The document has been prepared in accordance with the **Sustainability Reporting Guidelines** of Global Reporting Initiative (GRI) version **G4**, level “in accordance CORE”.

This report is may be viewed online [www.a2a.eu](http://www.a2a.eu).
7 Natural capital
  7.1 Group environmental management
  7.2 Natural capital in the Environment Business Unit
  7.3 Natural capital in the Generation and Trading Business Unit
  7.4 Natural capital in the Networks and Heat Business Unit

8 Human capital
  8.1 Responsible management of the human capital
  8.2 Health and safety at work
  8.3 Staff development
  8.4 Welfare and diversity
  8.5 Remuneration

9 Intellectual capital
  9.1 Research and development of smart grids
  9.2 Research and innovation for digital development
  9.3 Trademarks and patents as intangible resources

10 Relational capital
  10.1 Relations with customers
  10.2 Relations with the community
  10.3 Relations with suppliers

Statement of compliance

Statement of the level of compliance with GRI guidelines
  General Standard Disclosure
  Specific Standard Disclosure

www.a2a.eu
The A2A Group’s 2015 Sustainability Report is complete with a specific supplement and available for consultation on the Group’s website in both Italian and English.
Letter to stakeholders

For a Group that is undergoing a transformation and looking to the future, the publication of the Sustainability Report provides an opportunity for change and experimentation. This is why the 2015 edition of our Sustainability Report retains the level of transparency and completeness of information applied in the previous editions, with solid reference to the Global Reporting Initiative guidelines (GRI-G4) and, at the same time, it constitutes a first step towards adhesion to the International Integrated reporting Council (IIRC) framework.

It is not merely a methodological step, but rather it provides confirmation of the desire of A2A to increasingly integrate sustainability into the business strategy, giving stakeholders a clear, concise vision of how the company can create value over time. It is by no coincidence that this year, for the first time, the Sustainability Report is presented in the Shareholders’ Meeting for shareholder approval and the Sustainability Governance has been reinforced with the extension of the competence of the existing Territorial Committee to include matters of sustainability.

All this is part of the CSR development plan, resolved last November by the Board of Directors, with a great many important new features.

In the first place, the Group has undertaken to define a Sustainability Policy in 2016, which would indicate the sustainability objectives to be achieved in the next fifteen years, and a Sustainability Plan that lays them out into feasible actions and concrete results in the medium-term (2016-2020). A2A, which this year too is adhering to the Global Compact, has prepared them with reference to the United Nations 17 Sustainable Development Goals to 2030. With its Sustainability Policy, the Group expresses its commitment to helping the communities to be sustainable, taking a lead role in a new, low carbon circular economy based on smart services and networks. It also seeks to make an active contribution to the well-being of the community and improvement in working conditions, increasing transparency and improving dialogue with stakeholders. The development of actions of the Sustainability Plan will be monitored over time and connected to the management incentive systems.

This route also explains the decision to continue the experience launched with the first multi-stakeholder forum of Brescia in 2015. This model of involvement will be extended to include seven new territories during the two years 2016-17. The forums will become an essential tool by which to interpret the needs of the communities and cause project ideas to be conceived that are able to create shared value. A2A will provide a transparent disclosure on these interventions with the publication of local sustainability reports.

In addition to taking a look at the future, the 2015 Sustainability Report also contains, as always, the facts and numbers relative to A2A sustainability last year.

As concerns economic sustainability, in 2015 A2A generated and distributed to stakeholders gross global added value of 1,263 million euros. The Group has distributed wealth also through the more than 690 million euro spent on supplies, 98% of which for the benefit of Italian companies. 76% of the value of orders issues was related to suppliers in possession of at least one certification relating to environment, quality or safety, 3% to social cooperative companies or non-profit entities. The A2A business units have invested a total of 341 million euros (+11% on 2014), of which 96 million euros in activities with environmental effects: reduction of emissions, increased energy efficiency, development of renewable energies, innovation, etc.

In environmental terms, A2A has carried out interventions set to improve the comfort, safety and quality of the air in our cities: the plan to replace public lighting with LED solutions in Milan, Bergamo and Brescia, the intervention to eliminate hexavalent chrome in the Brescia aqueduct, the improvement of the mix of district heating production, with the start-up of two new gas heaters in the Brescia plant and the first thermal solar plant in Varese, along with the recovery of heat from two industrial plants of Lombardy.

In 2015, in the municipalities supplied by the Group, services made further progress, going from 51.5% to 55.1%. Worthy of note are the success enjoyed by AMSA in managing cleaning and separate waste collection on the EXPO 2015 site and the National Prize for the prevention of waste assigned to Aprica by Legambiente and Federambiente.
In 2015, electricity production increased by 7% as a result of the trend of the electricity market. The conditions of poor hydraulics resulted in a downturn to hydroelectric production of 27%, with a consequent reduction in the renewable portion from 52% to 36%. In relation to this, the average emission factor of CO₂, in relation to all energy production (electrical and thermal) by the Group, of 434 g/KWh, was higher than last year. In any case, A2A retains its commitment to contribute, over the next few years, to the international objectives of the Paris Conference on climate change (COP21) by improving the processes and developing renewable sources, cogeneration and low CO₂ emission energy carriers. This is borne out by the innovative project presented over the last few months, to transform the thermoelectric plant with fuel oil, of San Filippo del Mela, into an energy pole of renewable sources with cutting-edge technology.

Under the scope of customer relations, A2A Energia has confirmed that it excels on the national honours board of customer satisfaction, taking an absolute first place in the Monitor Energia Cerved survey for gas users and domestic electricity users. The commercial company has earned the favour of its customers also thanks to solutions and services promoting renewable sources, the digitisation of processes, energy efficiency (+64% of green energy sold, +10% in electronic billing; 16,000 LED lamp kits distributed).

The Group has confirmed its commitment to support social, cultural, environmental and sporting initiatives in the territories in which it operates, delivering 4.3 million euro in donations, sponsorships and contributions.

During the year, 975 people were hired and 943 ended their employment contracts. 57% of permanent new contracts of employment were stipulated with under 30s. As part of staff development, in 2015 A2A launched numerous projects, opting for a more entrepreneurial managerial culture, listening to and involving employees, optimising skills and ensuring professional requalification where appropriate. The Futuraza project, in particular, intended for young university graduates, is worthy of note, resulting in more than 200 innovative ideas; equally, the Melograno project was also extremely successful, promoting the optimisation of women in the company. Significant improvements were also seen in safety at work: the frequency and severity indices of accidents in the Group recorded an annual reduction of more than 10%, confirming the positive trend enjoyed during recent years.

Finally, my thanks must go to the people of A2A, for their professional attitude and commitment shown during the first year of implementation of the new strategy outlined by the 2015-2019 Business Plan. This same commitment and dedication will be essential in the next fifteen years, if we are to achieve, and perhaps even exceed, the sustainability goals we have set ourselves, firmly convinced that this is precisely the right way in which to create value for the Group and all its interlocutors.

This Sustainability Report is made available to the public by means of the 1Info authorised storage mechanism at www.1info.it, at the Company’s Brescia offices at Via Lamarmora 230 and on the www.a2a.eu website (in the “Governance” - “Meetings” section). The Shareholders’ Meeting of June 7, 2016 (with potential second calling for June 8, 2016) will be asked to approve it.

The Chairman
Giovanni Valotti

Chief Executive Officer
Luca Valerio Camerano
Note on method

The A2A Group publishes the eighth Sustainability Report prepared on the basis of the “Sustainability Reporting Guidelines G4” of the Global Reporting Initiative (GRI) and, together with the Sustainability Report – Supplement, of the Electric Utilities Sector Supplement – G4 Standard Disclosure. With a view to ensuring continuous improvement with respect to previous editions, A2A has also embarked upon a progressive adhesion to the Integrated Reporting Framework (IR Framework), as outlined by the International Integrated Reporting Council (IIRC).

This document (including its Supplement) complies with the standards of GRI-G4 and, in line with the latest evolutions of international business reporting, develops the structure of the Integrated Report, providing stakeholders with a clear representation of both the economic-financial performance and the social and environmental performance of the companies coming under the scope of consolidation for the financial year ended on December 31, 2015.

The aspects and indicators for the definition of contents to be reported, which are relevant to the Group and stakeholders, were selected on the basis of a structured process of analysis of materiality, to which we would refer you. On the basis of the current cover of the “Specific Standard Disclosure” indicators associated with the material aspects, and summarised in the GRI Index, the level of adherence to the GRI-G4 Guidelines is “In Accordance - Core”.

The data collection and control process was managed by the “CSR and Editorial Products” function, by means of Excel sheets sent to the managers of all company departments, of the local offices and companies coming under the scope of reference. Data on environmental responsibility was managed by the “Environment” department and was collected through the EMS (Environmental Management System) software, which envisions the tracking, verification and approval of all data required.

The document, submitted to the Board of Directors of A2A S.p.A. on April 5, 2016, has been assigned for revision by an external company, in accordance with the criteria laid down by the “International Standard on Assurance Engagements 3000” (“ISAE 3000”), which at the end of the work carried out issued the report attached to this Report.

The Sustainability Report, as resolved by the A2A BoD on November 12, 2015, has been formally approved by the Shareholders’ Meeting, together with the Court of Appeal of A2A.

The evolution towards the Integrated Report

In light of a business sustainability strategy, to incorporate integrated type logics into the company decision-making processes means to redefine the organisation in a holistic key.

An integrated report aims to present the way in which an organisation creates value over time. The value creation process consists of different parts that are internal and external to the organisation and, in order to better understand the process, the Integrated Report considers the following forms of capital:

- **Financial capital**: set of economic resources involved in the production processes;
- **Manufacturing capital**: properties and physical means of production;
- **Intellectual capital**: intangible resources represented by organisational knowledge that is the intellectual property of the Group;
- **Human capital**: competences, capacity and experience of the people and their motivation to innovate;
- **Relational capital**: capacity to relate to stakeholders and to share values in order to increase individual and collective well-being;
- **Natural capital**: all processes and environmental resources providing goods or services for the past, present and future success of an organisation.
Scope

The scope of reference for the preparation of the report varies in relation to the scopes considered. As regards the Financial Capital, the scope coincides with that of the A2A Group Consolidated financial statements. For all other forms of capital, the following are included in the reporting scope:

1. companies in which A2A has an investment of more than 50%;
2. companies present in the Group for the whole year (companies purchased/sold/liquidated during the year are therefore not considered).

These companies are applied a concept of relevance and significance as follows:
- for environmental aspects the scope includes companies having industrial activities;
- for social aspects, “Human capital” includes companies having at least one employee; “Relational capital” means companies having commercial activities and 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 are dealt with by using summarized captions and/or specific sections and/or qualitative information (for example, the Montenegrin company EPCG). The plants of which A2A has less than 50% joint ownership, but which are of significant interest, are consolidated on a pro rata basis. According to this principle, for environmental data, the Thermoelectric Plant of Mincio was consolidated for 45%.

The table below provides a summary of the scopes of consolidation of the various Group companies coming under the scope considered in this report.
### Figure 1 | Scope of consolidation of A2A group companies for the 2015 Sustainability Report

<table>
<thead>
<tr>
<th>Company</th>
<th>Natural capital</th>
<th>Human capital</th>
<th>Relational capital - customers</th>
<th>Relational capital - suppliers</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2A spa</td>
<td>×</td>
<td>×</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A2A Reti Gas</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>A2A Reti Elettriche</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>A2A Calore &amp; Servizi</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>Selene</td>
<td>-</td>
<td>×</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A2A Servizi alla Distribuzione</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>A2A Energia</td>
<td>-</td>
<td>×</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A2A Trading</td>
<td>Box*</td>
<td>×</td>
<td></td>
<td>Box*</td>
</tr>
<tr>
<td>A2A Logistica</td>
<td>Box*</td>
<td>×</td>
<td></td>
<td>×</td>
</tr>
<tr>
<td>A2A Ciclo Idrico</td>
<td>×</td>
<td>×</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A2A Ambiente**</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>Aspem Energia</td>
<td>-</td>
<td>×</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abruzzoenergia</td>
<td>×</td>
<td>×</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retragas</td>
<td>×</td>
<td>×</td>
<td></td>
<td>Box*</td>
</tr>
<tr>
<td>Aspem</td>
<td>×</td>
<td>×</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Varese Risorse</td>
<td>×</td>
<td>×</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camuna Energia</td>
<td>×</td>
<td>×</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edipower</td>
<td>×</td>
<td>×</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The matter is potentially discussed in a separate box of text.


The following are therefore not included in the scope of consolidation:

**In liquidation**
- Assoenergia S.p.A.
- Ostros Energia S.r.l.
- Plurigas S.p.A.
- Vespia S.r.l.

**Financial investment**
- A2A Montenegro d.o.o.
- A2A Alfa S.r.l.

**Irrelevant business**
- Proaris S.r.l.
- Mincio Trasmissione S.r.l.
- Montichiariambiente S.r.l.
- A3A S.r.l.

Please note that there have been no substantial changes in the scope with respect to the scope of companies consolidated in the 2014 Sustainability Report.
The A2A Group

The A2A Group mainly operates in the production, sale and distribution of gas and electricity, district heating, environmental services and the integrated water cycle.

The sectors of activity are, in turn, able to be traced to the Business Units (BUs) explained below and identified following the 2015 internal reorganisation.

**Figure 2 | A2A Group Business Units**

<table>
<thead>
<tr>
<th>Generation and Trading</th>
<th>Commercial</th>
<th>Environment</th>
<th>Heat and Services</th>
<th>Networks</th>
<th>EPCG</th>
<th>Other services and Corporate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermoelectric and hydroelectric plants</td>
<td>Sale of electricity and gas</td>
<td>Collection and street sweeping</td>
<td>District heating services</td>
<td>Electricity networks</td>
<td>Electricity generation and sales</td>
<td>Other services</td>
</tr>
<tr>
<td>Energy management</td>
<td>Treatment</td>
<td>Heat management services</td>
<td>Gas networks</td>
<td>Electricity networks</td>
<td>Corporate services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disposal and energy recovery</td>
<td>Integrated water cycle</td>
<td>Public lighting and other services</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A description of the BUs and the related quantitative and economic data may be found in the 2015 Report on Operations published at [www.a2a.eu](http://www.a2a.eu)
The A2A Group

Size of the organization and markets served

The information given in the table and image below refer to the scope of the Consolidated Financial Statements of the A2A Group.

