewage service.

Introduction

The A₂A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

2013

191 Geographical distribution of water service users

	Brescia	Varese
Aqueduct service	220,828	64,702
Purification service	191,277	0
Sewage service Sewage service	193,585	0

192 Online transactions of A2A Ciclo Idrico

	2011	2012	2013
Electronic bill activations	2,862	1,352	758
Number of online payments	16,792	23,107	34,561
Number of self-readings	1,103	894	5,902

Environmental services

193 Urban sanitation service: collection and sweeping

	2011	2012	2013
Municipalities served	86	89	88
Population served	2,309,310	2,326,391	2,437,207

194 Billed services: waste disposal and other services for private customers

Users served	2013
Amsa	8,298
Aprica	2,270

195 Waste disposal service – A2A Ambiente

	2011	2012	2013
Municipalities served	444	688	688
Companies served	1,466	1,320	1,203

196 Amsa customer satisfaction – Milan (scores out often)

Assessment of Amsa services	2011	2012	2013
Urban waste collection	7.88	7.94	8.15
Overall organization of waste collection	7.57	7.84	8.03
Frequency of removing the various fractions of waste	7.67	7.80	8.02
Information about the waste collection service	7.21	7.23	7.99
Noisiness of the service	6.54	6.83	6.83
Obstruction and inconvenience caused to traffic by collection vehicles	6.55	6.70	6.54
Street and pavement cleaning	5.96	6.72	6.82
Speed of the cleaning service and the presence of vehicles on the street	6.72	7.26	7.29
Means by which the cleaning service is organized	6.39	7.02	7.18
Frequency of street and pavement cleaning	6.18	6.97	6.95
Street washing	6.55	7.21	7.21
Service for cleaning market areas	7.94	7.83	8.13
Bulky waste collection service	8.46	8.50	8.58
Bin emptying	6.49	6.85	6.97

Other services

197 Public lighting

013
564
466
442
646
98
),

198 Traffic lights - Milan

		<u> </u>
2011	2012	2013
717	719	724
10,865	11,000	10,430
21,483	21,620	21,997
63,960	64,311	65,465
	717 10,865 21,483	717 719 10,865 11,000 21,483 21,620

199 Safety equipment - Milan

	2011	2012	2013
Television cameras (no.)	1,196	1,239	1,293
Traffic monitoring (no.)	174	160	160
Environmental monitoring (no.)	12	12	10
SOS bollards (no.)	148	148	152

Introduction

The A₂A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A2A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

5.3 Suppliers



IDENTITY CARD AT DECEMBER 31, 2013

The A2A portal includes about 3,700 ⁽¹⁾ validated suppliers, mainly SMEs and most of them validated for more than one category of goods. **Fifty percent of suppliers received at least one order in 2013**. During the year, Group companies issued over **8,800 orders** amounting to a total of almost **693 million euro.**



During the year, 2,367 supplier validation processes were undertaken, 2,154 successfully



Over 60% of tenders were managed by e-procurement, replacing conventional hard copy

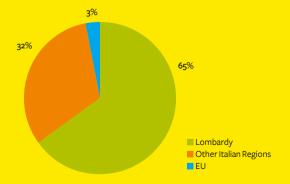


The "tree" of goods was extended to all Group companies

200 Breakdown of orders by type

Туре	Number of orders	Amount of order
Supplies	3,880	199,253,118
Works	1,845	248,611,406
Services	3,152	244,863,258
Total	8,877	692,727,781

201 Breakdown of orders by geographical area



(1) Suppliers with at least one ongoing validation at December 31, 2013. Not included are suppliers validated on the Edipower Portal, as yet not fully integrated with the Group Portal.



5.3.1 Tender procedures

Works, supply and service tenders in the ordinary and special sectors (urban sanitation, electricity grids, gas and district heating) are governed by European Community regulations aimed at ensuring the application of the provisions of Italian Legislative Decree No 163/06, "Code for public contracts relating to works, services and supplies implementing Directives 2004/17/EC and 2004/18/EC". Within this framework, A2A has adopted a system for ascertaining the validity of companies for the purposes of ensuring that they meet the technical, economic and financial requirements of the Code.

The publication of **European Validation Systems and Tenders** is the main source of information available to suppliers in relation to the procurement activities of the A2A Group. The information is given on the A2A website and, where public tenders are concerned, is set out in the Official Journal of the Republic of Italy, the Official Journal of the European Union and at least two national newspapers.

Where the tenders are not public, invitations to bid are sent out together with technical specifications. In these cases, suppliers are often identified using the lists of **Group suppliers**, based on validated suppliers for the particular goods required. At the same time, scouting is carried out to identify potential alternative suppliers, thereby enhancing competition. The companies identified in this manner are invited to undertake the validation process to join the List of Suppliers. In 2013, the Group continued its commitment to dematerializing procurement processes via the use of e-procurement systems. Over 60% of tenders were handled via the online tender platform, wherever possible replacing the conventional hard copy system, improving transparency and traceability in all tender stages.

The use of the e-procurement platform by suppliers in order to take part in electronically handled tenders and for access to the validation process is supported by a dedicated **call center**. During 2013, **about 620 requests for telephone support were managed**,

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

95% of which successfully within the time established by company procedures. Compared to 2012, the number of requests was down 24%, evidence of the fact that the portal is increasingly effective, simple and easy to use.

To further help to dematerialize the procurement process, the system of **electronic filing** of procurement details (agreement, technical documents, quotations/bids, etc.) was extended to Amsa, and the process for the authorization of procurement requests in the Ecodeco area (now called A2A Environment) was dematerialized.

Finally, the use of the **MicroPurchases catalog** was further extended: a service at the disposal of all Group companies to facilitate the purchasing process for indirect materials (office supplies, hardware, tools, plumbing equipment, etc.), with an increase in the number of suppliers involved and of internal users authorized to use the service. In 2013, **7,800 electronic orders were managed online**, with suppliers providing a single end-of-month invoice. This means that the process for generating orders and optimizing the management of the passive cycle by the reduction of the number of invoices has been completely dematerialized.

5.3.2 Supplier validation

A2A relations with suppliers are based on the principles of economy, effectiveness, quality, honesty, fair treatment, transparency and impartiality. The guidelines on procurement and on supplier validation set out in the company Code of Ethics apply to all Group companies and are embodied in the internal procedures governing operations in compliance with the organizational model as per Italian Legislative Decree No 231/2001.

The process of selecting and validating suppliers by A2A applies to all companies interested in taking part in Group tenders and leads to a List of Validated Suppliers for each

category of goods which the buyers can use to draw up a vendor list for the tender. Within this process, a **prior evaluation** of the supplier is carried out based on objective and measureable features.

Supplies who want to be listed as validated suppliers by A2A must register on the website https://www.pleiade.it/vendor_a2a/ and fill in the electronic questionnaire requesting details of the company's name and other general details, its financial position and organization, to be integrated with data and certification for quality,

The vendor rating

To create solid and mutually satisfactory relations with suppliers, the evaluation of companies takes place both before (during the validation phase) and after performance on the basis of the results achieved for the supply orders of the Group.

The **vendor rating** is the tool used by A2A to provide an overall evaluation of suppliers, summarizing in a single score:

- the **prior evaluation**, carried out for the validation of the supplier and updated regularly on the basis of information regarding the financial solidity and equity status of the company;
- the **evaluation of results**, based on the performance of suppliers after taking receipt of the goods ordered or the assessment of the services provided and/or the jobs commissioned by the Group.