**Figure 3 | Dimension of the organisation and geographic areas of business* **

<table>
<thead>
<tr>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues (mln€)</td>
<td>5,604</td>
<td>4,984</td>
</tr>
<tr>
<td>Gross operating income (mln€)</td>
<td>1,133</td>
<td>1,024</td>
</tr>
<tr>
<td>Net result (mln€)</td>
<td>62</td>
<td>-37</td>
</tr>
<tr>
<td>Net debt (mln€)</td>
<td>3,874</td>
<td>3,363</td>
</tr>
<tr>
<td>Total equity attributable to the Group and minorities (mln€)</td>
<td>3,348</td>
<td>3,179</td>
</tr>
<tr>
<td>Dividend (€ per share)</td>
<td>0.033</td>
<td>0.0363</td>
</tr>
<tr>
<td>Average market capitalisation (mln€)</td>
<td>1,990</td>
<td>2,639</td>
</tr>
<tr>
<td>A2A people</td>
<td>12,392</td>
<td>11,971</td>
</tr>
<tr>
<td>Installed capacity (GW)</td>
<td>10.3</td>
<td>9.8</td>
</tr>
<tr>
<td>Electricity produced (GWh)</td>
<td>16,267</td>
<td>14,901</td>
</tr>
<tr>
<td>Heat distributed with district heating (GWh)</td>
<td>2,382</td>
<td>1,951</td>
</tr>
<tr>
<td>Waste treated (Kton)</td>
<td>2,017</td>
<td>2,668</td>
</tr>
<tr>
<td>Electricity distributed (GWh)</td>
<td>13,628</td>
<td>12,798</td>
</tr>
<tr>
<td>Gas distributed (Mcm)</td>
<td>2,076</td>
<td>1,739</td>
</tr>
<tr>
<td>Water distributed (Mcm)</td>
<td>63</td>
<td>60</td>
</tr>
</tbody>
</table>

* includes EPCG
** dividend proposed by the Board of Directors

**Figure 4 | Geographical areas of activity**

Updated to December 31, 2015
- Hydroelectric plants
- Thermoelectric plants
- Cogeneration plants
- Waste treatment plants
- Technological partnership
1 Governance
Governance

On June 13, 2014, the Shareholders’ Meeting of A2A appointed for three years, with the mechanism of the list vote, the Board of Directors (BoD) consisting of 12 members. The current members of the BoD are specified in the table below:

<table>
<thead>
<tr>
<th>Category</th>
<th>Name</th>
<th>Year of birth</th>
<th>Executive (E)</th>
<th>Non Executive (NE)</th>
<th>Independence code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairman (C)</td>
<td>Giovanni Valotti</td>
<td>1962</td>
<td>E</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Deputy Chairman (DC)</td>
<td>Giovanni Comboni</td>
<td>1957</td>
<td>NE</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Chief Executive Officer</td>
<td>Luca Camerano</td>
<td>1963</td>
<td>E</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Director</td>
<td>Antonio Bonomo</td>
<td>1951</td>
<td>NE</td>
<td>×</td>
<td>-</td>
</tr>
<tr>
<td>Director</td>
<td>Giambattista Brivio</td>
<td>1953</td>
<td>NE</td>
<td>×</td>
<td>-</td>
</tr>
<tr>
<td>Director</td>
<td>Maria Elena Cappello</td>
<td>1968</td>
<td>NE</td>
<td>×</td>
<td>-</td>
</tr>
<tr>
<td>Director</td>
<td>Michaela Castelli</td>
<td>1970</td>
<td>NE</td>
<td>×</td>
<td>-</td>
</tr>
<tr>
<td>Director</td>
<td>Elisabetta Ceretti</td>
<td>1966</td>
<td>NE</td>
<td>×</td>
<td>-</td>
</tr>
<tr>
<td>Director</td>
<td>Luigi De Paoli</td>
<td>1949</td>
<td>NE</td>
<td>×</td>
<td>-</td>
</tr>
<tr>
<td>Director</td>
<td>Fausto Di Mezza</td>
<td>1971</td>
<td>NE</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Director</td>
<td>Stefano Pareglio</td>
<td>1963</td>
<td>NE</td>
<td>×</td>
<td>-</td>
</tr>
<tr>
<td>Director</td>
<td>Secondina Ravera</td>
<td>1966</td>
<td>NE</td>
<td>×</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: C: Chairman - M: Member

1.1 | Sustainability governance

On November 12, 2015, the BoD resolved to extend the competence of the Territorial Committee to include matters of sustainability, changing its name to the Committee for the Territory and Sustainability and appointing director Stefano Pareglio as its Chairman.

The Committee has the task to assist with information, advice and proposals to the Board of Directors, the Chairman and Chief Executive Officer of the Group, in defining guidelines and initiatives regarding:

1. the promotion of a strategy that integrates sustainability into the business processes, in order to ensure the creation of value over time for shareholders and all other stakeholders;
2. the preparation, implementation and monitoring of a document relating to the Group Sustainability Policy;
3. the preparation, implementation and monitoring of the Group Sustainability Plan, which gives the strategic priorities, commitments and objectives, including of a quantitative nature, for the development of corporate social, environmental and economic responsibility;
4. the preparation of the Group Sustainability Report and any local reports and its integration with the economic-financial report;
5. the introduction of sustainability objectives into the MBO system in collaboration with the Appointments and Remuneration Committee;
6. the dissemination of the culture of sustainability amongst employees, shareholders, users, customers and, more general, stakeholders;
7. the assessment of the environmental, social and economic impacts of the business conducted in the territories;
8. the implementation and promotion of structured means of comparison with the territories in which the A2A Group operates, also through the implementation of initiatives of the involvement of all stakeholders;
9. the implementation and monitoring of actions proposed during the involvement of stakeholders;
10. the active participation in national and international working parties on Sustainability, Corporate Social Responsibility and relations with the territory;
11. the development of relations with institutions, organisations and research centres of known competence in Sustainability matters.

In 2015, the Committee for the Territory and Sustainability met 10 times. By way of further confirmation of the new guidelines, which see the central role for the Group played by values of economic, social and environmental sustainability, on November 12, 2015, the BoD resolved to start a development programme for the years 2016-2017 on Corporate Social Responsibility activities.
Interventions will focus on four areas:

- extension of the stakeholder involvement model to include 7 territorial areas, through the multi-stakeholder forum and local sustainability reports (1st forum in Brescia in June 2015);
- approval of the 2015 Sustainability Report by the Shareholders’ Meeting and subsequent evolution into an Integrated Report in accordance with the standards of the International Integrated Reporting Council (IIRC) framework;
- definition of a new 2016-2020 Sustainability Plan and introduction of environmental sustainability and social objectives into the management incentive system;
- development of internal training programmes to consolidate a shared approach to sustainability.

Under the scope of training for directors aimed at ensuring suitable knowledge of the sector, the company dynamics and their progress, in December 2015, an induction session was held in relation to the evolution of the sustainability reporting process and the Integrated report envisaged by the CSR Development Plan.

For more details on the process of delegation and self-assessment in the social, economic and environmental field, please refer to the Supplement and to the “Report on Corporate Governance and Ownership Structures” available from the Governance section of the Group website: www.a2a.eu

**A2A and adhesion to Global Compact**

A2A is a voluntary member of Global Compact, the UN initiative for the promotion of the business citizenship culture. Structured as a public-private partnership between the United Nations, the private sector, the governments and civil society, the GC encourages the creation of a sustainable social, economic and environmental framework. The A2A Group observes and supports the universal principles promoted by GC (such as human rights, employment rights, the fight against corruption and respect for the environment), integrating them into its strategy and business through the definition of concrete tools.

The Group guarantees a regular disclosure of significant information on said issues, both within and outside the Company and also through the advanced level Communication on Progress (CoP). In 2015, A2A took part in the “Reporting”, “Human rights” and “Sustainable supply chain” work groups set up by the Italian network of the Global Compact.
1.2 | Culture, ethics and the system of values

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

- Code of ethics
- Organisation, management and control model;
- Policy for quality, the environment and safety;
- Systems for the management of quality, the environment and safety;
- Sustainability policy of the A2A Group.

With a view to guaranteeing constant respect for the integrity and ethical values by all staff, the A2A S.p.A. Board of Directors, in its meeting held on June 22, 2015, approved the update of the A2A Group Code of Ethics, addressed to all beneficiaries and focused on the correctness and integrity of behaviour - both personally and collectively - both at work and in relations with colleagues and third parties.

In line with that reported in the corporate Code of Ethics, the Group bans all forms of corruption, unlawful favours, collusive conduct, requesting of advantages, conferral of material and immaterial benefits and other advantages aimed at influencing or remunerating representatives of institutions or their relatives, and Group employees.

The rules of conduct on which the Group’s activities are hinged, are inspired by the following values:

- Technological and managerial innovation;
- Efficiency and quality;
- Ethics and legality;
- Protection of the environment and health;
- Sustainability;
- Competence;
- Attention to people;
- Willingness to listen;
- Transparency;
- Social responsibility.

During the year, an update was also prepared of the Organisation, Management and Control Model, in accordance with Italian Legislative Decree no. 231/01 of A2A S.p.A..

The main Group companies have, in turn, adopted their own Organisation, Management and Control Models in accordance with Italian Legislative Decree no. 231/01. The Board of Directors of each of the above companies has appointed a Supervisory Body entrusted with the task of supervising the functioning and compliance of the Model and its constant updating.

All Group stakeholders can report through appropriate channels of confidential information, any violation or suspected violation of the Code, to the Supervisory Body or Internal Audit organisational structure. Reports can be made through the communication channels established (e.g. e-mail, ordinary mail) and as per the “Management of anonymous and other reports of the A2A Group” guideline issued on June 22, 2015 and published on the Group website.

The 27 Group companies that have adopted their own Organisation, Management and Control Models in accordance with Italian Legislative Decree no. 231/01 are systematically monitored with regards to risks connected with corruption.

In 2015 there were no incidents of corruption and there were no pending cases relating to corruption incidents with the exception of a single proceeding, relating to a previous manager of AMSA, in which the company has filed an appearance as civil party.

Activities have begun to improve the e-learning training tools and plan the training interventions to be delivered, following the new features of 2015.

All documents mentioned above are available at: www.a2a.eu

For more information, please refer to the governance section of the website: www.a2a.eu

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1 The number of companies specified refers to the companies included in the Consolidated Financial Statement.
2
Risks and opportunities
2 | Risks and opportunities

With the increase in the complexity and “volatility” of the context in which the organisations operate, Risk Management has developed considerably in recent years. Today, large groups are increasingly aware that, in order to guarantee the solidity and stability of the company, the Management needs to take risks in an aware manner. The term “Risk Management” is used to refer to an articulated set of processes through which businesses identify, assess, quantify, monitor and mitigate risks connected with their business and the relevant sector.

2.1 | Analysis and management of risks and opportunities

The A2A Group has a Risk Management structure in place to monitor the volatility of commodity prices (i.e. the variability of the prices of the main energy vectors managed), which is considered as one of the most complex risks for the utilities sector.

It has also implemented a risk measurement and detection process on the basis of the Enterprise Risk Management method\(^2\), developed in order to make business risk management an integral and systematic part of the business management processes.

The Group Risk Management organisational unit is pursuing its evolution plan that envisages a progressive integration of the activities of Enterprise Risk Management with the management processes, a consolidation of the process of analysing and measuring mitigation actions and specific training support on all levels.

The main news connected with the Risk Management process regard:

- development of the structure of the processes on a corporate level (in line with the approval of the new “Guidelines for the internal control and risk management system”);
- introduction of the matter of risk management under the scope of the regular Business Reviews;
- development of the matter of “Risk appetite” also with reference to the role played by the Board of Directors.

\(^2\) The reference model for internal control prepared by the American Treadway Commission called COSO (Committee of Sponsoring Organizations) Report.
The Risk Management model is expressed through an integrated risk management process, which values the systems and processes used for management as already existing in the individual business units, promoting the standardisation with the specific Risk Management tools and methods.

This model, is not a static reference, it is subject to periodic revision consistent with the evolution of the company and the context in which it operates. More specifically, the main drivers considered refer to the company mission, the nature and diversification of the business units, the growth plan, the strategic objectives and the environment (competitive, legislative and regulatory), competition, the macroeconomic context characterised by growing sensitivity towards environmental matters.

Initially implemented on a Group level, the risk management process is developing a further structure both on the level of business units and the company (in particular for companies of significant strategic value). Below is a summary of the main types of risks mapped by the Group.

The risks analysed by the Group relate to internal variables rather than external phenomena and those characterising the development lines and strategy. Through the involvement of all corporate structures, the risk measurement process is regularly activated, enabling the identification of the most significant critical issues, the measures to monitor them and the mitigation plans.

**Figure 6** | The main categories of risks mapped
2.2 | Process for the identification and management of risk connected with climate change

Within the “Risks Model”, there is a category of risks connected with “Natural events”, which is divided up into “Climate change” and “Natural phenomena”.

Risks relating to “Natural phenomena” refer to the potential consequences, in terms of health and safety, environment, interruption of business operations and continuity of service, connected with the possible inadequacy or ineffectiveness of contingency plans for the mitigation of the impacts of unforeseen or extreme natural phenomena in terms of intensity.

The risks relating to “Climate change” refer to the possibility that the production and consumption of products (electricity, gas for heating) and services (district heating) may be negatively influenced by climate conditions (e.g. scarcity or excessive rainfall in the thermal season).

The Group has taken the following mitigation actions:

<table>
<thead>
<tr>
<th>Impacts</th>
<th>Mitigation actions</th>
<th>Link to text</th>
</tr>
</thead>
</table>
| Group reputation | • Green investments in plants for the production of electricity from renewable sources.  
• Development of energy-efficient projects through the increase in the district heating network, the renewal of plants and systems and projects to modernise the public and private property heritage.  
• Respect of emissions in line with legislation and transparent communication. | • Hydroelectric and photovoltaic plants (page 42).  
• Development of district heating (page 49).  
• LED systems (page 47).  
• Reconversion of plants (page 44-45).  
• Sustainability rating (page 36). |
| Evolution of consumer trends and habits | • Supply of green products.  
• Supply of energy-efficient services. | • Research and development on Smart grids (page 86). |
| Compliance | • Implementation of emissions monitoring systems at plants. | • Emissions monitoring system (page 54).  
• Plant certification system (page 53).  
• Environment markets (page 56). |

The Group has also taken out insurance cover by way of a mitigating action (for direct and indirect damages) for all assets owned by A2A.

With reference to the risks connected with natural events and health and safety, please refer to paragraphs 7.1 and 8.2.
The Business Model and Strategy
The A2A Group has developed a multi-utility business model in the production, sale and distribution of gas and electricity, district heating, environmental services and the integrated water cycle.

**MISSION**

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, that intends to pursue its path of excellence, leveraging its strong connection to the local territory and developing new geographic and business areas to ensure continued value added for customers, suppliers, employees, shareholders, community members, and institutions.

The business model pursued by the Group is that of a “multi-utility of territories” on which a business project is hinged that seeks to consolidate strengths to create opportunities for growth and development for all, for businesses monitored and for territories.

The relationship between business and territorial systems is a key element in the multi-utility sector: the business of local public services is based on activities that require a local rooting, and it is on a local level that businesses have built and continue to build scale economies, synergies and industrial efficiency.

The Group’s aim is to construct a multi-utility model that is strongly integrated into its territories, able to create and distribute a progressive social dividend over time, to all its stakeholders.