The results of the vendor rating are managed by Group Procurement Management via a dashboard that is able to highlight inadequate performance which might lead, on occasion, to steps being taken against the supplier, including: suspending validation, watch listing, black listing, etc.

environment and safety. Of fundamental importance for evaluation purposes are the references the company can provide for similar activities carried out recently, and the data relating to the financial stability of the enterprise, given by a specialist external provider, and other publicly available data.

Given the importance of the above, nearly 10% of candidates in individual goods categories fail at this stage.

202 Supplier validation processes carried out in 2013

	Number of processes*		
Validation processes terminating positively	2,154		
Validation processes terminating negatively	213		
Total validation processes	2,367		

^{*} Excluding validation processes managed via the Edipower portal.

The validation process to join the List of Suppliers takes place without cost to the supplier, encouraging the participation of many companies in Group tenders and enabling the validated companies to gain visibility in the broad overall context in which the Group works.

During 2013 the Group database for suppliers was consolidated, thereby improving the level of integration and convergence between company processes and systems. The supplier portal currently includes a little under **3,700 registered and validated suppliers** in at least one product category, and of these **50% received at least one order in 2013**. Geographically speaking, 63.1% of registered suppliers are based in Lombardy, 35.5% in other Italian Regions, 1% in other EU countries, and 0.4% in countries outside the EU.

A2A with the Italian global compact network

Within the framework of the Italian Global Compact Network, A2A has joined a working Group on the responsible management of the supply chain.

A questionnaire has been drawn up to assess the sustainability performance of suppliers, which is to be used in the pre-validation phase.

The questionnaire covers the **10 Global Compact principles**, and the result is expressed by an overall score and partial scores in each area (human rights, employment, the environment, the fight against corruption), identifying areas of weakness. An ad hoc portal was also created, and access will be possible from supplier validation portals (suppliers taking part in the program).

The main aims of the project are: to share and implement a monitoring tool for the sustainability performance of companies in the supply chain belonging to the Network; to create support mechanisms for sustainability performance; to contribute, via actions in relation to the supply chain, to spreading sustainability principles and practices among Italian companies, particularly SMEs.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

203 Breakdown of suppliers by number of employees

	Number of suppliers *	% variation on 2012
Micro company (1-10 employees)	1,118	+25%
Small enterprise (10-50 employees)	1,399	+5%
Medium-sized enterprise (50-250 employees)	606	0%
Large enterprise (over 250 employees)	220	-1%
Data not available**	329	-32%

^{*} Excluding Edipower suppliers.

During 2013 the Group's "product tree" was extended to include Edipower, thereby completing the extension program to all A2A Group companies. Bringing all product categories into line across the broad throughout the Group has enabled:

- the use of a **single code** for all interlocutors involved in the validation and procurement process (those making requests, buyers, Validation Departments);
- the simplification of supplier relations during the validation and tender processes;
- further additions to the List of Suppliers to be made simply (proactive scouting).

The Groups product tree was extended to include Edipower

5.3.3 Sustainable supply chain management and certification requirements

A socially responsible enterprise cannot confine itself to safeguarding the environment and guaranteeing the health and safety of its staff, but must also continuously monitor the **environmental and safety policies of its suppliers** to make sure that they, too, act with social responsibility.

A2A has adopted a specific procedure which transposes European Community regulations in relation to Public Tenders and the dictates of the Group Code of Ethics. The specifications and related agreement schedules include not only compliance with the general regulations, but also deal specifically with matters such as insurance, pay and social security, in order to **combat off-the-book employment and guarantee safety in the workplace.**

Specifically, the procedure governing "Means for managing safety aspects in subcontracted activities" sets out a series of controls to be carried out during management of the agreement. For tender agreements, the winning bidder commits to continuously training and informing its employees on the risks involved in carrying out their activities. There is also a procedure in place for "Inspections at worksites for quality, environment and safety aspects", which aims to identify and correct non-compliance.

In 2013, 20 injuries were recorded with a prognosis of more than 3 days to recover, involving employees of winning bidders during activities on A2A plant, with a total of 668 working days lost. Although this number is up on 2012, the rate of injuries from accidents is down due to the higher number of hours worked. In fact, there was a sharp improvement in safety.

204 Accident data for contracting companies

	Hours worked by contractors	No. of accidents	Days lost	Accident rate	Seriousness Index
2013	1,878,955	20	668	10.42	0.83

^{**} Data not provided by the supplier at the registration phase and not included in the other data bases used.

Example of safety management at the worksite

A virtuous example of safety management on a very dangerous work site is the **demolition of** the 220 meter high 4-stack chimney of the Sermide (Mantua) thermoelectric power **station.** The demolition involved a number of specialist workmen and safety experts in Italian and foreign companies. The teams worked well together on their respective activities under the supervision of the Control Entity (the SPSAL Local Health Authority of Ostiglia – Mantua) which carried out 23 on-site inspections during the job. After 161,000 working hours (many carried out at a considerable height), there was only one mild injury with a prognosis of over three days. A conference was organized after the demolition, which took place on December 5, 2013, on the premises of the Mantua Industrialists Association: "The demolition of Units SE1 and SE2 of the Sermide Thermoelectric Power Station. A Model of cooperation between a Company and Control Entity".



All Group companies **systematically gather information relating to supplier certification**, i.e. ISO 9001 (Quality), ISO 14001 (the Environment), OHSAS 18001 (Safety), in order to help increase the number of validated suppliers with certification.

As at December 31, 2013, about 60% of validated suppliers had at least one form of certification (ISO 9001, ISO 14001 or OHSAS 18001). At the Group level, 60% of the value of the orders issued in 2013 went to suppliers with at least one form of certification.

205 Validated suppliers with certification

ISO 9001	2,115
ISO 14001	618
OHSAS 18001	327
At least one certification	2,130

^{*} Excluding suppliers managed on the Edipower Portal.

Disputes with suppliers

During 2013, 91 suits were ongoing or were concluded with suppliers of Group companies or their employees. Many are related to economic matters of various sorts, above all disputes relating to tenders or supply agreements and requests for damages from Group suppliers. In 9 cases the disputes involved companies taking part in Group tenders who were unsuccessful. There were 45 disputes with employees of winning bidders: in about half of these cases, Group companies were involved not directly but as joint defendants with the winning bidder; 12 concerned alleged failures of a non-serious nature in health and safety; 5 workers brought suits to obtain permanent jobs from a Group company; finally 8 cases involved injuries to the employees of contractors, in one case fatal, an event that occurred in 2004.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

5.4 Institutions and local communities



IDENTITY CARD AT DECEMBER 31, 2013

In 2013, A2A contributed **over 5.1 million euro** in sponsorships, donations and funding to the territory and communities in which we operate.



During the year, **over 24,000 visitors**,
including many schools,
registered on the 35
different Group websites



A2A joined leading social networks such as Facebook and Twitter

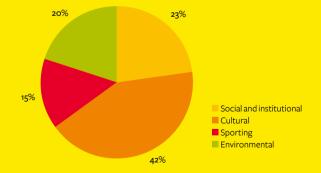


During 2103, A2A took part in **70 meetings** with consumer and
environmental associations
and **327 meetings** with journalists

206 Funding to the territory in the last three years (Amount in euro)

		/
2011	2012	2013
1,865,232	1,471,107	1,759,114
1,785,856	1,669,349	284,650
5,540,000	3,340,000	3,100,000
9,191,088	6,480,456	5,143,764
	1,865,232 1,785,856 5,540,000	1,865,232 1,471,107 1,785,856 1,669,349 5,540,000 3,340,000

207 Breakdown of sponsorships in 2013 by area of activity





5.4.1 Dialogue with Institutions

The relationship between A2A and institutions at the local, national and international level is inspired by the wish to create and maintain **an open and constructive dialogue**. It is based on trust towards institutions, which are, for A2A, an important means of gathering information about the needs of the various different interlocutors of the Group.

The tool used to govern these relations is the **Code of Ethics** which sets out regulations and criteria for the behavior of A2A personnel.

Central instructions

A2A takes part in, and cooperates with, leading **trade associations** and with numerous institutions through meetings dedicated to energy and environmental matters.

Via Group Institutional Relations
Management, the Group has a dialogue
with the **Government and Parliament**and unstintingly monitors legislative
activities, new regulations and licensing
requirements at the national and
international level.

In 2013, this activity focused on a series of topics, including:

- criteria and mode of issuing tenders for hydroelectric licenses;
- commencement of credit recovery in relation to sums owed to A2A by the Public Administration for the provision of services;
- use of secondary solid fuels (SSF), following transformation of waste into combustible products to be used in cement plants and thermoelectric power stations.

During the year, the company continued to talk to the Government and the Region of Campania in relation to a law dated August 2013 on the refuse emergency in Campania where A2A – via its subsidiary A2A Ambiente – manages the Acerra incinerator.

The aim of these meetings was to monitor draft legislation and maintain a

constructive dialogue with institutions.

Local Authorities

A2A carries on a daily dialogue with local authorities based on decades of relations and activities. Each Group company works to implement initiatives able to produce Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

a positive impact on the territory and the people who live in the area where we conduct our activities. This is also the case for services carried out by A2A and the impact of these services on local communities.

Via this approach and policy aimed at constructive dialogue, a number of joint initiatives emerge in the social, cultural, environmental and economic fields.

Observatory on the Brescia incinerator

The Observatory was set up following an initiative by the City of Brescia aimed at verifying and reporting on the environmental impact of the plant: type, quantity and geographical origin of the waste handled, emissions in the Brescia territory, etc. The data was published in the updated "Observatory Report on the Functioning of the Brescia Incinerator" available on the website www.a2a.eu. Special attention is given to evaluating the problems reported by the public with recommended actions put forward by A2A. The Observatory includes city officials, the Manager for the Environment and Ecology, heads of District Councils, members of the Environmental Consultative Body and consultants and members of trade unions in Brescia (CGIL, CISL, UIL).

In 2013, Amsa organized a series of meetings with **Area Councils of the City of Milan**, for the purpose of disseminating the main activities of the company in the local territory, with special reference to the collection of organic waste.

In relation to water, in 2013 a series of local meetings were held in Brescia and Val Trompia with the collaboration and participation of associations and committees active in the territory

Sector Authorities and Trade Associations

The sectors in which the A2A Group operates (energy, heat and services, the environment, and networks) are heavily regulated. The authorities in these sectors, with which A2A has continuous relations, are: the **Electricity, Gas and Water** Authority (AEEGSI) and the Antitrust Authority (AGCM).

In direct meetings and roundtables, during 2013, A2A also maintained relations with institutions, trade associations, regulators and other watchdog authorities, including: the Energy Services Manager (GSE); the National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA), Research on the Energy System (RSE) and others. A2A is a member of Confindustria (the Confederation of Italian Industry) within which it is a member of Assoelettrica (the National Association of Electrical Enterprises) in which A2A's Chairman of the Supervisory Board and its Head of Institutional Relations sit on the Board. After December 5, 2013, the Chairman of the Supervisory Board was replaced by the General Manager of the Corporate and Market Area.

A2A is also a member of numerous associations inside and outside the industry (over 90) and is particularly active, with positions of responsibility, in:

- Federutility the Federation of Energy and Water Enterprises;
- Federambiente the Italian Federation of Sanitation and Environmental Public Services, whose vice-president is the General Manager of the Technical-Operations Area;
- AIRU the Italian Association of Urban Heating which represents operators in the sector of urban heating systems from combined heat and power plants, using conventional fuels and renewable energy sources;

 Assocarboni – an association that represents over 90 companies in the sector of coal handling and usage, including electricity producers, importers, representatives of foreign companies, traders, end users and plant manufacturers, etc.

The General Manager of the Technical-Operations Area of A2A S.p.A. is also the President of CIG – the Italian Gas Committee, the UNI federated entity which deals with technical regulations for combustible gases in Italy. The companies in the A2A Group that work in the environmental sector are also members of other national and international associations in that sector.

Consumer protection and environmental associations

A2A has always been proactive in its dialog with leading consumer protection and environmental associations.

Nationally, regionally and territorially, A2A has established continuous relations with the **world of consumer protection** (18 associations in Italy, including the CNCU – the National Council of Consumers and End-users, headed by the Minister for Economic Development) based on transparency and the proactive safeguarding of the consumer.

Dialog and interaction with consumer-protection associations

These relations are expressed in a series of initiatives, from meetings with individual associations, to promoting and taking part in working groups dedicated to projects and activities within the current regulatory framework; from visits to plant to the presentation of activities on behalf of customers/consumers; and taking part in seminars, conferences and workshops on consumer-related issues organized by the "Consumers' Forum" and by individual associations such as the AEEGSI, GSE or other entities involved in consumer protection.

Similar "listening" and joint activities are carried out with leading environmental associations at the national level and with numerous territorial committees active in safeguarding the environment, whether or not they are officially recognized.

In 2013, a number of projects were designed and implemented to further strengthen the relations between A2A and these associations.

The busy schedule of activities included:

- activation of working groups to draft Amsa, Aprica and A2A Calore & Servizi Charters of Services (see page 176, 183, 184);
- permanent working groups with A2A Energia and consumer protection associations to fight against unfair commercial practices (see page 166);
- helping to set up the new Consumer Forum of Friuli Venezia Giulia, created in July 2013;
- taking part as a representative of Federutility, in the Working Group set up by AEEGSI for the creation of a new Energy Client Conciliation Service, available since April 2013, managed directly by the Sole Buyer (see page 187).

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

2013

During the year, cooperation with **environmental associations** included the following initiatives and meetings:

- the educational project "Collect-Transform-Create" promoted in Acerra, Naples and Caivano, consisting in lessons on the environment carried out in schools and visits to local incinerator plant, with the direct participation of three associations active in the territory (Friends of the Earth, ACSSA and the Consumer Protection League);
- taking part in specific projects promoted by Legambiente, Friends of the Earth and the Italian Environmental Fund (FAI);
- meetings dedicated to topics of specific interest in the territories in which the Group works, such as in Acerra (Naples) in relation to the incinerator, in Monfalcone (Gorizia) to the thermoelectric power station, in Corteolona (Pavia) to the incinerator, and in Calabria to the topic of discharge from hydroelectric basins.

Universities and Research Institutes

The Group takes an active part in numerous research projects in the energy and environmental fields, cooperating and partnering with universities and research institutes, including:

Targeted projects and partnerships with universities and research centers

- the participation of Amsa, in partnership with **Politecnico di Milano**, in an industrial research and experimental development project to reduce energy consumption and carbon dioxide emissions, benefiting sustainable economic growth and high quality of life;
- the support of A2A Electricity Networks for numerous projects including: an agreement with Politecnico di Milano to jointly finance a research doctorate in the field of Network Planning; the Schools Project, jointly funded with the Region of Lombardy
- European Funds, with partners that include Politecnico di Milano and

Brescia University; the TrasExpo Project, in cooperation with the **Senior Health Institute** and **Milan Health Authority**, to carry out an international epidemiologic study into the possible effects of magnetic fields generated by electrical substations.