Below is the A2A Group business model showing the correlation between the key inputs and capital on which the organisation depends (Natural, Manufacturing, Intellectual, Relational, Financial and Human), which are converted into outputs (products and services) through business activities, generating outcome in order to achieve the organisation’s strategic objectives and create value in the short-, medium- and long-term.
Figure 7 | The A2A Group business model

Sustainable Value

2030 Sustainability Policy

2016 – 2020 Business and Sustainability Plan

Governance

Principles

Corporate BU

Environment BU

Commercial BU

Generation BU

Networks and Heat BU

Risk Management

Strategy

MISSION & VALUES

The six capitals

Human

Financial

Relational

Intellectual

Manufacturing

Natural

Process for the creation of sustainable value in the short-, medium- and long-term

Statement of compliance

Statement of the level of compliance with GRI guidelines

Stakeholder engagement and Materiality analysis

Financial capital

Manufacturing capital

Natural capital

Human capital

Intellectual capital

Relational capital

Governance Principles

MISSION & VALUES

BU

Environment

Corporate

Commercial

Generation

Networks and Heat

BU

Strategy

Human Financial Risk Management Intellectual Relational Manufacturing Natural

Governance

The A2A Group

Risks and opportunities

Sustainable Value

2015 Sustainability Report
3.1 | Representation of the value chain

Figure 8 | Summary representation of the main value chains of the A2A Group
3.2 | Strategy

A2A is the multi-utility with national leadership in environmental services and district heating and operates at the very top of the energy and networks sectors. The Group is an innovative reality that looks to the future with competence and responsibility, also thanks to a business model based on diversification and synergy between all its activities, characterised by an approach focused on the environment and territory.

The A2A Group strategy is outlined in the 2016-2020 Business Plan and aims to confirm the sustainable growth path already undertaken in 2015. The Plan seeks to gradually reposition A2A in a strategic sector in which it will continue to grow with greater profitability, through an efficient management of its resources, maintaining a good economic-financial balance.

The strategic actions rely on the Group’s growth in the businesses in which it already holds a leadership position, namely: environment, networks and energy services; on the significant competences accrued, essential in staying ahead of and coping with future trends in all sectors of business applicable. The Plan aims to have the Group act as a guide in the sector, able to ensure the very best quality of service standards for its customers, pursuing industrial development objectives that can generate value for shareholders, employees, territories and communities served. The Business Plan will provide a common thread for the next 4 years, comprising concrete projects, innovation and competence.

3.3 | 2016-2020 Business Plan

The Business Plan unveiled in 2015 has undergone an annual review, as part of which, in addition to analysing the progress made with respect to the goals set by the Group, certain targets have been updated and adjusted.
The six macro areas

**RESTRUCTURING**: optimisation and reduction of exposure in the thermoelectric sector, through a reconversion of plants and an investment plan intended to make existing Combined Cycles more flexible.

**RELAUNCH**: reinforcement of the leadership position in sectors characterised by excellent prospects for development and margins (environmental, gas distribution, district heating and retail commercial on the free market).

**REDESIGN**: identification of the growing options stemming from smart cities and the green economy, by means of gradual, scalable investments.

**DISCIPLINE**: creation of an effective and efficient organisation and a policy of growing dividends, in line with the financial solidity of the Group.

**DIALOGUE**: valuation of employees and the quality of life in the communities, also through the launch of territorial Sustainability Reports accompanied by precise commitments undertaken in stakeholder forums.

**DIGITAL**: technological transformation, by means of the use of new communication channels to obtain a new, more innovative repositioning that is closer to the residents.

The set of actions described above will contribute to achieving the following expected results:

- **Relaunch of investments**: 2.2 billion euros in investments in five years.
- **Significant EBITDA growth**: 1.3 billion euro of gross operating income in 2020.
- **Growth of the return on investment (ROI)**: from 10% to 12%.
- **Further reduction in debt**: Net Financial Debt equal to about 2.4 billion euros in 2020, down 545 million euros compared to 2015. Improvement in Net Financial Debt/EBITDA ratio from 2.8x in 2015 to 1.8x in 2020.
- **Relaunch of the dividends policy**: cash generation supports the increase in dividends.

For more information, please refer to the 2016-2020 Business Plan, available from the Company section of the website: [www.a2a.eu](http://www.a2a.eu)

### 3.4 | 2016-2020 Sustainability Plan and Policy

As part of the implementation of the Business Plan, in November 2015, the A2A Board of Directors resolved to start a programme to develop Corporate Social Responsibility activities, in line with the best international practices. The main objectives of the Programme include the foreseen preparation of a Group Sustainability Policy and the definition of a Sustainability Plan, which envisages objectives that can be quantified over a time frame that is in line with the Business Plan, until 2020. The Sustainability Policy is a declaration to the management, employees, customers and other Group stakeholders of the values and commitments in order to guide the actions and conduct of all Stakeholders.
More specifically, the commitments made by A2A have been laid out around four macro trends characterising the sector:

1. Circular economy:
   - Develop the sustainable management of waste throughout the life cycle, through a further increase of separate waste collection, an increased treatment and recovery capacity in Group plants and technological innovation and the promotion of responsible behaviour, so as to minimise use of landfills, to the benefit of health and the environment.

2. Decarbonisation process:
   - Contribute towards achieving the national and European Community objectives for the reduction of GHG emissions in electricity generation.
   - Reduce carbon intensity in electricity generation, favouring the use of renewable sources and low CO2 emission energy carriers.
   - Develop high-efficiency district heating and district cooling, privileging the use of and integration with renewable sources, the recovery of cogenerated and reject heat and ensuring a positive contribution to air quality in cities.
   - Increase use by and fidelity of customers for electricity from renewable sources.
   - Promote energy efficiency and the use of renewable sources in ultimate uses.

3. Smartness in systems and services
   - Increase the resilience and degree of reliability of systems by increasing investments in technological innovation of infrastructures and management systems, so as to ensure high quality standards of the services supplied to users and help towards the sustainability of the cities and communities, including through the enabling and implementation of systems and tools able to stimulate the adoption of virtuous, aware behaviour by end customers as regards energy consumption.

4. People innovation:
   - Promote innovative solutions for the economic and environmental sustainability of the business, to attract talent, increase transparency and improve dialogue with stakeholders, actively helping increase the well-being of communities and improve working conditions.

The path undertaken to define the Sustainability Plan has involved the top management and directors of the main Group areas in times of sharing and a comparison of ideas on the business strategies to be adopted.

To translate the Group commitments into concrete action, A2A has referred to the 17 Sustainable Development Goals to 2030 set by the United Nations, which provide an adequate response to the most important needs towards a future marked by standards of fairness, inclusion and growth of the Planet’s resource limits.

The setting out of the Global Goals shared internationally and to which the main countries’ leaders across the world have subscribed in their business activities, is one of the most innovative, cutting-edge methods in terms of the sustainability strategy. For each goal, specific targets have been set, i.e. long-term, concrete, measurable commitments (2030). From these, A2A has then identified 29 feasible actions in the medium-term (by 2020), in line with the 2016-2020 Business Plan.

The actions of the Sustainability Plan are described in this Report, at the start of each chapter and, together with the material aspects, as an indication of the improvements envisaged for sustainability in the next five years.

For more information, please refer to the 2016-2020 Sustainability Plan, available from the Sustainability section of the website: www.a2a.eu
Stakeholder engagement and materiality analysis
For a Group like A2A, knowing how to listen and then react in a precise, effective manner to the expectations of the community is the basis on which sustainability can become tangible, and shared value generated and distributed in a lasting, harmonious manner, conciliating the needs of the various players with which the Group interacts. In this virtuous interplay of relations and interests, it is important to see that the main stakeholders often play a double role, for example: the municipalities in which the Group operates are also shareholders; the institutions with which it compares notes are also customers; the residents (and therefore the public) are, in turn, the greatest consumers of the services; customers also include employees and suppliers. In 2013, a structured reporting system was introduced on stakeholder engagement activities through the development of a specific Group database. During meetings and external involvement, stakeholders thus become players leading the change and promoting the evolution of the Group sustainability strategies.

In 2015, approximately 400 engagement initiatives were organised. The most involved stakeholders are the local communities and institutions and associations of Milan, Brescia, Naples, Bergamo, Valtellina and Friuli Venezia Giulia.

### Stakeholder engagement and materiality analysis

**Figure 10 | Material issues addressed during engagement initiatives**

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal and external communication to stakeholders</td>
<td>33%</td>
</tr>
<tr>
<td>Responsible management of the business units</td>
<td>14%</td>
</tr>
<tr>
<td>Support for initiatives and projects in the region</td>
<td>12%</td>
</tr>
<tr>
<td>Quality of services provided and attention to customers</td>
<td>4%</td>
</tr>
<tr>
<td>Environmental education programs and initiatives</td>
<td>14%</td>
</tr>
</tbody>
</table>

**Figure 11 | Stakeholders involved in engagement initiatives**

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutions</td>
<td>23.3%</td>
</tr>
<tr>
<td>Local community/residents</td>
<td>15.7%</td>
</tr>
<tr>
<td>Media</td>
<td>13.1%</td>
</tr>
<tr>
<td>Civic committees/spontaneous committees</td>
<td>7.6%</td>
</tr>
<tr>
<td>Employees</td>
<td>3.4%</td>
</tr>
<tr>
<td>Customers</td>
<td>3.7%</td>
</tr>
<tr>
<td>Ass. of Consumers</td>
<td>4.4%</td>
</tr>
<tr>
<td>Ass. of Environmentalists</td>
<td>0.8%</td>
</tr>
<tr>
<td>Multi-stakeholders</td>
<td>0.8%</td>
</tr>
<tr>
<td>Shareholders and investors</td>
<td>0.3%</td>
</tr>
<tr>
<td>Political movements</td>
<td>0.3%</td>
</tr>
<tr>
<td>Other</td>
<td>3.1%</td>
</tr>
</tbody>
</table>
Apertura e Ascolto [Opening and listening] is the name given to the new route that A2A has embarked upon to improve its capacity to read and interpret the expectations of all stakeholders. On June 8, 2015, A2A organised the first multi-stakeholder forum for the territory of Brescia, which involved 40 different external stakeholders, according to their capacity to contribute towards the analysis of the needs of the territory and generation of ideas. The multi-stakeholder forum was organised through plenary sessions and round tables to facilitate the identification of shared visions and proposed ideas. The round tables revealed 19 ideas, of which 5 were considered to be high impact and extremely relevant in terms of sustainability and alignment with the Business Plan objectives; these will be developed by the end of 2016. On September 21, 2015, the results were presented to the stakeholders.

Figure 12 | Ideas selected

<table>
<thead>
<tr>
<th>Idea</th>
<th>Description</th>
<th>Works progress report</th>
</tr>
</thead>
<tbody>
<tr>
<td>A chain certified for energy efficiency</td>
<td>Creation of a network of professionals to develop energy efficiency interventions for domestic and business customers.</td>
<td>The local technical partner is currently being chosen to develop and sell A2A Energia branded heaters.</td>
</tr>
<tr>
<td>Energy bank</td>
<td>A solidarity initiative towards customers who have the possibility of “symbolically donating kWh or m3” (in actual fact euros) to users experiencing temporary financial difficulties.</td>
<td>The executive design is currently in progress, involving the A2A Group, ASM Foundation and AEM Foundation. The initiative is expected to launch in September 2016.</td>
</tr>
<tr>
<td>District cooling, a resource to be investigated</td>
<td>Package of offers addressed to a target of customers of the tertiary and commercial sector, for the district cooling service by means of absorbers.</td>
<td>In summer 2015, a test was run on an absorber at the offices in Via Malta, Brescia; by the end of next summer, a 100 kW unit is to be installed at the former Psychiatric Hospital of Brescia and other installations are currently being considered in various municipal buildings.</td>
</tr>
<tr>
<td>For aware consumption</td>
<td>Theatrical show on the matter of water as a resource to mark the international day of water, and preparation of a cold and fizzy water distribution point supplied by the public aqueduct (Water Point).</td>
<td>The “mobile” installation for the disbursement of drinking water is currently being developed. The agreement has been implemented with Ambiente Parco with free teaching routes for the schools of Brescia (100 classes a year), enriching the external exhibit.</td>
</tr>
<tr>
<td>Environmental education</td>
<td>Partnership between local associations and the ASM foundation to develop teaching paths on the waste cycle for the schools of the province of Brescia.</td>
<td>With the start-up of the new separate waste collection system in Brescia, the city will have a specific campaign organised for first and middle schools, with a letter being sent out to explain the new waste collection system; in collaboration with Telaio Theatre, an installation will also be prepared at the Natural Science Museum, on the recycling of waste, accessible free of charge to schools and offering families a cycle of theatrical events on the matter, in collaboration with the Brescia Theatre Centre.</td>
</tr>
</tbody>
</table>

The results of the first multi-stakeholder forum, together with the economic, social and environmental performance of A2A on the territory of the province of Brescia, are included in the first Local Sustainability Report, the first document to report on the information and quantitative data developed on a local level.

The Brescia Local Sustainability Report is available at: www.a2a.eu

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1 The multi-stakeholder forum was run in accordance with the EASW (European Awareness Scenario Workshop) method developed on a European level, which envisages the involvement of various categories of stakeholders in plenary sessions and parallel round tables.
4.2 | Materiality matrix and analysis

In 2015, the A2A Group materiality matrix was updated. To measure the importance for stakeholders, the assessments were considered as emerging from:

- a survey conducted in July 2015 by means of direct e-mail marketing and which targeted A2A Energia customers;

To measure the importance for A2A, the various issues were assessed by the Group companies/management teams involved.

Figure 13 | Materiality matrix
As compared with the previous Sustainability Report, a new issue “Innovation and smart cities” has been included, which emerged during the Brescia multi-stakeholder forum.
The Group undertakes to manage the financial resources generated from the business activity in a responsible manner and with a view to creating value in the medium/long-term for the company and all its stakeholders, guaranteeing the necessary transparency and correctness in the communication of results to its investors.

- Growth and distribution of value added between the various stakeholders
- Investment plan

The consolidated net operating result amounted to 215 million euros. After deducting the result attributable to minorities, the “Group net result of the year” was positive for 73 million euros (negative for 37 million euros for the year ended December 31, 2014).

Revenues earned by the Group in 2015 are 4,921 million euros, with consolidated gross operating income of 1,048 million euros, up 24 million euros on 2014.
5.1 | Value added produced and distributed

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.

This parameter measures the financial effect of the business of the A2A Group on its main stakeholders and therefore the Group’s capacity to create value for its stakeholders.

To determine the formation of value added, A2A uses the methodology defined Social Accounts Group (Gruppo per il Bilancio Sociale - GBS).

In 2015, the gross global value added distributed by the Group was 1,263 million euros. Most of this was allocated to staff compensation (466 million euros), company remuneration (355 million euros) and transfers to the public administration (261 million euros).

5.2 | Relations with shareholders

The parent company, A2A S.p.A., is listed on the Milan stock exchange. The A2A share is traded on the electronic stock market and belongs to the FTSE-MIB segment and falls within the “Public Utilities - Electricity” sector. Under article 9 of the company’s By-laws, 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.

Figure 14 | A2A’s shareholding structure (at December 31, 2015)*

A2A has about 96,000 shareholders, divided between institutional investors and retail investors.