Brescia Smart Living

The "Brescia Smart Living" project was conceived and developed with **Brescia University, ENEA** and other partners, including both large corporations (STM, Cavagna Group, Beretta) and SMEs. The project was awarded **top place** by the **Ministry of Education and Research** (MIUR).

The project idea is to integrate the data derived from the management of various energy networks (heat, electricity, gas, water, public lighting, waste) with social networks, so that individuals can understand how they consume utilities (heat, electricity, water and waste) in their homes and neighborhoods, reducing costs and the environmental impact. The integrated platform will be extended to include the safety of vulnerable segments of the population through the identification of available social services and personnel.

5.4.2 Actions on behalf of local communities

A2A is traditionally very involved with the local territories in which we operate, a closeness that can be seen in the relations and interactions established with communities. In 2013, as in previous years, many initiatives, projects and activities in the social, environmental, sports and cultural areas received the support of the Group.

For some of these activities, A2A and Group companies cooperated closely with the local institutions and associations involved in implementation. In 2013, this commitment led to providing funding of over 5.1 million euro.

"Less packaging, more environment"

In February 2013, a new project kicked off under the umbrella of the **Action Plan for the Reduction of Refuse** (PARR) by the Region of Lombardy and implemented experimentally in the area of Brescia in conjunction with the City of Brescia and Aprica, a company of the A2A Group active in environmental services in the provinces of Brescia, Bergamo, Como and Mantua. The project includes the promotion of products where the packaging has been modified to allow the consumer, without reducing purchases, to "**produce**" more **sustainable** waste for the environment: lighter, more compact and easier to recycle. The initiative is being carried out in cooperation with Coop, Simply and Auchan, which have placed their supermarkets in Brescia and the surrounding area at the disposal of the project. The products with lightened packaging are highlighted in the supermarkets with specific signs and specially marked price tags on the products on the shelves.

The social projects supported by A2A during 2013 included:

- the purchase and equipping of an emergency ambulance for the **Croce Azzurra** ("Blue Cross") of Belgioioso (PV) via the subsidiary A2A Ambiente;
- equipping a design and drawing classroom in the **middle school of the San Filippo Comprehensive Institute in Mela**, in the province of Messina, via the subsidiary

 Edipower;

Christmas cards by A2A supported the Francesca Rava
 Foundation and the N.P.H. Pediatric Hospital of
 Saint Damien in Haiti, a facility that helps 80,000
 children every year. The Christmas card shows an original Haitian drawing of the "Tree of Life".

Actions supporting culture

The commitment of A2A in this area refers to initiatives of local interest and support for cultural institutions and projects in the territory but with a national or international reach.

Particularly relevant are actions benefiting **La Scala in Milan, Teatro Grande in Brescia**, and the **Brescia Theater Center** (CTB). Also important is the work with the City of Milan and the Ministry of Cultural Heritage on

over **5.1**

Millions of euro earmarked to support the communities in which the Group operates Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

2013

the **restoration of Sala delle Asse in the Sforzesco Castle in Milan**, which includes protecting the monochromatic artwork of Leonardo da Vinci.

In addition, in the cultural area in 2013, A2A supported numerous initiatives in the various territories in which we operate, such as: the tenth "Magna Grecia Film Festival" which took place in Catanzaro, the seventh "Milan Art Music" event, the International Festival of Ancient Music, the Milan Film Festival, and the competition for young videographers "Movi&CO". For the 51st concert season run by the Association of Friends of Music of Sondalo, A2A contributed to the evening dedicated to Giuseppe Verdi in December 2013. In Monfalcone, cooperation continued between A2A and the municipal council for the summer event "Cinema Under the Stars".

Action supporting the environment

In 2013, A2A strengthened the organization's support for the Italian Environmental Fund (FAI), enabling students who took part in the A2A School Project to join the association free of charge; the association carries out actions to safeguard the countryside and the historic and artistic heritage of the country.

As has become a tradition, A2A contributed to the organization of the **27th Sondrio Film Festival (2013).** The event, which is eagerly awaited by residents and everyone involved in environmental and nature issues, is an international film festival dedicated to nature documentaries of the highest scientific level, which are produced in nature reserves and protected areas throughout the world.



 $\mbox{\sc A2A}$ also supported "The water way: from the source in Mompiano to the Water

Park", an initiative promoted annually by the Study and Research Center of Serafino Zani and the Brescia Astrophile Union on behalf of schools, teachers and the citizens of Brescia and its provincial territory.

In May, A2A was "Gigawatt sponsor" at the **Festival of Energy** in Rome: an event with nationwide reach dedicated to energy issues, an important opportunity for dialogue between industry, politicians and the general public.

Via the subsidiary Amsa, which works in the environmental services sector, A2A supported numerous initiatives aimed at safeguarding the environment and promoted by institutions, local communities, volunteer associations and area councils of the City of Milan and some neighboring areas. They included:

- "Festival of Recycling and Environmental Sustainability", a program with four events between May and September aimed at involving the public in environmental issues, including recycling and reuse;
- "5R for 5 districts", a week of events and initiatives on behalf of the environment in 5 districts of Milan, relating to 5 key issues: collections, recycling, reduction, reuse and respect. The districts involves were: Gratosoglio, Molise-Calvairate, Mazzini, Ponte Lambro and San Siro.

• "Cleaning the World", an event organized by Legambiente for the general public – households and the young and elderly alike – to clean and otherwise improve the environment of the city center and outlying areas.

In collaboration with CONAI – the National Packaging Consortium – and with the contribution of the City of Milan, in December 2013, Amsa launched a promotional campaign called "Milan is my future" to foster awareness among foreign residents in the city of the need to make separate waste collections and to recycle. For the campaign, 180,000 leaflets were produced and distributed in ten different languages: Italian, Arabic, Mandarin, Sinhala, French, English, Romanian, Spanish, Tagalog and Ukrainian.

A2A and Legambiente in the Mid-Valtellina Valley, together protecting nature

The Oasis of Piane di Lovero, in the province of Sondrio, is an important area for ecosystems and, in particular, for water, as wells, ponds and beds of reeds provide the habitats and breeding grounds for a large number of organisms. These areas are now threatened by changes in farming techniques, urbanization, the pollution of the waters and artificial water courses. In light of this, the importance of water courses and the effects of the presence of hydroelectric plants, A2A and Legambiente have implemented a project called "Le Piane" for the **local environment**, aimed at creating a harmonious balance between natural and man-made features.

Actions for sport

The sports activities and events supported by A2A in 2013 included a large number of different disciplines, including a partnership with the "Leonessa" basketball club of Brescia and assistance to the "Atlantide" volleyball club, also in Brescia.

In April, A2A sponsored the second **"Rugby in the Park"** event organized by the City of Milan and by Rugby Grande Milano to promote sport throughout the city. Over 400 youngsters, aged 6 to 13, took part in four different parks in Milan: Parco di Trenno, Parco Nord, Parco Forlanini and, for the final event, the Gianni Brera Civic Arena in the Parco Sempione.

Sports and nature for children

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A2A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

Also in April, in Aprica, the sixth edition of the now traditional **A2A Ski Trophy** took place, with about 400 students from middle schools in the province of Sondrio and the nearby Val Poschiavo. While the champion skiers raced, their "brainier" companions answered test questions. The trophy is awarded each year in a different location in Valtellina.

This was not the only support given to mountain activities by A2A, which supported the Himalayan expedition of **Marco Confortola**, who, in May 2013, reached the peak of the Lhotse in Nepal (8,516 meters), the fourth highest in the world and the local mountaineer's eighth 8,000-meter climb.