Institutional investors hold approximately 31.5% of the share capital (20.4% in 2014). 26.3% of the free float in the hands of institutional investors is held by British investors, 24.9% by Italian investors, 15.0% by US investors. There are also French (10.6%), Luxembourg (8.8%) and German (4.1%) institutional investors.

Please note that there are also ethical investors amongst the shareholders, such as Norges Bank and Etica Sgr. Retail investors total approximately 95,000 and together hold 16.2% of share capital (19.3% of 2014). 99.4% of the retail shareholding is resident in Italy and in particular, 55.2% in Lombardy. Investors residing in the provinces of Milan and Brescia hold 25.2% and 11.8%, respectively, of the total retail.

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*Source: CONSOB for shareholdings exceeding 2%

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4 The figures have been prepared on the basis of the shareholders’ register updated as of the distribution of the dividend on June 24, 2015.
Figure 15 | Share indicators

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings per share (EPS) (euros)</td>
<td>0.020</td>
<td>(0.012)</td>
<td>0.023</td>
</tr>
<tr>
<td>Dividend per share (DPS) (euros)</td>
<td>0.033</td>
<td>0.0363</td>
<td>0.041*</td>
</tr>
<tr>
<td>Dividend Yield (DPS/P)**</td>
<td>5.20%</td>
<td>4.3%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Number of shares (million)</td>
<td>3.133</td>
<td>3.133</td>
<td>3.133</td>
</tr>
</tbody>
</table>

* dividend proposed by the Board of Directors  
** Calculated on average share price

A2A in the stock market indices

Among the factors affecting share performance in 2015 were those arising from macro-economic and government policy trends, as well as capital flows on the international financial markets.

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

- the launch of the new 2015-2019 Strategic Plan;
- achievement of the objectives to reduce controllable costs;
- the growth of the dividend distributed;
- continuation of the trend of reducing the amount and the cost of debt;
- the growth of the quarterly industrial results, which exceed expectations, despite the particularly adverse effects of the energy scenario;
- the sale by the Municipalities of Brescia and Milan of a corporate share of 5%;
- the initiatives connected with sector consolidation.

A2A forms part of the following indices: FTSE MIB, STOXX Europe, EURO STOXX, WisdomTree and S&P Developed Ex-US.

Note on method

The A2A Group

Governance

Risks and opportunities

The Business Model and Strategy

Stakeholder engagement and Materiality analysis

Financial capital

Value added produced and distributed

Relations with shareholders

Relaunch of investments

Manufacturing capital

Natural capital

Human capital

Intellectual capital

Relational capital

Statement of compliance

Statement of the level of compliance with GRI guidelines
A2A in the sustainability ratings

Sustainability is applied more and more frequently also in finance and investors attentive to criteria of environmental, social and economic responsibility are identified with the phrase “Environmental, Social & Governance Investor”.

Even the A2A Group is assessed and analyzed according to said criteria by analysts and investors and the stock is included in specific indexes, commonly called ethical indices or sustainability indexes, such as:

- ECPI Ethical Index EMU;
- Axia Sustainable Index;
- Solactive Climate Change Index;
- FTSE ECPI Italia SRI Benchmark Index;
- Standard Ethics Italian Index;
- ESI Excellence Europe.

Since May 2013, A2A has been included in the ETHIBEL EXCELLENCE Investments Register. A2A also participates in the annual assessments of the CDP (Carbon Disclosure Project) of Vigeo and ETICA SGR.

Figure 16 | Performance of the A2A stock with respect to FTSE MIB and EURO STOXX UTILITIES

Figure 17 | A2A in the stock exchange

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average capitalisation (millions of euro)</td>
<td>2,639</td>
<td>3,405</td>
</tr>
<tr>
<td>Market capitalisation at December 31 (millions of euro)</td>
<td>2,624</td>
<td>3,929</td>
</tr>
<tr>
<td>Average volumes 15,847,798</td>
<td>17,204,368</td>
<td></td>
</tr>
<tr>
<td>Average share price* (euros per share)</td>
<td>0.842</td>
<td>1.087</td>
</tr>
<tr>
<td>Maximum share price* (euros per share)</td>
<td>1.029</td>
<td>1.352</td>
</tr>
<tr>
<td>Minimum share price* (euros per share)</td>
<td>0.701</td>
<td>0.792</td>
</tr>
</tbody>
</table>

* Euros per share (source: Bloomberg)
Relations with shareholders and investors

A2A is constantly committed to providing answers as precise and exhaustive as possible to the needs and specific requests of financial stakeholders. To this end, various communication tools and channels are used:

- company documents (financial statements, interim reports, corporate presentations);
- documentation ad hoc (Investor Guidebook, Investor Databook, documents of the Library for the investor);
- press releases;
- “A2A Business Plan News” newsletter (on-line);
- “Letterazionisti” newsletter (on-line and hard copy);
- meetings with analysts and shareholders (road shows, one-to-one meetings, group meetings, conference calls, presentations at events, seminars on specific sector issues, etc.).

As for the coverage of the analysts, at the end of 2015, A2A was followed by 13 different brokers.

Internet communication (website and mailing) is particularly important and, in 2015, the Investors section of the website was further expanded:

- the subsection “Library for the investor” was enriched with further contents, with the publication of specific studies regarding the markets in which the Group operates;
- new information was added to the Investor Guidebook, a document that provides a comprehensive overview of A2A through the use of the main public information available;
- the set of economic-financial data of the Investor Databook has been expanded upon, in particular envisaging not only the historic information from 2008, but also a part dedicated to prospective data, useful for analysts’ modelling.

As regards communication with the institutional investors and analysts, in 2015 a new web newsletter was launched (the “A2A Business Plan News”), which illustrates the main updates connected with the Strategic Plan.

The web also provides an effective communication channel with retail investors: the A2A website publishes the answers to the most frequently asked questions (FAQs).

The Investor Relations unit also provides timely responses to specific questions raised by small investors (especially by e-mail).
Financial capital

5.3 Relaunch of investments

Capital expenditure totalling 341 million euros (+11% vs. 2014) was made in the A2A Group’s various sectors in 2015. 28% of investments related to environmental aspects, such as: actions to reduce emissions, increase energy efficiency, development of renewable sources and innovation.

Figure 19 | Investments in % by business unit

![Figure 19](image_url)

Figure 20 | Environmental investment (millions of euro)

<table>
<thead>
<tr>
<th>Investment classification</th>
<th>Generation and Trading Business Unit</th>
<th>Networks and Heat Business Unit</th>
<th>Environment Business Unit</th>
<th>Corporate Business Unit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emissions reduction</td>
<td>19.22</td>
<td>12.97</td>
<td>2.69</td>
<td>0</td>
<td>34.88</td>
</tr>
<tr>
<td>Energy efficiency</td>
<td>0.19</td>
<td>12.60</td>
<td>1713</td>
<td>0</td>
<td>29.92</td>
</tr>
<tr>
<td>Renewable sources</td>
<td>11.09</td>
<td>0</td>
<td>4.80</td>
<td>0</td>
<td>15.89</td>
</tr>
<tr>
<td>Innovation</td>
<td>14.30</td>
<td>0</td>
<td>1.00</td>
<td>0.11</td>
<td>15.41</td>
</tr>
<tr>
<td>Total</td>
<td>44.80</td>
<td>25.57</td>
<td>25.62</td>
<td>0.11</td>
<td>96.1</td>
</tr>
</tbody>
</table>

Investments mainly related to interventions to reduce emissions: in 2015, in fact, investments continued for the installation of the denitrification plant in Monfalcone (see page 68) and the installation and start-up of the new heaters in Lamarmora (see page 72).

As regards energy efficiency drives, we note the increased efficiency achieved at all the Group’s waste-to-energy plants and the replacement of the public lighting systems with LED solutions, in the cities of Milan, Brescia and Bergamo.

To develop renewable sources, in 2015 A2A invested to improve the technological status of all its hydroelectric units, as well as envisaging an increase in the power of the Sillaz waste-to-energy plant (see page 41).
Manufacturing capital

A2A is constantly committed to increasing the efficiency of its plants, both in terms of productivity and environmental impact, through the search for and use of the very best technologies available on the market today, both nationally and internationally.

An up-to-date description of the Group plants is available from the following link: a2a.eu/it/societa/dove_siamo
6.1 | The manufacturing capital in the Environment Business Unit

The plants managed by the Environment BU cover all the stages of the integrated waste cycle, from collection through to treatment and recovery in the form of energy or materials or definitive storage, thereby maximising the creation of value.

Figure 21 | Plant types and geographic location of the Environment BU

<table>
<thead>
<tr>
<th>Number of plants</th>
<th>Type of plants</th>
<th>Capacity</th>
<th>UoM</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Material treatment and recovery</td>
<td>805,900</td>
<td>t/year</td>
</tr>
<tr>
<td>5</td>
<td>Waste-to-energy plants</td>
<td>204 628</td>
<td>MWe MWT</td>
</tr>
<tr>
<td>10</td>
<td>Biogas production</td>
<td>11.9 2.2</td>
<td>MWe MWT</td>
</tr>
<tr>
<td>7</td>
<td>ITS</td>
<td>682,000</td>
<td>t/year</td>
</tr>
<tr>
<td>15</td>
<td>Landfills</td>
<td>6,375,530</td>
<td>t</td>
</tr>
</tbody>
</table>

[Map showing plant types and geographic location]
The energy recovery of the residual fraction of waste, implemented downstream of the separate waste collection, with high energy performance plants and advanced fume purification systems, has significant benefits for the environment: it guarantees not only savings of natural sources, but also a reduction in CO₂ emissions and only marginal use of disposal in landfills.

These plants are an important source of thermal energy for the territories serviced by A2A’s district heating and contribute, for a significant portion, to the Group’s electricity production.

Waste-to-energy is not an alternative to separate waste collection, rather it enables energy to be recovered from waste that cannot be further separated and recovered, and which would otherwise be sent to a landfill.

In this sense, the waste-to-energy plants meet the priority management of waste envisaged by European Community Directives. The Group’s 5 waste-to-energy plants are located in: Bergamo, Brescia, Corteolona, Filago and Milan. A2A manages the Acerra waste-to-energy plant in the province of Naples, owned by the Region of Campania; it does not, therefore, come under the scope of consolidation of this Report.

A2A Environment also manages controlled landfills for solid municipal waste and special waste equivalent to municipal waste, and other landfills that the Group has under post-operative management. In all landfills, energy recovery of biogas also takes place and consequently energy production. The biogas is generated by the biological activity present in the landfills and “digesters” of the sludge at the water purification plants. A2A intercepts it and recovers it to produce electricity or thermal energy, often used to cope with the energy demands of the actual plants.

The material treatment and recovery plants include some plants for the treatment of special waste, the glass recovery plant of Asti, which processes glass-based waste deriving from separate waste collection and transforms them into product, in accordance with Reg. 1179/2012 and waste washing plants, mainly intended for waste deriving from road clearing and aimed at recovering inert materials, like sand and gravel, after removing any polluting substances.

Intelligent Transformation Stations (ITS®) are plants used to recover the Residual Fraction of Solid Municipal Waste after separate waste collection.

Extraordinary maintenance of the Silla2 waste-to-energy plant

In 2014, the extraordinary maintenance project got underway on the Silla2 waste-to-energy plant in Milan; this envisages:

- adjustments of the heaters with the introduction of additional exchanging surfaces, protective coatings and more efficient cleaning systems;
- extension of the fumes treatment line, adjustment of the electrical filters, catalytic denitrification plants and the reagent injection system;
- installation of a new turbine-generator unit to optimise the larger quantity of steam produced;
- adjustment of many of the water-steam cycle components and electrical systems.

In 2015, the preliminary and collateral works were carried out. Maintenance proper will be started in summer 2016 (first line) and conclude in 2017 (another two lines). After the completion of these works, nominal thermal power will be increased by 15%.
6.2 | The manufacturing capital in the Generation and Trading Business Unit

The Generation and Trading BU controls most of the installed capacity of the Group’s electricity and thermal energy production plants. The main sources for the generation of electricity come from hydroelectric and thermoelectric systems.

**Figure 22 | Plant types and geographic location of the Generation and Trading BU**

<table>
<thead>
<tr>
<th>Number of plants/units</th>
<th>Type of plants/units</th>
<th>Installed capacity MWe</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Hydroelectric units</td>
<td>1,998</td>
</tr>
<tr>
<td>9</td>
<td>Thermoelectric plants</td>
<td>7,535</td>
</tr>
<tr>
<td>5</td>
<td>Photovoltaic plants</td>
<td>3.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>9,536.6</strong></td>
</tr>
</tbody>
</table>

![Map of Italy with plant types indicated]

- **Hydroelectric**
- **Thermoelectric**
- **Photovoltaic**
Hydroelectric energy is one of the resources that the A2A Group has traditionally privileged, in view of the flexibility in production and its important contribution to economic and environmental sustainability. Hydroelectric plants are both with “flowing water” and “storage”.

Production takes place in 4 hydroelectric units: Valtellina, Mese, Calabria and Udine. The A2A Group theremoelectric production plants mainly (66% of the total) consist of plants based on high-performance combined cycle technology, powered by methane gas, like the plants situated in Cassano d’Adda (MI), Gissi (CH), Ponti sul Mincio (MN) – owned jointly with other companies - Chivasso (TO), Piacenza and Sermide (MN).

The plants of Monfalcone (GO) and Brindisi are coal-powered, whilst the plant of San Filippo del Mela (ME) is powered by fuel oil.

**Reduction of Heavy Fuel Oil (HFO) deposits**

The liberalisation of the electricity market, the start-up of a great many high-efficiency, combined cycle gas plants and the simultaneous development of the mechanisms supporting renewable energy plants in recent years, have directly resulted in a reduction in the use of Heavy Fuel Oil in conventional thermoelectric plants.

This is why the A2A Group has decided to start procedures and operative activities to reduce the quantity of Heavy Fuel Oil present in the tanks of some of its thermoelectric plants.

This will have the positive effect of reducing the environmental risk connected with the management of Heavy Fuel Oil deposits and will result in these plants no longer being classified as “Plants at Risk of Major Accidents” (RMA) and the application of the “Seveso Directive”.

One example is the thermoelectric plant of Brindisi, where the procedure has begun to reduce this, with the emptying of the Heavy Fuel Oil still present in the supply lines and deposit tanks and its subsequent transfer to the San Filippo del Mela plant (the only Group plant that is still able to use this fuel to produce electricity, as it is still an essential plant for Sicily), after obtaining the necessary authorisations from the competent entities.

The entire activity will be completed in October 2015. The same procedure is currently reaching completion at the thermoelectric plant of Sermide.

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5 On December 28, 2015, the partial spin-off contract was signed for the Udine Unit of Edipower, with effect as from January 1, 2016. By virtue of this operation, Cellina Energy S.r.l. is assigned the complex comprising the hydroelectric plants constituting the Udine Unit, with the exception of the hydroelectric plants of Ampezzo and Somplago and the related works.
Reconversion of the San Filippo del Mela plant

The thermoelectric plant of San Filippo del Mela currently houses 4 conventional units (heater - steam turbine), powered by fuel oil, which ensure that the demand for energy of the Sicilian network that is not covered by the other production units on the island nor by the current connection with the regional network, is met, thereby guaranteeing the relevant stability.