Sport fishing: 1st A2A trophy

In May 2013, on the river Ancinale, in Cardinale (Catanzaro), the 1st edition of the A2A Fishing Trophy took place, an initiative supported by the City and Provincial Authorities of Catanzaro, at the end of the extraordinary maintenance work carried out by A2A for hydroelectric uptake on the river. The work provided better water management and upgraded an area which had fallen into disuse, as well as improving the safety of the dwellings below. The competition included children of between 6 and 14 years of age, who received free membership of FIPAS (the Italian Federation for Fishing and Underwater Activities). For competition purposes, in the early morning, the river was stocked with native prize fish.



Foundation Activities

The two foundations under the umbrella of A2A play an important role within local communities, thanks to their strong roots. Their names – AEM and ASM – are those of the companies that gave rise to the Group. Their activities range over a number of fields: from traditional work in the social and cultural fields to education and the environment, as well as research studies on innovation in the energy and environmental sectors.

The **AEM Foundation** is involved in the protection and valorization of the historic, architectural and cultural heritage of AEM (now A2A).



In 2013, the AEM Foundation worked on the World Access to Modern Energy (WAME) project with the EnergyLab and helped to fund specialization programs and university scholarships.

With the A2A Schools Project, the AEM Foundation continued and extended its educational programs in museums relating to energy and the environment via lessons and guided visits for students in schools in Milan and Lombardy at the Home of Energy and the Environment, the foundation's headquarters.

In 2013, A2A allocated about 20% of its resources to supporting social and cultural development in the territories and communities where we work, and we directly organized or contributed to staging important exhibitions, such as Light in the City, Brain, and Diamonds are Stars, collaborating with officials in the Culture Department of the City

A project full of energy for the planet

A2A and WAME & Expo 2015 to bring energy to everyone on the planet

World Access Modern Energy (WAME) is an association that brings together eight Italian and European energy companies (A2A, Enel, E.On Italia, Edison, Eni, Gas Natural Italia, GDF SUEZ Energia Italia, Tenaris) that have decided to cooperate with Expo 2015 to give voice to the segment of humanity – almost 1.3 billion people – that has no access to electricity. Of all of the world's inhabitants, 38% have no clean energy sources for cooking and so use biomass, which has serious health consequences. The lack of access to modern energy is an important component of poverty and deprivation and of fundamental human rights. Often, it means no clean water or food, poor hygiene and health, and reduced opportunities for progress. This delicate issue is being addressed by the WAME Association & Expo 2015 so as to inform the public and promote initiatives aimed at eliminating barriers to bringing energy to everyone on the planet.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

of Milan, the Lombardy Institute and Academy of Science and Letters, and Politecnico di Milano.

In addition, the technical consultancy service continues at the Home of Energy and the Environment, with over 1,800 calls received in 2013 from individuals asking for advice and information on topics such as energy efficiency and gas and electricity safety in the home.

The **ASM Foundation** works mainly in the area of social problems, the promotion of artistic and cultural expression, and training and programs to protect the environment, especially as concerns the territories of Brescia, Bergamo and their respective provinces.



Among other projects, in 2013, the ASM Foundation contributed to the **reopening of the archaeological area of the Capitolino Temple in Brescia**, further developing the site with the installation of a multimedia system, enabling the display of on-site activities, and promoting a better understanding of the meaning of the Capitolium.

In the area of environmental protection, the ASM Foundation took part in the **reclamation of the "Brescia - Caffaro" area**, supporting actions to clean up the

 $\begin{tabular}{ll} \textbf{reclamation of the "Brescia - Caffaro" area}, supporting actions to clean up the parklands and rid them of pollution (in the form of polychlorobiphenyls, i.e. PCBs) with a campaign targeting the local public. \\ \end{tabular}$

In the cultural sector, the foundation promoted a **competition for young artists and theater companies** in Brescia, to produce two plays on social and structural change in cities.



Visits to plants and activities for schools

A2A willingly and frequently opens the doors of its plant to visitors – the young and not-so-young alike – to show the technology we uses on our various sites and to give first hand evidence of our commitment to reducing the environmental impact of our activities within the framework of sustainability. This approach embodies the explicit wishes of the Company to involve and maintain relations with all of our interlocutors, starting with the young.

For over thirty years, companies in the A2A Group have been involved in developing didactic programs for schools, promoting an environmentally responsible culture among young people, and giving them the opportunity to see and become more familiar with the many A2A production facilities.

Most of the initiatives for the young are under the umbrella of the "A2A Schools Project", which is designed for schools in the territories where the Group has a presence.

The initiatives begin in September, with school calendars sent to over 1,900 schools, and continue throughout the school year with specific topics chosen each year.

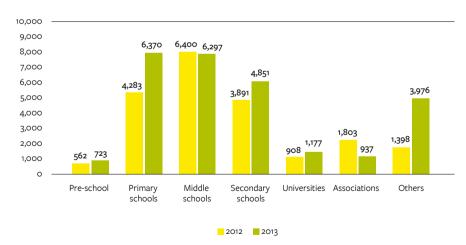
The topic for 2013 is district heating in order to help young

Students who visited A2A facilities

19,000



208 Visitors to A2A plants and to the Home of Energy and the Environment



people familiarize themselves with this efficient system of centralized heat production, dispensing with the need for offices and houses to have heaters, chimneys and fuel tanks, thereby benefiting the quality of the air in our cities.

With Edipower's electric power stations joining the Group, as of 2013 the total number of sites that can be visited has risen to 35, i.e. 6 incinerators, 8 waste disposal/treatment plants, 2 cogeneration power stations, 8 thermoelectric power stations, 5 hydroelectric power plants, 4 water cycle plants and 1 gas network plant, plus the Home of Energy in Milan with its museum and educational program.

Under the A2A Schools Project, **over 19,000 students** were able to visit Group facilities in 2013 as well as the Home of Energy.

The **Home of Energy** in Piazza Po 3 in Milan is a place where the subject of energy is illustrated simply and

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance

understandably, highlighting the need for energy efficiency along with a range of topics linked to sustainable development and household safety. In 2013, over 5,000 people visited the Home.

5.4.3 Environmental education

In particular, A2A is committed to designing and implementing initiatives in the area of environmental education, aimed at fostering a proper relationship with the surrounding ecosystem and minimizing the effects of human behavior on the balance of the natural environment. These initiatives specifically involve the local communities where the Group works, with projects for the young and less young, and special attention on schools.

The topics dealt with include the environment and sustainability, methods for producing energy and renewable and non-renewable energy sources, the safeguarding of the territory and nature, and good daily habits to pick up and follow in relation to the environment.

The leading environmental projects implemented or assisted by A2A during 2013 are set out below.

ENVIRONMENTAL EDUCATION FOR THE YOUNG: LEADING PROJECTS IN 2013

ECOSCHOOLS ON THE WEB

Who: A2A Ambiente

Where: Pavia

Designed for: "Alessandro Volta"

Secondary School in Pavia

A2A Ambiente supported the "Alessandro Volta" Secondary School in Pavia in implementing a project promoted with the assistance of the Province of Pavia – Department for Environmental Protection aimed at fostering understanding by the new generation in relation to environmental issues and the concept of environmental development.

THE ENVIRONMENT I HAVE IN MIND

Who: A2A Calore & Servizi
Where: Brescia and Bergamo

Designed for: Primary and secondary schools

During the 2012-2013 school year, in conjunction with Aprica, A2A Calore & Servizi promoted an initiative called "The Environment I have in mind", which is designed for primary and secondary schools in the cities of Brescia and Bergamo. Classes were given lessons on the Integrated Energy System, followed up by a prize competition. About 700 students took part in Bergamo (28 classes) and 800 in Brescia (39 classes).

THE SUSTAINABLE GENERATION

Who: Edipower

Where: Chivasso (Turin), Mese (Sondrio)

Piacenza, San Filippo del Mela (Messina), Sermide (Mantua), Turbigo (Milan), Tusciano

(Salerno)

Designed for: Grades 4 and 5 of primary

and secondary schools

On the web site "The Sustainable Generation", youngsters were asked how – through everyday actions – they could improve the environment in which they live (school, home, the city, etc.). Chosen activities helped them to come up with a list of daily actions to follow, with the ideas then being published on the web site. They also invented a game using recycled materials.



GREEN DAY

Who: A2A

Where: Lovero (Sondrio)

Designed for: Primary and secondary schools

The project was carried out in the park near the Lovero hydroelectric power plant and involved 300 children from the L. Credaro school in Tirano.

"Green Day" is part of the ordinary activities of A2A, informing and teaching about environmental and natural resources in the territory as well as industrial resources. In this case, the nature Oasis of "Le Piane" was the subject, with a project dedicated to safeguarding and optimizing the environment, the result of work by A2A and Legambiente in conjunction with the Lovero hydroelectric power station.

OUR ENERGY FOR THE ENVIRONMENT

Who: A2A

Where: Area Brescia

Designed for: Primary and secondary schools

Youngsters were involved in a challenge on how to save energy, on the use of water, the disposal of refuse and district heating, with special attention given to environmental topics.

Information sheets were provided beforehand, with whole classes or selected members of classes

taking part.

"ENERGY AND THE ENVIRONMENT" NEW GUIDE TO TEACHERS

Who: A2A

Where: Territories served by A2A

Designed for: School executives and teachers

The Guide, a collaboration with De Agostini, is one of the traditional activities of A2A in its schools program, consisting in lessons, learning laboratories, and visits to Group facilities.

The Guide includes materials for school executives and teachers and 2,000 copies were distributed in 2013, along with study materials and in-depth reports on energy, water, waste and sustainability.

THE "LEARNING THE COUNTRYSIDE" CONFERENCE BY FAI AND A2A

Who: A2A

Where: Milan Home of Energy

Designed for: School executives and

teachers of all grades and levels

The training session "Learning the Countryside", organized by A2A and the FAI (the Italian Environmental Fund), in collaboration with ANP (the National Association of Education Executives and Professionals for School) and the AEM Foundation, took place in March in Milan at the Home of Energy. About a hundred teachers and school executives attended, mostly from the cities and provinces of Milan, Brescia and Bergamo.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance



5.4.4 Media Relations

In 2013, the media relations activities of the Group Press Office intensified, thereby helping to ensure a constant flow of accurate and transparent communications to the benefit of all stakeholders.

During the year, 211 press releases were issued, around 50% of them including information for customers/users, 36% for the general public, and the remaining 14% for shareholders.

Also during the year, **113 letters were sent to the media**, 48% with content for customers/users and 52% for the general public.

Of all the information provided to the media (letters and press releases), 50% dealt with specific topics of interest to customers/users, 41% with topics of general interest to the public, and the remaining 9% with topics of interest to shareholders.

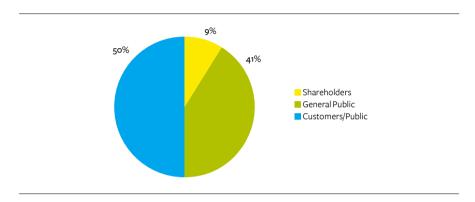
There were 327 meetings with journalists, in the form of interviews, one-on-one conversations, press conferences, and other initiatives aimed at improving relations.

The Group Press Office monitors media coverage and reporting, which results in a daily press review containing a selection of the news stories that make reference to the Group and its activities. This is a useful "listening device" at the disposal of company management, to understand the

"mood" of public opinion and what people want, as well as to help understand the financial community and other specific communities of interest to Group companies.

Transparency in communication

209 Breakdown of A2A media communications by intended recipient



5.4.5 A2A on the web

In 2013, the **digital communications of the A2A Group** were re-launched with the main aim of developing tools able to generate value for customers and the general public, giving due attention to the expectations of all those who use Group services. In relation to the A2A website, traffic data for 2013 confirmed previous results with **over 2.5 million page visits.**

In light of this, **A2A listened to the public** via leading social networks such as **Facebook** and **Twitter**.

The increasing presence of the Group on the web and in social networks has well-defined aims, which include: divulging publicly useful information; properly informing the public on topics such as the separate collection of waste and energy saving; social media customer care efforts in order to anticipate critical issues, address complaints,

and handle other reports promptly and effectively; monitoring the web by following the leading discussions on social networks with the participation of energy users; and addressing potentially critical areas relating to the "digital reputation" of A2A.

2013: the new AMSA website

In 2013, Amsa renewed its website in line with the standards for mobile devices (tablets and smartphones). The home page directly targets these users, and the interactive "Area Services" tool, based on Google maps, immediately identifies the Amsa services available in the territory, such as: street recycling banks, containers for expired pharmaceuticals, recyclers, mobile environmental centers, and so on. In addition, by inputting an address, users are given the calendar of collections from their area.

The web site is available in 10 languages:

Italian, English, Spanish, French, Chinese, Arabic, Ukrainian, Romanian, Tagalog and Sinhala.
Visitors can use a variety of tools to interact with the company, learn what services are available, use the various services, and report irregularities. The website is complete with a back office system linked to the Amsa Customer Center, which handles incoming messages and integrates them directly with the company operating system.

A2A digital communications, an effort to support stakeholders

During the year, the "**PULIamo" app was extended to all authorities served by Amsa**, with improved graphics and performance and suitable for latest generation mobile devices and use without internet connection. On March 31, 2014, the app had been downloaded some 35,000 times.

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

A₂A people

The customers and public served

Suppliers

Institutions and local communities

Statement of compliance



INDEPENDENT REPORT ON THE LIMITED ASSURANCE ENGAGEMENT OF THE SUSTAINABILITY REPORT 2013

To the Shareholders of A2A SpA

- We have carried out the bruited assurance engagement of the Sustainability Report as of 34 December 2013 (hereafter the "Report For A2A Group fleereafter the "Group") following the procedures summarized in paragraph 3 of the present document. The Board of Directors of A2A SpA are responsible for the proparation of the Report as accordance with Sustainability Reporting Gradichers (Person 33.1) issued by Grada Reporting Lantaine and with Sustainability Reporting Gradichers (Person 33.1) issued by Grada Reporting Lantaine and with Sustainability Reporting Gradichers (Person 33.1) issued by Grada Reporting Lantaine and with Sustainability Reporting Gradichers (Person 33.1). The Heard of Directors of A2A SpA are also responsible for the definition of the Group algorities regarding the sustainability performance and the reporting of the achieved festlys. We are responsible for the preporation of this report on the basis of the work performed.
- 2 Our work has been conducted in accordance with the principles and guidelines established by the International Standard on Assurance Engagements given. Assurance Engagements other than Audits or Remeas of Historical Francisch Information (SME) most, issued by the International Audition and Assurance Standards Banda, ISAEguno respects the compliance with efectal principles (Code of Inticis for Professional Accountains), including professional independence, It also requires that our work is planned and performed with the annot obtaining a limited assurance, rather than a reasonable assurance, that the Report is five of material errors. A limited assurance capagement of the sestimability report consists in interviews, primarily with company's personnel in sponsible for the preparation of the information included in the sustainability report, in the product of the systainability report and in other verification promitines.
- Be verification procedures performed on the Report are summarized as follows:
 - companison between the eronomic and financial information and data included in the Report with those included in the Group consolidated financial statements as of ga-Describer 2013.
 - (a) analysis of design and irreferentiation of governance and management framework of sustainability topics related to strategy and operation of the Group.
 - analysis of the processes underlying the generation, recording and management of quantitative data incit ded in the Report. In particular, we have carried out the following procedures.
 - meetings with management representatives of A2A SpA, A2A Reti Gos SpA, A2A Reti Elettriche SpA, Aprica SpA, AMSA SpA, A2A Servizi alia Distribuzione SpA, selected on the base of a risk analysis that takes into esosidezation spatialative and