With the strengthening of the connection to the national electricity grid (by means of the Terna Sorgente-Rizziconi cable), which is expected to start-up by end 2016, the San Filippo del Mela plants will no longer be competitive and destined to close.

In putting its extensively diversified know-how to good use, A2A has prepared a project to reconvert the production site, which will guarantee:

- a response to the need of the region of Sicily to close the waste cycle with suitable, necessary plants, even if levels of separate waste collection are achieved that are in line with the national objectives;
- the optimisation of the plants and infrastructures already present and the consequent savings in the use of further land and territory, today intended for non-industrial purposes;
- the optimisation of the competences and professionalism already present in the territory.

A2A has therefore planned the complete transformation of the San Filippo plants into an integrated energy pole based on renewable energies, achieved using cutting-edge technology, mainly comprising:

- a new plant for the creation of energy from SSF (Secondary Solid Fuel deriving from a waste treatment process) with a potential of approximately 200 MWe and 60 MWe;
- a new-design type thermodynamic solar plant of approximately 1.5 MW, able to guarantee the storage of thermal energy for approximately 5-6 hours;
- a new anaerobic digestion plant producing biomethane, able to use a wide range of biomasses;
- photovoltaic plants already operating on the site for the production of energy in the network (total peak power approximately 800 kWp).

In thus doing, the potential of all renewable energy available on the island is optimised, at the same time as reducing use of waste landfills (currently the only method of disposal used in Sicily). The new Secondary Solid Fuel plant will guarantee furnace emissions that are considerably below legal limits, thanks to the careful design of the fumes treatment plants, the most modern, efficient technology available and the lower values than current emission levels of the site’s fuel oil plants.
Improvements in the performance of combined cycles

The national electricity grid requires a constant monitoring of the balance of the network, mainly through the balancing of power generated and power absorbed. The generation from renewable sources, in particular photovoltaic and wind power, does not contribute towards the network stability insofar as generation of these sources can only partially be planned and, moreover, the release of power to the network takes place through electronic equipment (inverters) that cannot neutralise network disturbances (they do not react to variations of network frequency, increasing or reducing power as instead conventional generators do).

The massive financial incentives offered for these sources has resulted in a major incidence of renewable generation on the Italian network, giving rise to the generation from fossil sources (in particular natural gas combined cycles), the compensatory role played in the balance of generation and absorption on the Italian network. This type of operation entails environmental performance of the thermoelectric plants that is not in line with their nominal performance (average thermodynamic performance around 50%, as compared with the 56% that can be obtained at maximum load).

This is why the strategic commitments of the Business Plan include making some Turbogas Combined Cycle plants more competitive, allocating major investments to make them more flexible, thanks to the application of new, modern technologies.

The choice has focused on the 800 MW plants of Chivasso (TO), Sermide (MN) and Cassano (MI). To this end, on April 30, 2015, A2A and General Electric stipulated the “Co-Development Program Framework Agreement”, which envisages some important interventions, including the installation of new low NOx emission burners and the implementation of software packages to improve performance and management. A first series of interventions was carried out in 2015 on the 800 MW CCGT production plant in Chivasso, resulting in its re-start in October 2015 and the achievement of the following results:

- start-up of the two turbogas plants with a significant reduction in NOx emissions;
- greater capacity to respond to manager’s demands;
- shorter start-up time and consequent reduction of gas consumption.

Thanks to the excellent results obtained, the Group will be considering the application of this same technology, also to the 800 MW CCGT plants in Sermide (MN) and Cassano d’Adda (MI).

6.3 | The manufacturing capital in the Networks and Heat Business Unit

The Networks and Heat BU is responsible for coordinating, implementing and maintaining the electricity, gas, heat and water cycle network distribution infrastructure as well as for managing plants used to produce thermal energy and electricity. The presence of these infrastructures on the territory makes a key contribution to the energy development and local economic growth.

Gas and electricity distribution networks

<table>
<thead>
<tr>
<th>Type of plants</th>
<th>Extension</th>
<th>UoM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity networks</td>
<td>13,952 km</td>
<td></td>
</tr>
<tr>
<td>of which underground cable</td>
<td>11,922 km</td>
<td></td>
</tr>
<tr>
<td>Gas networks</td>
<td>8,055 km</td>
<td></td>
</tr>
<tr>
<td>Light points</td>
<td>206,687 number</td>
<td></td>
</tr>
<tr>
<td>Traffic light regulators</td>
<td>728 number</td>
<td></td>
</tr>
</tbody>
</table>

Figure 23 | Extension and geographic distribution of the gas and electricity network
The electricity distribution network extends for approximately 14,000 km in high, medium and low voltage, with 28 primary stations and sub-stations and more than 8,300 secondary stations.

More than 12,000 GWh are supplied per year to Milan, Rozzano, Brescia and a further 45 municipalities in the province of the areas of Lake Garda and Valsabbia.

Three-year plan to renew the Milan electricity grid

In December 2015, Milan City Council and A2A announced an extraordinary plan to renew the most critical parts of the city’s electricity grid in the next 4 years, making total investments in the region of 13 million euros. 11,500 junctions will be replaced, with around 3,000 interventions per year. The network will thus be able to withstand the exceptional electricity loads and cope with ever-hotter summers. Starting from early July 2015, Milan has experienced climate conditions of exceptional warmth, both in terms of intensity and duration. The network electricity load reached an all-time high of 1,625 MW (+30% on the average), causing an increase in the number of failures.

4 28 “very high/high voltage” (VHV/HV) and “high voltage/medium voltage” (HV/MV) electrical transformation stations. Approximately 5,900 km of medium voltage (MV) lines head out from the plants and more than 7,900 km low voltage network.
The length of the gas distribution infrastructure is approximately 8,000 km, of which 2,000 in medium and high pressure, with more than 270 primary stations (REM) and approximately 3,500 secondary stations. The network expands into approximately 200 Italian municipalities in 14 provinces and 7 regions.

Plan for the cathodic protection of low pressure gas networks in 2015

Resolution AEEGSI 574/13 envisages the obligation for the concession-holder of the gas distribution network to guarantee effective cathodic protection on 90% of low pressure gas networks for 2015 and 2016. This type of protection safeguards the integrity of the steel pipes, so as to avoid damaging the structure and having the gas disperse. In order to achieve this challenging objective, as from 2014, A2A Reti Gas has decided to adopt a recovery plan, using a greater number of teams of contractors, rapid procurement of all materials necessary to the works and an extraordinary commitment on the part of Company staff. As at January 1, 2015, 63% of the steel network of Milan, which was the most critical, was protected. At year end, the 90% target had been surpassed, respecting the obligation established by the AEEGSI for all Company plants.

The Group also operates in the regional transmission of natural gas through the subsidiary Retragas srl, which manages its own regional transmission system, moving more than 390 million cubic metres of natural gas per year. The network is more than 398 km long and is distributed throughout the territory of Lombardy, Trentino Alto Adige and Piedmont.

Moreover, through the subsidiary A2A Reti Elettriche, the Group manages more than 200,000 lighting points in the municipalities of Milan, Bergamo and Brescia and another 9 municipalities of Lombardy, directly designing and maintaining the public lighting systems to optimise the territory.

Led lighting

Ever-attentive to energy savings, with the gradual increase in the number of lighting points, A2A has gradually adopted higher efficiency plants, thereby reducing specific consumptions. Late 2014, the project was started to replace all lighting points managed by A2A - in the cities of Milan, Brescia and Bergamo - with LED lighting. At end 2015, 94% of lighting points in Milan had been replaced, along with 71% in Brescia and 41% in Bergamo. The amount of investments made by the Group is approximately 54 million euros in 2 years (2015-2016). The decision taken in favour of LED will mean a clear improvement in terms of efficiency, lighting efficacy and safety. The new lighting bodies will guarantee an efficiency equal to that of the traditional lamps used until now (100 lumens per watt), but the light beam (lesser light pollution) will be better pointed and the lamps will have a much longer life cycle (up to 5 times that of traditional lamps); in terms of service quality and safety this will mean fewer broken lamps on the city streets. Moreover, the emission is avoided of 27,300 tonnes of CO2 into the atmosphere, thanks to the lesser energy consumption.
Integrated water service

Figure 24 | Extension and geographic distribution of the integrated water service

<table>
<thead>
<tr>
<th>Type of plants</th>
<th>Extension</th>
<th>UoM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aqueduct network</td>
<td>3,456 km</td>
<td></td>
</tr>
<tr>
<td>Sewers network</td>
<td>2,186 km</td>
<td></td>
</tr>
<tr>
<td>Purifiers</td>
<td>57 number</td>
<td></td>
</tr>
<tr>
<td>Treatment capacity</td>
<td>515 millions of m³</td>
<td></td>
</tr>
</tbody>
</table>

The term **integrated water cycle** is used to mean the management of three services: aqueduct, sewers and purification. Sources of production consist of 175 wells and 188 sources for A2A Ciclo Idrico in the province of Brescia and 86 wells and 55 sources for Aspem in the province of Varese. The sewer service consists of managing the sewer networks, including maintenance, emptying and controls on waste quality.

To treat waste water, there is a purification plant functioning in Verziano (Brescia), which is connected to the city’s and hinterland’s sewers network. In addition to the Verziano purification plant, A2A Ciclo Idrico also manages another 56 plants, some of which are supra-municipal. Each year, approximately 49 million cubic metres of water are purified from the sewers.

Revamping works at the Verziano (BS) purification plant

The Verziano purification plant is the largest in the province of Brescia, with a potential of 250,000 equivalent inhabitants (E.I.). The plant is structured into three lines, of which line B, developed using MBR (Membrane Bio Reactor) technology, which guarantees extremely high purification performance. In order to cope with the extension of the hinterland sewer networks and the consequences of the passage of time, in 2015 some important **requalification works were carried out on line B**:  
- emptying of the tanks and reclamion of reinforced concrete by means of water blasting and resining (intervention already carried out),  
- replacement of all 160 ultrafiltration crates with new crates with a larger filter surface (50% already installed), increasing plant potential by approximately 38,000 E.I. (intervention currently in progress),  
- strengthening of the lifting stations, using low energy consumption pumps (intervention currently in progress),  
- update of the membrane system control software (intervention yet to be started).

In all, investments total approximately 5.5 million euros.
Cogeneration plants and district heating networks

Figure 25 | Plant types and geographic location of the cogeneration and district heating network

<table>
<thead>
<tr>
<th>Number of plants</th>
<th>Type of plants</th>
<th>Installed capacity in MWe</th>
<th>Installed capacity in MWt</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Cogeneration plants</td>
<td>184</td>
<td>567</td>
</tr>
<tr>
<td>1</td>
<td>Thermal solar plant</td>
<td>-</td>
<td>0.693</td>
</tr>
<tr>
<td>19</td>
<td>Thermal plants</td>
<td>-</td>
<td>613.5</td>
</tr>
<tr>
<td>8</td>
<td>Heat exchange</td>
<td>-</td>
<td>465</td>
</tr>
<tr>
<td>2</td>
<td>Heat pump</td>
<td>-</td>
<td>30</td>
</tr>
</tbody>
</table>

The A2A Group has cogeneration plants powered by natural gas and/or coal. The plants envisaging the generation of electricity and heat during the production cycle allow for savings on primary energy resources with respect to separate production and the reduction of atmospheric pollution.

Some of these plants also have a heat pump with table water section (renewable source) that enables a further reduction in fuel consumption. To cover the peak thermal demands, coal plants also have additional supplementary heaters installed. The result is a system in which the low environmental impact is assured by using the very best low-emission technology with renewable sources.

This is in addition to the municipal district heating networks whose capillary distribution enables thousands of condominium heaters to be switched off, reducing emissions in the city atmosphere and enabling the recovery of locally-available heat that would otherwise be lost.

The A2A Group designs, develops and manages district heating in the cities of Milan, Sesto San Giovanni (MI), Novate (MI), Cassano d’Adda (MI), Brescia, Bovezzo (BS), Concesio (BS), Bergamo and Varese. The district heating network consists of double pipes for the distribution of heat in the form of hot or heated water.
### Figure 26 | Extension of the district heating network

<table>
<thead>
<tr>
<th>Network development(^1) (double pipe) km</th>
<th>Buildings connected(^2) (users) no.</th>
<th>Volume serviced Mm(^1)</th>
<th>Apartment equivalents(^3) no.</th>
<th>Volume serviced Mm(^3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bergamo area</td>
<td>69.1</td>
<td>545</td>
<td>6.2</td>
<td>25,800</td>
</tr>
<tr>
<td>Brescia area</td>
<td>665.4</td>
<td>20,726</td>
<td>41.9</td>
<td>174,600</td>
</tr>
<tr>
<td>Milan area</td>
<td>280.6</td>
<td>3,109</td>
<td>44.9</td>
<td>187,100</td>
</tr>
<tr>
<td>Varese area</td>
<td>16</td>
<td>146</td>
<td>2.7</td>
<td>11,150</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,031.1</strong></td>
<td><strong>24,526.0</strong></td>
<td><strong>95.7</strong></td>
<td><strong>398,650</strong></td>
</tr>
</tbody>
</table>

\(^1\) The network is intended as the sum of heat transmission, distribution and supply pipes.
\(^2\) Users may be individual residential units in the case of independent heating or whole buildings in the case of centralised heating.
\(^3\) Apartment equivalent = 80 m\(^2\).

In May 2015, the very first **thermal solar plant** of southern Europe, associated with a district heating network, was opened; it was developed by Varese Risorse, a Group company.

The solar plant had been designed to produce 450 MWh of thermal energy a year, equivalent to the sanitary hot water requirements of 150 apartments, avoiding the need to resort to 43 toe (tonnes of oil equivalent) of fossil fuels and accordingly providing both an economic and environmental benefit.

The results of heat produced last summer exceeded expectations. The real technical innovation of the system consists of the priority use of solar power to preheat the treated water from the municipal network.

For the months of 2015 during which it operated, peak solar production fell on May 27, with daily production of 3,660 kWh.