Price waterhouse Coopers Advisory SpA

sufficiel Managery, Marcon or a special recovery cut is the consequence of the MA and all Relin Marcon control with the form Kars and Author the control of the special properties of Bolographic and a cost of the control of the cost of Theorem and Control of the cost of the cost of the Control of the cost of the advanced Napolal with Particle Nation Science and Control of the C



qualitative criteria. In achieve a general uniferstanding of the information, accounting and reporting systems in use to prepare the Report, as we'll assoft the internal control processes and procedures supporting the collection, aggregation, processing and transmission of data and information to the department responsible for drawing it up.

- mesite visit of Brysch whele to energy plant (A2A Ambiente Srl.). Farmagesta
 esgeneration plant (A2A Calore e Servizi Srl.). Pragenza thermoelestr e plant
 (Edipower SpA) and Meso bydroc lectric plant (Edipower SpA);
- d) analysis, on a sample basis, of the documentation supporting the Report, in order to confirm the rehability of data and information collected through meetings, interstows and on site verifications and to confirm they were properly managed;
- serification of less data and refermation are managed in the selected selected how they are subsequently aggregated and consolidated at Group level;
- f) analysis of the completeness and internal consistency of qualitative into major included in the Report compared with the grafelines about fird in paragraph 1 of the present dominent:
- (g) obtaining a representation letter, signed by the legal representative of AzA SpA, relating to the completeness and rehability of the Report and of the information and data included in it, as well as to the compliance with the guidelines identified in the paragraph 1 of the present document.

As far as data and information concerning the Sustainability Report of the prior year, presented for comparative graposes, are concerned, refer to the assurance report assied on 28 May 2013.

A limited assurance organization is less in scape than a reconstitute a surance organization carried out in accordance with ISM group and, as a consequence of provides a lower level of accordance that we because aware of all the significant events and circumstances that a reasonable assurance organization to talk have identified.

4 Based on the procedures corried out, nothing corrects our aftention that causes us to believe that the Sustainability Report as of 3) December 2013 is not in compitance, in all material respects, with Sustainability Reporting Guidelines (Version 3.)) issued by Gobal Reporting Initiative, application level Assaud with Sustainability Reporting Guidelines & Electric Unity (RG Version 3) of USS Final Version), as stated in the shapter "Intendedict" of the Report.

Milan, 15 May 2014

PricessaterhouseCoopers Advisory SpA

Parks Rezcepi (Partner)

This report has been translated from the original, which was issued in Bahan. We have not performed any montrol on the Sustainability Report 2003 translation.

ntroduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

Statement of compliance

Statement of the level of compliance with GRI guidelines

Cod.	Description	Correspondence	Page
1	Strategy and Analysis		
1.1	Chairmen's statement	•	6-7
1.2	Key impacts, risks and opportunities	•	11-13; 26-32; 38-39
2	Organizational Profile		
2.1	Name of the organization	•	8,16
2.2	Primary brands, products and/or services	•	18-19
2.3	Operational structure	•	17
2.4	Location of headquarters	•	16, colophon
2.5	Countries where the organization operates	•	19
2.6	Nature of ownership and legal form		16
2.7	Markets served	•	18-19
2.8	Scale of the organization	•	19
2.9	Significant changes	•	20
2.10	Awards/prizes received	•	33-34
EU1	Installed capacity	•	16, 19
EU2	Net energy output	•	19
EU3	Number of customers analyzed by type	•	156
EU4	Length of transmission and distribution lines	•	156, 191
EU5	Allocations of emissions allowances and observance of the Kyoto protocol	•	81-82
3	Report Parameters		
3.1	Reporting period	•	8
3.2	Date of most recent financial report	•	8
3.3	Reporting cycle	•	8
3.4	Contact point for questions regarding the report	•	colophon
3.5	Process for defining report content	•	11-13

Cod.	Description	Correspondence	Page
3.6	Boundary of the report	•	9-10
3.7	Limitations on the scope or boundary of the report	•	10
3.8	Information regarding affiliates	•	10,20-23
3.9	Data measurement techniques and bases of calculation	•	8-9
3.10	Restatements of information provided in earlier reports	•	10
3.11	Significant changes from previous reporting periods	•	10,20
3.12	Reference table	•	224-231
3.13	External certification	•	222-223
4	Governance, Commitments and Engagement		
4.1	Governance structure	•	35
4.2	Indicate whether the chairman is also an executive officer	•	37
4.3	Independent and non-executive directors	•	36-37
4.4	Mechanisms for shareholders to provide recommendations	•	RGS 54-55, 58-60
4.5	Linkage between compensation for directors and top management and performance	•	37
4.6	Conflicts of interest	•	38,CE10
4.7	Directors' qualifications	•	36-37
4.8	Mission, values, codes of conduct and principles	•	26,40-42
4.9	Procedures for identification and management of economic, environmental and social performance	•	26-32, 34-47, 62-65
4.10	Process for evaluating the highest governance body's performance	•	RGS 23-29, 33-35
4.11	Means by which the precautionary approach or principle is addressed	•	38-41, 62-65
4.12	Externally developed economic, environmental and social charters, principles or other initiatives subscribed or endorsed	•	8, 33, 38, 40, 52, 63, 128, 131
4.13	Membership in industry associations	•	208-210
4.14	List of stakeholders engaged	•	42-43
1.15	Basis for identification and selection of stakeholders with whom to engage	•	11, 42-43

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

Statement of compliance

Cod.	Description	Correspondence	Page
4.16	Stakeholder engagement activities	•	44-47
4.17	Key topics and concerns raised through stakeholder engagement and response		12-13, 44-47
	ECONOMIC PERFORMANCE		
DMA EC	Disclosure on management approach	•	50-59
EC1	Direct economic value generated and distributed	•	51-53
EC2	Risks and opportunities due to climate change	•	38-39
EC3	Coverage of pension plan obligations	•	134
EC4	Financial assistance received from government	•	52
EC ₅	Ratio of standard entry level wage to local minimum wage	•	130
EC6	Policy, practices and proportion of spending on locally-based suppliers	•	200
EC ₇	Procedures for local hiring at locations of significant operation		No policies exist in this regard
EC8	Development of investment for public benefit	•	206, 210-219
EC9	Describing indirect economic impacts	•	50, 52, 53, 130, 139-140, 200, 206
EU6	Management approach to ensure medium-long term electricity availability	•	190,193
EU7	Demand-side management programs	•	157-173
EU8	Research and development activity aimed at promoting sustainable development	•	66-68
EU9	Decommissioning of nuclear power sites		na
EU10	Planned capacity		The requested information cannot be published for strategic opportunity reasons
EU11	Average generation efficiency of thermal plants	•	76,107
EU12	Transmission and distribution losses as a percentage of total energy	•	107
	ENVIRONMENTAL PERFORMANCE		
DMA EN	Disclosure on management approach	•	QAS, 62-105
EN1	Materials used	•	110-113

Cod.	Description	Correspondence	Page
EN2	Percentage of recycled materials	•	88-90, 101, 110
EN3	Direct energy consumption by source	•	110-113
EN4	Indirect energy consumption by source	•	110-113
EN ₅	Energy saved	•	65-68,75-82,96-100
EN6	Energy-efficient or renewable energy-based products and services	•	75-82
EN ₇	Initiatives to reduce indirect energy consumption and reductions achieved	•	82,100
EN8	Water usage by source	•	110-113
EN9	Water sources for withdrawal	•	84-85,103-104
EN10	Water recycled and reused	•	84-85, 101, 110
EN11	Land adjacent to or in protected areas	•	68-71
EN12	Description of significant impacts on biodiversity	•	68-71,120
EN13	Habitats protected or restored	•	68-71
EN14	Strategies for managing impact on biodiversity	•	68-71
EN15	Protected species with habitats in areas affected by operations	•	68-71
EN16	Greenhouse gas emissions	•	72-73,84,118-120
EN17	Indirect greenhouse gas emissions	•	72,120
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved	•	66-68, 72, 84, 86-87, 99-101
EN19	Emissions of ozone-depleting substances	•	82-83, 118-119
EN20	Other air emissions	•	82-83, 114-118
EN21	Water discharge	•	88,121
EN22	Production of waste and disposal method	•	88-91, 122-123
EN23	Total number and volume of significant spills	•	65
EN24	Waste deemed hazardous	•	73,123
EN25	Impact on biodiversity affected by discharges of water	•	70,120
EN26	Initiatives to mitigate environmental impact of products and services	•	63-65, 66-73, 74-91, 92, 96-101, 10

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

Statement of compliance

Cod.	Description	Correspondence	Page
EN27	Products sold and their packaging materials that are reclaimed		na
EN28	Fines for non-compliance with environmental laws and regulations	•	65
EN29	Environmental impacts of transporting products and members of the workforce	•	72,100
EN30	Environmental protection expenditures and investments by type	•	65-66
EU13	Biodiversity of offset habitats compared to the biodiversity of the affected areas	•	68-70
	SOCIAL PERFORMANCE		
DMA LA	Disclosure on management approach	•	127-140
LA 1	Total workforce by employment type, employment contract and region	•	126, 141-142, 144
LA 2	Turnover by age group, gender and region	•	129-130,145-146
LA3	Employee benefits	•	130,139-140
LA4	Percentage of employees covered by collective bargaining agreements	•	134,154
LA ₅	Minimum notice period regarding operational changes	•	135
LA ₇	Occupational injuries and diseases	•	131-134, 149-150
LA8	Employee prevention and risk-control training programs regarding serious disorders and diseases	•	132,150
LA 10	Employee training	•	135-137, 147-149
LA 11	Programs for skills management	•	135-137
LA 12	Employees receiving performance and career development reviews	•	137
LA 13	Composition of employees by gender and other indicators of diversity (e.g. disability)	•	128, 141-142
	Composition of governance bodies by gender and other indicators of diversity	•	36-37
LA14	Ratio of basic salary of women to that of men in the same category	•	128
LA15	Return to work and retention rates after parental leave by gender	•	128,153
EU14	Programs and processes to ensure the availability of a skilled workforce	•	135-137,147-148
EU15	Percentage of employees eligible to retire in the next 5 to 10 years	•	143
EU16	Policies regarding health and safety of employees and third-party employees	•	204-205

Cod.	Description	Correspondence	Page
EU17	Days worked by third-party employees involved in construction, operation & maintenance activities	•	204
EU18	Percentage of third-party employees that have undergone relevant health and safety training	•	204-205
EU19	Stakeholder participation in the decision making process	•	11-13, 42-47
	HUMAN RIGHTS		
DMA HR	Disclosure on management approach	•	33
HR1	Operations that have undergone human rights screening	•	33
HR2	Suppliers and contractors that have undergone human rights screening	•	33
HR3	Employee training on human rights		na
HR4	Incidents of discrimination and actions taken		na
HR5	Freedom of association and bargaining	•	134
HR6	Operations having significant risk for incidents of child labor	•	33
HR7	Operations having significant risk for incidents of forced labor	•	33
HR8	Security personnel trained in human rights		na
HR9	Violations of the rights of indigenous people	•	33
HR10	Operations that have been subject to human rights reviews and/or impact assessments		na
HR11	Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms	•	33
	SOCIETY		
DMA SO	Disclosure on management approach	•	63-65, 206-221
SO1	Management of impacts on the local community	•	63-65, 206-221
SO ₂	Business units analyzed for risks related to corruption	•	40
SO ₃	Employees trained in the prevention of corruption offences	•	40
SO4	Actions taken in response to incidents of corruption	•	40
SO ₅	Public policy positions and lobbying	•	207-210

Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

Statement of compliance

Cod.	Description	Correspondence	Page
SO6	Contributions to political parties, politicians and related institutions by country		0 in compliance with the code of ethics
SO ₇	Legal actions for anti-competitive behavior, anti-trust and monopolistic practices	•	42
SO8	Fines and non-monetary sanctions for non-compliance with laws and regulations	•	42
SO9	Operations with significant potential or actual negative impact on local communities	•	63-65
SO10	$Prevention and \ mitigation \ measures \ implemented \ in \ operations \ with \ significant \ potential \ or \ actual \ negative \ impacts \ on \ local \ communities$	•	63-65
EU20	Approach to managing the impacts of displacement		na
EU21	Contingency and disaster management	•	63-65,193
EU22	Number of people physically or economically displaced and compensation		na
	PRODUCT RESPONSIBILITY		
DMA PR	Disclosure on management approach	•	156-199
PR1	Life cycle stages of services whose impacts on health and safety are assessed	•	172, 176-177, 180
PR2	Cases of non-compliance with codes concerning health and safety impact	•	186
PR ₃	Information required by procedures and percentage of significant products and services subject to such information requirements	•	158, 160, 163, 166-168, 179, 187
PR4	Non-compliance concerning product and service information and labeling		na
PR ₅	Customer satisfaction	•	169-172, 179-180, 184-185, 190, 199
PR6	Programs for adherence to laws and voluntary codes related to marketing activities		Operates in compliance with the AEEG code of business conduct
PR7	Non-compliance concerning marketing activities	•	42
PR8	Complaints regarding breaches of customer privacy and losses of customer data	•	42,158
PR9	Fines for non-compliance with laws and regulations	•	42
EU23	Programs to improve or maintain access to electricity	•	193
EU24	Information provided to customers on the safe use of energy and support services		http://www.a2a.eu/gruppo/cms/a2a/ it/clienti/gas/sicurezza_gas.html

Cod.	Description	Correspondence	Page
EU25	Number of injuries and fatalities to the public, including legal proceedings	•	188
EU26	Population unserved in distribution areas		na
EU27	Number of disconnections for non-payment		As part of its credit control procedures A2A Energia keeps constant control over this indicator. The company nevertheless believes it is inappropriate to provide the figure as it represents sensitive data
EU28	Power outage frequency	•	192
EU29	Average power outage duration	•	192
EU30	Average plant availability factor	•	190

RCG: Report on Corporate Governance & Ownership Structure QES: The Group's Quality, Environment & Safety Report CE: Code of Ethics Introduction

The A2A Group

Strategies and policies for sustainability

Economic responsibility

Environmental responsibility

Social responsibility

Statement of compliance

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