### Energy diagnosis on production sites

Italian Legislative Decree no. 102/2014, which incorporated Directive 2012/27/EU on energy efficiency, established the obligation for businesses to perform an energy diagnosis on production sites by December 5, 2015. A2A has analysed a sample in accordance with the criterion proposed by the Ministry of Economic Development, identifying 37 sites to be subjected to energy diagnosis (96% of the Group’s energy consumption). In all, these 37 sites consume more than 2.2 million toe. This diagnosis has revealed the possibility of carrying out 74 interventions (equal to more than 41 million euros in investments) by which to ensure energy savings quantifiable in 11,000 toe/year.
Natural capital

- 17 company certified ISO 14001 and
- 24 EMAS registered sites
- 55% of waste collected separately by the Group’s environmental companies
- 1.7 million tonnes of CO2 avoided thanks to the technologies used to produce energy
- 4,100 parameters analysed per million m³ supplied
- 52% of thermal energy produced from waste

Electricity production by source

- Renewable sources (hydraulic, renewable fraction of waste, biogas, solar)
- Coal
- Natural gas
- Oil products
- Nuclear
- Non-renewable fraction of waste
### Natural capital

<table>
<thead>
<tr>
<th>Material Issues</th>
<th>Management method</th>
<th>2015 actions</th>
<th>2016 – 2020 Sustainability Plan actions</th>
</tr>
</thead>
</table>
| Use of resources and renewable sources               | • Optimisation of the use of natural resources (air, climate, water, commodities) for the production of electricity and thermal energy • Increased use of renewable energy sources for the production of electricity and thermal energy | • Thermal solar in Varese
• Energy diagnosis on production sites
• New gas heaters Lamarmora plant
• Start-up of new exchanger to recover heat from a glass factory in Milan and development of an equivalent plant at a steelworks in Brescia | • 49% of production of thermal energy from renewable sources |
| Efficient use of water resources                     | • Development of technological initiatives and projects and ones of innovative value aiming to optimise the use of water | • Plan for eliminating hexavalent chromium in the Brescia aqueduct | • 5% reduction in losses measured in the five years 2016-2020, in the water service (with respect to 2015) |
| Safeguarding of biodiversity, habitats and the landscape | • Collaboration with entities, institutions and associations to protect the territory and promote its safeguarding | • Experimentation of Vital Minimum Outflow in Valtellina and Val Chiavenna
• Landmark Parco del Mincio | • Monitoring of biodiversity in all plants |
| Atmospheric emissions                                | • Installation of plants to eliminate emissions and continuous monitoring systems of emissions produced | • DeNOx on the Monfalcone plant
• “Co-Development Program Framework Agreement”, to improve combined cycle performance | • 194 t/a of NOx avoided thanks to the extension of district heating
• 243,000 t/a emissions of COx avoided thanks to the extension of district heating
• Improve the emissions factor of electricity production plants by 10% (as compared with the average levels for the period 2008-2012)
• 775,000 t/a of CO2eq avoided thanks to new solar plants and energy recovery |
| Waste management                                     | • Implementation of a circular waste management process, to recover the material and energy and limit final disposal | • Recoverision project for the San Filippo del Mela plant
• Design of new combined home waste collection system in Brescia | • More than 99% municipal waste collected sent to recovery of materials and energy
• Reach an average percentage of 67% separate waste collection in the municipalities served
• Increase the capacity of waste treatment plants (municipal and special) by 15%, in order to recover materials |
| Management of waste water                            | • Compliance with the relevant regulations and adhesion to the integrating voluntary standards (Group Environmental Management System) | • Revamping of the Verziano purification plant | • Purify sewers waste, by end 2020, a percentage of 60% of inhabitants equivalent not treated as at 2015 |
7.1 | Group environmental management

The aspects to be considered for a responsible management of environmental impacts cannot fail to consider the assessment of the strictly economic elements, such as: availability and cost of raw materials and investment in the best technologies available (MDT).

The whole of the Group’s business is strictly interconnected and inter-dependent with the ecosystem surrounding it, from which it obtains a great deal of the resources with which it works, at the same time also influencing their functions and capacity to regenerate. The value of the natural capital is often not adequately quantified.

In this context, the A2A Group has, over time, built up its own integrated approach to environmental governance, thanks to its Quality, Environment and Safety Policy, thereby enabling the development of a reference model that is valid for all Group employees and collaborators.

The principle of the protection and sustainable use of the “natural capital” explained in the Group Policy seeks to guarantee the effectiveness of the environmental protection from any potential irreversibility of damages that can be caused to the environment. The following objectives and strategies are implemented:

- limitation of atmospheric emissions and pollution of the soil, subsoil and water, with special attention paid to the reduction of impacts on climate change;
- the efficient use of resources, optimizing the use of natural and energy resources;
- protection of biodiversity and ecosystems;
- the recovery and recycling of waste.

All in compliance with regulatory and authorisation requirements concerning the environment. In order to encourage a correct environmental approach, the Group adopts the environmental management system UNI EN ISO 14001; in 2015, this system was adopted by 17 companies, for a total of 18 certificates. As at December 31, 2015, 24 sites were registered EMAS.

The new editions of standards UNI EN ISO 9001 and UNI EN ISO 14001

In September 2015, the new editions were issued of standards ISO 9001 and ISO 14001.

The standards introduce, particularly as regards environmental management, a new approach in which the analysis of the relationship between the work of the individual business and the context in which it operates, is privileged.

Another very innovative element introduced by the new standards is the risk-based approach. The introduction of the concept of “risk-based thought” has significantly expanded on the proactive vision of environmental management, allowing an organisation to take actions and decisions following the assessment of the possible positive and/or negative consequences (risks/opportunities).
Natural capital

The Environment, Health and Safety management model adopted by the A2A Group envisages the monitoring of the HSE (Health, Safety, Environment) risks on a Group level, corporate level and site level for high-risk plants. The monitoring of “general” risks has been examined since 2014. In particular, the Group has equipped itself with the guideline “Regulatory Observatory Environment, Health and Safety”, which defines the procedures and responsibilities related to the identification, recording, analysis and dissemination of the legislation applicable to the activities, products and services performed.

In 2015, with the publication of the Guideline “Roles and responsibilities for Environment, Health and Safety”, criteria and methods were defined on which basis Group companies are currently proceeding to map out the roles and responsibilities envisaged by applicable legislation and their allocation in connection with the specific corporate organisation and structure of proxies.

As part of this activity, A2A has equipped itself with a tool to monitor the improvement plans deriving from the verification, referred to as “Action Plan Management” (APM); this operates through the Group intranet to enable an automated, structured control of all information relative to the state of implementation of the individual actions of the plans agreed with the audited structures.

Again in 2015, in order to increase awareness for a better management of risks and environmental impacts, the “Environmental Master” was launched for more than 50 employees, with the aim of: strengthening and standardising environmental competences of the Group HSE structures; creating opportunities for discussion and an exchange of opinions between HSE structures to share experiences, needs and common problems and make the competence and services of experts on environmental matters, available.

The initiative was launched in December 2015 and will continue for the first half of 2016. A2A exploits its characteristic as Group operating different activities to optimise the competences and excellences in the various BUs, in order to guarantee the best comprehensive result in terms of the sustainability of its business.

Climate change

In December 2015, Paris hosted the XXI Conference of the Parties (COP 21) on climate change. The 195 countries that signed the final agreement, including Italy, undertook to limit the average temperature increase on planet Earth by 1.5°C, undertaking to establish specific national targets of CO₂ reduction as from 2020.

The use of renewable resources, such as hydroelectric and biomass, as well as the use of CHP and advanced technologies, allows saving both in terms of CO₂ emissions and in terms of fuel compared to conventional processes.

To properly assess the emission savings of CO₂ achieved by its activities, the A2A Group uses a methodology for calculating the avoided emissions of CO₂ and energy savings applicable to all plant and energy processes. This method is updated once a year on the basis of the parameters and emission factors of the national thermoelectric farm, published by Terna and ISPRA.

2015 Group direct emissions (classified as Scope 1) came to approximately 7.7 million tonnes, primarily due to the supply chain for the production of electricity and heat and, secondarily, to methane leaked from the distribution network or not collected at landfill sites.

As compared with the previous year, a 30% increase has been recorded, mainly due to the lesser function of the hydroelectric plants, due to a year of low hydraulics and the consequent greater production of the thermoelectric plants, above all those powered by fuel oil and coal that, for market logics, have significantly increased their production with respect to 2014.

Emissions of CO₂ equivalent of fluoride gases have instead reduced, thanks to better management of equipment containing these gases.
Consequently, the Group’s average CO\textsubscript{2} emission factor calculated by adding all emissions of energy production and relating them to the total energy production (electricity and heat), came to 434 g/kWh, up on 2014.

By contrast, indirect emissions (Scope 2) due to electricity consumption, are down to 126,722 t (-14% on 2014), due to the reduced function of pumping systems in the hydroelectric plants. Scope 3 emissions in 2015 are reported to be 1,758,426 tonnes. This value includes both emissions from plants managed for third parties (boilers for heating buildings, the waste-to-energy plant in Acerra and STIR in Caivano) and also the greenhouse gas emissions produced during refining and extraction of the fuels used by the Group, equal to more than 1 million tonnes of CO\textsubscript{2}, which this year increased as a result of the increased use of heavy fuel oil and coal. The assessment of the emissions saved (emissions of CO\textsubscript{2} avoided and energy saved) was performed using the calculation method finalised in 2010.
Attention to biodiversity and the landscape

The A2A Group operates in harmony with regional, natural and cultural features, and is aware of the extraordinary wealth of biodiversity present in our country and the importance that these aspects have in outlining the identity and wealth of the territory. Some Group plants are located in or near sites characterised by high natural value, parks or protected areas: for example, some plants are situated in the Parco Regionale Adda Nord, in the Parco regionale del Mincio, in the Parco Nazionale dello Stelvio and in the Parco Nazionale della Sila.

These parks record the presence of more than 40 species included on the Red List of the International Union for the conservation of Nature (IUCN). In order to minimise the environmental impacts, the A2A Group takes specific action to protect and safeguard the environment, also carrying out interventions to improve the territory and assessing the impact on the landscape context. In the design and development of plants, A2A sets itself the aim of optimising the natural component, leaving a portion of surface area in its sites, green.

Environmental requalification of the Mincio plant

In 2015, having completed the conversion into combined cycle of the Ponti sul Mincio (MN) plant, the works were carried out generally on the site, eliminating the parts of the plant that were no longer necessary to generation. The only element no longer used, but kept intact, is the 150 m flue, due to the interest that had emerged locally, for it to be requalified with a view to optimising it as a tower that can be visited by the public and a landmark introducing the north side of Parco del Mincio. The project involves redoing the infrastructures necessary to granting access (lift, internal routes), staining the flue again and preparing some items dedicated to welcoming visitors.

The protection of the soil, subsoil and water tables is ensured by envisaging the installation and correct management of storage systems, which reduce the risk of the dispersion of pollutants into the environment.

In managing the landfills, including those that have been dismantled, the presence is guaranteed of all measures and works necessary for the safe management of the post-closure phase, enabling the surface development of green areas, often chosen as refuge and for population by local birds and animals. For hydroelectric production plants, it is essential to guarantee respect for the Minimum Vital Flow (MVF). To comply with EU, national and regional norms, for the protection of river habitats in the waterways affected by extraction for hydroelectric energy production; in fact, it is necessary to ensure a minimum flow of water in the river bed. To this end, A2A has developed a trial programme based on regional instructions on MVF, recording a gradual increase in the volumes of water released to guarantee the minimum vital flow. Since 2013, an increase of almost 20% has been recorded.
Trial of the Minimum Vital Flow (MVF) downstream of the A2A intakes in Valtellina and Valchiavenna

The regional Programme for the Protection and Use of Water has established the general reference regulations for the quantification and release of the minimum vital flow (MVF) in the Region of Lombardy. Under this scope, the A2A Group has conducted an experiment in the basin of the River Adda in Valtellina and the basins of River Liro and River Mera in Valchiavenna, with the main aim of verifying the environmental sustainability of various scenarios, both in absolute terms and with respect to the hydrological MVF scenario (constant 10% of the average annual flow).

The activities, which last a total of 6 years, divided up into two three-year periods, began in January 2009 and were completed in June 2015.

The project achieved major goals:
- identify, in a deterministic manner, the value of MVF that is actually necessary to guarantee the ecological status in the rivers concerned by our collections;
- minimise, in respect of the quality objectives set by current regulations, the loss of electricity production from renewable source;
- construct a scientific heritage, of theoretical and experimental knowledge in a high-level biological, ecological and hydraulic context.

In order to protect biodiversity, habitats and landscape, both during planning and design stages, A2A assesses the aspects connected with the crossing of or proximity to areas of landscape interest, such as: green areas, local parks, flower beds, gardens or other portions of territory of particular value and natural prestige. Correct planning when designing the plants also enables us to significantly reduce possible impacts and pressure on any water bodies, thereby helping prevent issues and protect the territory’s water resources.
## 7.2 | Natural capital in the Environment Business Unit

The main resource of the Environment Business Unit is waste. This resource is treated with an integrated, circular approach, involving all areas: from its reduction through to the recovery of material and energy.

The Environment BU deals with the integrated waste management cycle, involved through the subsidiaries **A2A Ambiente, Amsa, Aprica and Aspem** in the collection, transport, treatment and optimisation of both municipal and special waste.

The environmental services of the Group are aimed at both the public administration and private companies and carried out in Lombardy, Piedmont and Campania. Efficiency in waste management and optimisation, through district heating and waste-to-energy systems, are important to the A2A Group, which refer to principles that have been taken and adapted directly from the “sharing economy”.

The model below shows the input-output model of the Environment Business Unit. For a more in-depth vision of the value chain, reference is made to Chapter 1 on page 22.

**Figure 31 | Input-output model of the Environment BU**

<table>
<thead>
<tr>
<th>INPUTS</th>
<th>OUTPUTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Waste</td>
<td>- Optimisation of materials (waste recovered)</td>
</tr>
<tr>
<td>- Fuels</td>
<td>- Optimisation of energy from waste</td>
</tr>
<tr>
<td>- Chemical substances and reagents</td>
<td>- Unrecoverable waste</td>
</tr>
<tr>
<td>- Water</td>
<td>- Atmospheric emissions</td>
</tr>
<tr>
<td>- Fossil fuels</td>
<td>- Waste water</td>
</tr>
<tr>
<td>- Soil</td>
<td>- Territory and biodiversity</td>
</tr>
<tr>
<td>- Electricity</td>
<td>- Noise</td>
</tr>
<tr>
<td>- Waste collection and street sweeping</td>
<td>- Waste collection and street sweeping</td>
</tr>
<tr>
<td>- Waste treatment</td>
<td>- Waste-to-energy</td>
</tr>
<tr>
<td>- Waste-to-energy</td>
<td></td>
</tr>
</tbody>
</table>

### Municipal waste

A2A promotes and encourages the separate collection of all fractions of waste (paper, glass, plastic, metal, organic, green garden waste, etc.), using different methods designed to meet the needs of the municipalities served.

In 2015, generally, in the municipalities served, the positive trend continued of differentiated collection, due both to the campaigns of citizenship awareness and improvements and new measures introduced in the service.

### New combined home waste collection system in Brescia

With the teaser advertising campaign “Scegliamo l’ambiente” [Let’s choose the environment], December 2015 saw the start-up of the sensitisation and information of residents on the new combined home waste collection operating in Brescia. The new system will be introduced in April 2016 in the south-east area for a total of 20 thousand utilities and will gradually be extended to the whole city by 2017. Paper, glass, metals and plastic will be collected door-to-door, whilst organic and mixed waste will be conferred to swing-top bins that can be opened with a customised magnetic badge. Thanks to the commitment of residents and the capillary, efficient collection system, the aim is to achieve the European objective of 65% of separate waste collection. Environmental education actions in schools will also be intensified.
Figure 32 | Percentage of differentiated collection in the Municipalities where Group companies operate*

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Province</strong></td>
<td><strong>Quantity</strong></td>
<td><strong>Index %</strong></td>
<td><strong>Quantity</strong></td>
</tr>
<tr>
<td>Bergamo</td>
<td>36,595 t</td>
<td>60.3%</td>
<td>40,718 t</td>
</tr>
<tr>
<td>Brescia</td>
<td>50,230 t</td>
<td>38.2%</td>
<td>51,809 t</td>
</tr>
<tr>
<td>Como</td>
<td>-</td>
<td>-</td>
<td>19,728 t</td>
</tr>
<tr>
<td>Milan</td>
<td>282,318 t</td>
<td>43.4%</td>
<td>334,938 t</td>
</tr>
<tr>
<td>Varese</td>
<td>22,995 t</td>
<td>58.9%</td>
<td>24,303 t</td>
</tr>
<tr>
<td>Province Bg</td>
<td>4,883 t</td>
<td>58.6%</td>
<td>4,443 t</td>
</tr>
<tr>
<td>Provinces Bs and Mn</td>
<td>84,796 t</td>
<td>53.7%</td>
<td>85,400 t</td>
</tr>
<tr>
<td>Province Mi</td>
<td>46,571 t</td>
<td>54.6%</td>
<td>59,612 t</td>
</tr>
<tr>
<td>Province Va</td>
<td>5,733 t</td>
<td>68.7%</td>
<td>5,884 t</td>
</tr>
<tr>
<td><strong>Total/average</strong></td>
<td><strong>534,121 t</strong></td>
<td><strong>46.3%</strong></td>
<td><strong>626,035 t</strong></td>
</tr>
</tbody>
</table>

* The quantity collected and differentiated collection rate have been calculated on the basis of the recommendations of the Region of Lombardy. The data of the provinces refer to all the Municipalities where the complete collection service is provided.

**Waste collected separately** is sent for recovery, obtaining four important environmental results:

- savings of raw materials;
- reduction of energy used in the production processes of materials;
- reduction of the environmental impacts connected with production;
- reduction of waste disposed of in landfills.

In 2015, a total of 1,282,786 t of municipal waste was collected, 3.5% more than last year; a considerable portion (58.1%) of the waste collected is recovered by means of separate waste collection, whilst the remaining 40.8% is sent for energy recovery. Only 1.1% is sent for disposal or incineration without any possibility of recovery. Energy recovery activities that include electricity and heat production from waste, like the disposal phases in landfills, are managed responsibly so as to minimise and limit possible impacts.

Figure 33 | Final destination of municipal waste collected

- Waste-to-energy plant
- Separate waste collection and other collection
- Disposal (in landfill, incineration or other)
**APRICA winner of the National Award on waste prevention**

Aprica has won the second edition of the “National Award on waste prevention” sponsored by Legambiente and Federambiente, for its commitment to waste prevention and the accuracy in the design, implementation, monitoring and assessment of the measures taken. Aprica has, in fact, over the years tried out prevention measures for the various waste production contexts, using the most appropriate tools to involve the territorial stakeholders and reach the target subjects.

The five actions that won Aprica the award:

- Reduction in packaging in Wholesale Distribution
  - Waste avoided: 5.9 t/a.
- Reduction in packaging in the sale of fruit and vegetables on the short chain
  - Waste avoided: 0.7 t/a.
- Farm delivery
  - Waste avoided: 85.5 t/a.
- Distribution of surplus food
  - Waste avoided: 107.3 t/a.
- Tap water
  - Waste avoided: 62.7 t/a.

Of the most significant initiatives of 2015, Asma’s commitment to managing cleaning and waste collection in the Expo 2015 exhibition site. Expo 2015 and Amsa, with the support of Conai, have reached the objective established on the eve of the Milan event.

The objective, which consists of achieving a 70% separate waste collection of the waste produced every day, was achieved during the last week of July, thereafter recording further improvements and enabling the recycling of materials and an effective cleaning of exhibition spaces.

![Figure 34](chart.png)

**Special waste: collection, transport, intermediation**

As part of the waste management chain, A2A provides services collecting, transporting, recovering and disposing 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, bodywork shops, laundrettes, etc.).

For the management of waste produced by its customers, the Environment BU also provides waste intermediation services. In this context it identifies, engages and coordinates third parties, ensuring that this waste is assigned to authorised plants while optimising management costs and also guaranteeing transport to third parties.

The collection and transport of both municipal and special waste is carried out using a fleet of 2,272 vehicles (of which 753 dedicated to street sweeping), equipped for the various service needs.
A2A Ambiente is the main manager of the Business Unit treatment plants, so as to be able to accept various types of municipal and special waste with a view to recovering materials and energy. In 2015, a total of 2,722,575 t of waste were processed by the plants. This total is far higher than the municipal waste collected by the Group (1,282,786 t) as the waste can be processed by several plants (e.g. biodrying with production of SSF and subsequent waste-to-energy in a fluid bed plant) as well as come from the collection of other operators.

Numerous ecological platforms are also operative for separate waste collection (approximately 50), managed under the scope of the municipal waste collection process. Recovery and storage include:

- 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;
- recovery of inert materials, sand and gravel, certified in accordance with standards UNI for use in construction (by means of the treatment and washing of the street sweeping grounds); these materials can be reused directly as raw materials, e.g. to prepare cement or bituminous conglomerates and to prepare road beds;
- the production of fuel (SSF) 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 inertisation operations;
- interim storage of waste to be sent for subsequent recovery or to a lesser extent to disposal at the Group’s plants or external plants.

The non-recoverable waste as a raw material is used as fuel in the processes of waste-to-energy to supply the district heating networks as well as to generate electricity, thereby saving fossil fuels. Electricity produced from waste in 2015 was approximately 71% of the total electricity produced by the Group, while thermal energy from waste accounted for 52% of total thermal energy produced and allocated to the district heating networks, just under last year’s figure (53%). On average 773 kWh of electricity and 899 kWh of thermal energy were produced, showing an increase on efficiency compared with the previous year (+25%).

A fundamental role in the integrated waste cycle is played by the controlled landfills, which is necessary as a way of “segregating” waste of which no further use can be made.

The companies of the Environment BU manage non-hazardous and hazardous urban and special waste landfills on their own behalf and for third parties. The landfills have come to the end of the waste disposal stage and, after being subject to 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.
Natural capital

Resources: water

A2A adopts responsible behaviour to correctly manage the water resource during the different activities of the integrated waste cycle.

<table>
<thead>
<tr>
<th>Assets</th>
<th>Type of use</th>
<th>Responsible management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste-to-energy plant</td>
<td>Reintegration of the cooling towers of the thermal cycle, steam generation, plant washing, cooling of waste and irrigation of green areas</td>
<td>Procurement by means of the pumping of specific, dedicated wells; consumption of drinking water reduced and limited to sanitary uses</td>
</tr>
<tr>
<td>Biogas production and landfills</td>
<td>Consumption of water from wells for domestic and technological uses and to power the fire protection network and irrigation of green areas; consumption of drinking water of the network for sanitary use</td>
<td>Recovery of rainwater for irrigating green areas</td>
</tr>
<tr>
<td>Waste collection and urban hygiene</td>
<td>Cleaning of streets and washing of vehicles</td>
<td>Use of reduced water consumption washing technologies</td>
</tr>
<tr>
<td>Treatment plants</td>
<td>Washing of the sweeping lands (waste washing plant)</td>
<td>Recycling of washing water</td>
</tr>
</tbody>
</table>

Figure 36 | Main uses of water resources in the Environment BU

Most of the consumption is attributed to waste-to-energy plants and to a lesser extent to the activities described in the table above. Of the approximately 3.5 million cubic metres used in 2015, 25% comes from aqueduct and the remaining 75% from well.

Resources: combustible fuels, fuels, chemical products and materials

The fuel commonly used in the BU is waste, whether municipal, SSF (Secondary Solid Fuel, waste-derived), special waste or biogas. The traditional fossil fuels are used only to a limited extent in starting up the plants (waste-to-energy plants) or to produce integration heat (district heating of Bergamo). In all, out of the 16,651 T J used in 2015, only 2.4% comes from fossil sources.

The fuels are the main resource in terms of waste collection and transport. In 2015, 485 T J were used, comprising diesel (78%), methane (21%) and petrol (1%). As regards the use of chemical products and materials, the approximately 200,000 t of 2015 consists 81% of inert materials (used to recover landfills or other) and 11% of lime and other neutralising products used in the treatment of fumes of waste-to-energy plants.

Output: atmospheric emissions

The sources of atmospheric emissions of the Environment Business Unit are the waste-to-energy plants, the means used in the collection and transport, the landfills and other plants. The continuous analysis of the main parameters of the A2A Group’s waste-to-energy plants are available for public consultation on the company’s websites and, in Brescia, on six digital totem poles located in public places.

Of the micro-pollutants, dioxins are those giving rise to greatest concern in public opinion. The total emission of dioxins from waste-to-energy plants, thanks to the dedicated elimination systems, is very limited. The 2015 value is 24 mg (equivalent toxicity), which is higher than 2014 (+3 mg) but in any case very low in absolute terms.

For further information refer to: a2a.eu/it/sostenibilita/emissioni
The dispersion of biogas from landfill, consisting approximately 50% of methane, is dealt with by specific collection plants that, working by depression, minimise the relevant emissions. The significant greenhouse effect of this gas, just like the odours, are eliminated by means of complete combustion and, where possible, also with the recovery of the related energy content. In 2015, approximately 4.7 million m$^3$ of biogas is estimated as dispersed against 55 million m$^3$ of biogas collected and used to a large extent to produce energy.

Emissions deriving from other plants (mainly biodrying) are limited to virtually only the odorous compounds that are eliminated with suitable biological filters. To this end, in addition to compliance with regulatory and authorisation limits, no abnormal situations or discomfort is recorded for the population.

Emissions deriving from the vehicles used to collect and transport waste are limited in various ways, such as:

- the use of emission-reducing technologies;
- preventive and corrective maintenance of all vehicles in addition to the statutory tests and inspections;
- changing from diesel vehicles to methane or low emission diesel (Euro 5 and 6);
- use of light vehicles with electric motor for sweeping services.

The dispersion of biogas from landfill, consisting approximately 50% of methane, is dealt with by specific collection plants that, working by depression, minimise the relevant emissions. The significant greenhouse effect of this gas, just like the odours, are eliminated by means of complete combustion and, where possible, also with the recovery of the related energy content. In 2015, approximately 4.7 million m$^3$ of biogas is estimated as dispersed against 55 million m$^3$ of biogas collected and used to a large extent to produce energy. Emissions deriving from other plants (mainly biodrying) are limited to virtually only the odorous compounds that are eliminated with suitable biological filters. To this end, in addition to compliance with regulatory and authorisation limits, no abnormal situations or discomfort is recorded for the population.

### Study for the assessment of air quality in Brescia and Acerra

In collaboration with Brescia University (UNIBS), a study has been launched called “Integrated assessment of primary and secondary atmospheric pollution and the related impact on health in Padua and Brescia”. In Acerra, a complete study has been initiated in collaboration with the CNR, which enables the verification of the contribution of the emissions of the Acerra waste-to-energy plant on the surrounding territory, comparing it with the existing overall situation.

The A2A Group hopes to use this activity to help develop scientific knowledge about these complex issues and at the same time, to offer all subjects concerned, the opportunity to use the results of the work to better assess the condition of the territory.
Output: waste produced and discharges

The combustion process generates waste, like slag and powders from fumes treatment, to a large extent then sent for the recovery of material, just like the landfill percolates that are sent to suitable fluid waste treatment plants.

In 2015, a total decline in waste production was recorded with 1% less non-hazardous with respect to last year, for a total of approximately 490,000 t and 6% less hazardous with around 80,000 t in total.

Industrial type discharges into sewers are fairly limited, at 402,000 m³ in 2015 (-9% less than in 2014).

Instead, approximately 1.4 million m³ waste water was discharged into surface water bodies, almost entirely at the Gerenzano site, where a pump and treat system is in place to protect the water table. The figure is 46% higher than last year insofar as in 2014, maintenance works were carried out on the treatment plant.

7.3 | Natural capital in the Generation and Trading Business Unit

The Generation and Trading Business Unit is dedicated to the Group’s electricity generation and energy portfolio management processes, including the purchase and sale of electricity, fuels and environmental certificates.

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**Figure 38 | Input-output model of the Environment BU**

<table>
<thead>
<tr>
<th>INPUTS</th>
<th>OUTPUTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuels</td>
<td>Recovery of materials and energy</td>
</tr>
<tr>
<td>Water</td>
<td>Return of the water resource</td>
</tr>
<tr>
<td>Solar energy</td>
<td>Atmospheric emissions</td>
</tr>
<tr>
<td>Chemical substances</td>
<td>Noise</td>
</tr>
<tr>
<td>Use of the territory</td>
<td>Waste</td>
</tr>
<tr>
<td>Electricity</td>
<td>Waste water</td>
</tr>
<tr>
<td>Automotive fuels</td>
<td>Thermoelectric production</td>
</tr>
<tr>
<td>Hydroelectric production</td>
<td>Photovoltaic production</td>
</tr>
</tbody>
</table>
Energy production

In 2015, collectively the A2A Group produced 13,792 GWh energy: approximately 7% more than last year. The increase is mainly due to the increased production of thermoelectric plants (equal to 8,129 GWh), which mirrors the performance of the electricity market, and the recovery of activities in the Chivasso plant. The production of hydroelectric energy, on the other hand, took a downturn due to the little rainfall recorded. Production of photovoltaic energy remained constant, coming in at 3 GWh.

Figure 39 | Electricity production by type of plant in the Generation and Trading BU (GWh)

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermoelectric plants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCGT</td>
<td>3,782</td>
<td>2,252</td>
<td>3,797</td>
</tr>
<tr>
<td>Multi-fuel plants</td>
<td>3,323</td>
<td>3,192</td>
<td>4,332</td>
</tr>
<tr>
<td>Hydroelectric plants</td>
<td>5,118</td>
<td>6,066</td>
<td>4,451</td>
</tr>
<tr>
<td>Photovoltaic plants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(including self-consumption)</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>12,226</td>
<td>11,513</td>
<td>12,583</td>
</tr>
</tbody>
</table>

Resources: fuels

Electricity is produced using various sources, ranging from fossil fuels to renewable sources. Of the latter, the main role in the A2A Group is played by water, which powers the hydroelectric plants; in 2015, net hydroelectric energy production in fact accounted for 35% of total production. As compared with previous years, an increase is noted in the contribution made by oil products, and heavy fuel oil in particular, which was used in the San Filippo del Mela plant (the only Group plant still able to use it, in fact) to use up the quantity held in the deposit at the end of the essential period of the plant, before then reconverting the plant as had been forecast. Clearly, use of natural gas and coal, which depends on market logics, is back at 2013 levels.

Figure 40 | Use of fuels in the Generation and Trading BU (TJ)

Resources: water

In hydroelectric production, the derived water is returned in full to the water body, without any particular qualitative changes. In 2015, hydroelectric production reduced due to the little rainfall.
The data has changed with respect to that declared in the 2014 Report, because the same water run through the turbines of several plants in series on the same water course had been counted. In thermoelectric production, water is above all needed to cool the plants. 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.

Additional water collections are mainly used for the process; A2A has also decided to add the collection made of sea water by the San Filippo del Mela plant for desalination to the count (also revising 2013 and 2014 data accordingly). To a large extent, process water is recovered during the production cycle. The percentage recovery, in 2015, came in at around 38% (+6% on 2014).
Resources: chemical products and materials

The main chemical products used to produce electricity are used to eliminate pollutants and condition process water; the quantity used depends on production levels. In 2015, 81% of all products and materials used (total quantity 45,628 t) consists of neutralising substances (lime, calcium carbonate, etc.). The increased consumption of these substances is due to the greater production of the plants of San Filippo del Mela and Monfalcone, to eliminate the sulphur oxides.

Use of ammonia has also risen with a view to the start-up of the denitrification system at the Monfalcone plant. The increase in thermoelectric production has resulted in an increased use of sodium hydroxide to produce the demineralised water necessary to the production cycle. A fair quantity, of 7,149 t, consists of oils and lubricants, whose production varies depending on the type of maintenance carried out.

Output: atmospheric emissions

The limitation of atmospheric emissions generated by electricity production is guaranteed by the use of the most modern technologies to eliminate pollutants.

To manage, limit and reduce atmospheric pollution, A2A installs emissions elimination plants, installs continuous monitoring systems and uses low sulphur content fuels. The results of the atmospheric emissions management are shown in the graph below.

![Graph: Emissions produced by the Generation and Trading BU (t)]

Total emissions of NOx, SO2 and Powders have increased due to the greater production of energy. The different percentage rise is connected with the mix of fuels used. Plant performance in terms of reducing or eliminating emissions has also improved, particularly as regards nitrogen oxides, as shown by the reduction in the respective specific emissions.
The main waste generated from electricity production consists of light ash from fumes treatment, heavy ash and slag, gypsum and residues from the desulphurisation process of fumes and sludge from water treatment. Most of this waste is recovered through operations carried out on the sites. Total recovery of hazardous and non-hazardous waste produced in 2015 was 66%; the percentage is down on 2014 because the ash and gypsum of the Monfalcone plant are no longer managed as waste, but rather as by-products.

---

Development of the system to eliminate nitrogen oxides (DeNO\(_x\)) at the Monfalcone plant

With an investment of around 25 million euros, A2A has planned the technological and environmental requalification of the Monfalcone thermoelectric plant. More specifically, in order to also reduce emissions of nitrogen oxide (NO\(_x\)), A2A has submitted a project to the Competent authorities by which to eliminate nitrogen oxides (DeNO\(_x\)) on coal groups 1 and 2 by means of the catalytic denitrification of fumes; its development was completed in 2015. The catalytic denitrifiers developed are the very best technology available as applicable to the plant and will guarantee, as from 2016, a reduction in emissions of NO\(_x\) to values that fall below the limit indicated in European Directive 2010/75/EU on industrial emissions (the “IED”) and are in line with the current reference document on the Best Available Techniques (BREF). According to the plan, the catalytic reactors will, once in operation, allow the reduction of previous emission levels for nitrogen oxides by over 60%.

Output: waste produced

The main waste generated from electricity production consists of light ash from fumes treatment, heavy ash and slag, gypsum and residues from the desulphurisation process of fumes and sludge from water treatment. Most of this waste is recovered through operations carried out on the sites. Total recovery of hazardous and non-hazardous waste produced in 2015 was 66%; the percentage is down on 2014 because the ash and gypsum of the Monfalcone plant are no longer managed as waste, but rather as by-products.
7.4 | Natural capital in the Networks and Heat Business Unit

The Networks and Heat Business Unit comprises the operation and maintenance of the cogeneration plants and the distribution on the territory of network services. In particular, it governs:

- the distribution of electricity and gas;
- integrated water cycle management;
- the production and distribution of heat.

Figure 45 | Input-output model of the Networks and Heat BU

**INPUTS**
- Fuels
- Water
- Chemical substances
- Use of the territory
- Electricity
- Automotive fuels
- Thermal energy

**OUTPUTS**
- Cogeneration
- District heating
- Sale of heat
- Electricity and gas networks
- Integrated water cycle
- Recovery of materials and energy
- Making the water resource suitable for drinking
- Atmospheric emissions
- Use of the water resource
- Noise
- Waste
- Waste water

Distribution of gas and electricity

In 2015, 1,995 Mm³ of natural gas were released to the network; this value is in line with that of the previous years, as can be seen in the graph below. As regards gas distribution, the BU also governs plant development and maintenance in relation to the connection of new users, the changing of low and medium pressure pipes and the installation of gas meters.

Figure 46 | Gas distributed

<table>
<thead>
<tr>
<th>Year</th>
<th>Gas Distributed (Mm³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>2,220</td>
</tr>
<tr>
<td>2014</td>
<td>1,809</td>
</tr>
<tr>
<td>2015</td>
<td>1,995</td>
</tr>
</tbody>
</table>

In 2015, more than 10,000 GWh of electricity was sold. The network losses, of 383 GWh instead rose on previous years, as can be summed up by the two points below:

1. we have moved from a method defined in the equalisation of losses (energy released to the network reconciled - energy distributed reconciled) to the “physical” value (energy released to the network - energy distributed);
2. consideration has also been given to losses in HV/MV transformers, in line with the document prepared for the “Energy Diagnosis” (Decree Law 102/2014).
Natural capital

Project for the reduction of hexavalent chromium

In 2015, the project to eliminate hexavalent chromium continued with the execution of the upgrading of existing treatment plants and the development of new water treatment plants, with the aim of removing the hexavalent chromium from water distributed to supply the city and municipalities connected to the Brescia aqueduct. As from the end of the year, 100% of water distributed had a concentration of hexavalent chromium less than 2 micrograms/litre, the current threshold of detectability for the substance. The limit envisaged by legislation on drinking water is 50 micrograms/litre for total chromium. The result achieved by A2A Ciclo Idrico puts it in an excellent position internationally.

For more information: a2acicloidrico.eu/home/cms/idrico/sostenibilita/qualita/cromo/

Integrated water cycle

It is very important to monitor the water resource in order to protect the underground water: in 2015, controls carried out on water exceeded the 4,100 parameters per million m$^3$ supplied. Before distribution to users, the water taken from the wells undergoes specific treatments to disinfect it and make it fit for drinking; these are located at each source of supply, so as to guarantee respect of values making it suitable for human consumption. In 2015, there were a total of 63 drinking water plants operative and managed by the Networks and Heat BU. Ten of these, located in the municipality of Brescia, were involved by plant upgrades (as detailed in the box “Project for the reduction of hexavalent chromium”) developed under the scope of a programme to remove chromium from all sources of supply used.
In the province of Brescia, A2A Ciclo Idrico also manages the collection and treatment of waste water, using processes to eliminate pollutant substances, to achieve qualitative characteristics that are compatible with the safeguarding of the environment to which it is returned.

The performance of the removal of polluting loads (COD, BOD, Nitrogen and phosphor) have increased slightly on the figures recorded in previous years, as shown in the graph below.

**Heat production and distribution**

The companies A2A Calore & Servizi and Varese Risorse manage the production and distribution of heat under the scope of the Networks and Heat BU. The cogeneration processes enable the simultaneous production of thermal energy and electricity, using the same production cycle and the same quantity of fuel. The heat produced by the cogeneration is conveyed into the district heating networks, which the BU technically and operatively manages, and distributed to users. These services are always supplied with a view to guaranteeing high performance and pursuing objectives relating to the protection of the territory and sustainability in resource management. The territories concerned by the presence of a district heating network are those of the cities of Milan, Bergamo, Brescia, Varese and Cassano, as well as numerous municipalities in the respective provinces. The district heating network is also powered by heat produced by the waste-to-energy plants of Bergamo, Brescia and Milan; an analysis of this is given in the paragraph on the Environment BU. Use of highly efficient plants, like thermal recovery, heat pumps and cogeneration systems, in 2015 enabled useful thermal power to be obtained in the region of 1,700 MW. In 2015, net production of electricity in cogeneration plants came to that of the previous year, namely 229 GWh. We have instead seen a slight increase, as compared with 2014, in the production of thermal energy, both that produced in cogeneration plants and in thermal plants.

The average yield of fossil fuel cogeneration plants of the Networks and Heat BU maintained values of close to 80% in 2015.
**New installation in the Lamarmora Plant**

At the Brescia Lamarmora plant, the installation and start-up of the first two new heaters for simple heat generation, powered by natural gas, have been completed. The two heaters have already begun producing heat for the district heating network and are now fully available for operation, whilst the third heater will be completed in 2016. The realization of this intervention was necessary to continue to provide current levels of service in the district heating system of Brescia, active for over 40 years, currently covering over 70% of the demand for heating and hot water in the city and some neighbouring communities. The new heaters installed enable us to pursue the objective of continuous improvement of environmental performance in the district heating system and the Lamarmora plant. The new units are in fact powered exclusively by natural gas and equipped with the very best technology available to limit polluting atmospheric emissions.

**Resources: fuels and energy**

Use of fuels in the Networks and Heat Business Unit is attributable for the most part to the cogeneration plants, mainly powered by natural gas. The Brescia Lamarmora cogeneration plant also uses coal for its operation.

As can be seen from the table below, performance was recorded in line with that of previous years, in relation to fuel consumption. The slight increase in consumption is connected with the increased thermal production.

**Figure 50 | Fuels used in the Networks and Heat BU (TJ)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Natural gas (TJ)</th>
<th>Coal (TJ)</th>
<th>Oil (heavy fuel oil, diesel) (TJ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>4,357</td>
<td>0.28</td>
<td>0.04</td>
</tr>
<tr>
<td>2014</td>
<td>3,123</td>
<td>0.04</td>
<td>0.23</td>
</tr>
<tr>
<td>2015</td>
<td>3,318</td>
<td>0.04</td>
<td>0.23</td>
</tr>
</tbody>
</table>

Under the scope of the network operation, fuel consumption is instead almost entirely traceable to the use of fuels for vehicles necessary to move staff managing emergency intervention and maintenance works on the infrastructures. In this case too, the consumption of petrol, diesel and methane recorded in 2015 is in line with previous years.

The collection of water, on the other hand, entails significant electricity consumption to power the drinking water plants. Procurement is above all through pumping the water from wells and taking it, paying particularly careful attention to minimising waste, thanks to the use of high energy efficient pumps.
**Resources: water**

Water consumption includes:

- process water for the production and distribution of heat, in particular to replenish the water in the distribution and circuits of steam production;
- cooling water, used both in the thermal cycle to produce heat and to cool the transformers of the electricity distribution network;
- the water procured for the activities of the integrated water cycle and to distribute drinking water to users, both for the washing and regeneration of treatment plants and purifiers.

The graph below shows that water is mainly taken from a well (73% of the total) and mainly goes towards producing heat and energy and supplying the drinking water plants.

In 2015, water collection from wells was far smaller than previous years, due to the fact that the Famagosta plant has ceased all function of the heat pump.

The remaining 27% of water collection instead comes from the aqueduct and is mainly used to replenish mains water, cool transformers and for hygienic-sanitary purposes.

![Figure 51 | Water resource consumed (thousands of m³)](image)

**Output: atmospheric emissions**

The atmospheric emissions of the Networks and Heat BU are mainly due to the production of thermal energy and electricity. The remarks made on the emissions of carbon dioxide and greenhouse gases were given in the introduction to the Natural Capital, and we would refer you to that paragraph for more in-depth information.

As regards the other main parameters of interest, nitrogen oxides, sulphur oxides and powders are considered. The increased production of NOₓ and SO₂ are related to the greater production of heat recorded in 2015 to cope with the energy demand.
Under the scope of heat, gas and electricity distribution, the atmospheric emissions of pollutants are considered mainly in connection with the CO₂ emitted by vehicles used for transfers. In 2015, a slight reduction was recorded with respect to the values of previous years.

The trend relating to methane losses, due, for example, to failures in the gas distribution network, was kept on average in line with that recorded in previous years (equal to more than 21 million kg).

**Output: waste water**

Waste water is minimal and mainly drained into the sewers and, to a lesser extent, into a surface water body. The water extracted for cooling of heat production cycles is fully returned to the same water body from which it was taken, with the same qualitative features apart from a slight increase in temperature.

As compared with 2014, a reduction in pollutants in waste water discharged into surface water bodies was recorded, deriving from the work of the Networks and Heat Business Unit. More specifically, there has been a reduction of almost 27% for BOD and 21% for COD.

**Output: waste produced**

99% of waste produced is special, non-hazardous, deriving above all from cogeneration processes. Only 1% of waste produced is hazardous. The main types of waste produced under the scope of the activities managed by A2A Ciclo Idrico consist of sludge deriving from the purification processes and used granular active carbon used in the drinking water processes, as well as waste deriving from the maintenance of networks and plants. Under the scope of the distribution of heat, gas and electricity, we are instead seeing waste production deriving from the maintenance of infrastructures. The percentage of waste, both hazardous and non-hazardous, sent for recovery is confirmed as almost 90% for 2015 too.
9,652 employees of the A2A Group as at December 31, 2015

Constant improvement of all accident rates

139,559 hours of training in 2015, for an average of 14.5 hours per person

New people strategy for projects: for a more entrepreneurial managerial culture

New generations: 57% of new permanent employees are aged under 30

Workers by type of employment contract
- Permanent: 98%
- Fixed-term: 2%

Personnel by workplace
- Lombardy: 10%
- Other regions of Italy: 90%
### Material issues for “EMPLOYEE” stakeholders

<table>
<thead>
<tr>
<th>Material issues</th>
<th>Management method</th>
<th>2015 actions</th>
<th>2016 - 2020 Sustainability Plan actions</th>
</tr>
</thead>
</table>
| **Employment**                       | The Group undertakes to guarantee both the maintenance of suitable employment levels and the monitoring of essential competences for the business, through intra-group development routes and territorial relocation initiatives that guarantee diversified management policies of business needs. | • Employer branding  
• Generational handover  
• Reorganisation of BU workforces                                                               | • Maintenance of current hours of training per person to 2020, with:  
- 100% of employees involved in sustainability matters  
- 100% of employees involved in training on the new Group Code of Ethics including sensitisation to the culture of integrity  
- Maintenance of average levels of approval of the teaching/training hours at least equal to 5 (scale from 1 to 7) |
| **Industrial relations**             | Industrial relations govern the contract (collective) of labor relations through negotiations conducted in association locations where the Group is a member and/or company headquarters. The subject contributes to a positive model of the social system of the company. | • Agreement on electricity generation  
• Agreement on the new methods of offering the meal replacement service                      | • 100% of employees involved in listening survey                                                  |
| **Health and safety**                | The Group operates in a heterogeneous business context characterised by a strong interaction with a technological component and the presence of staff on the territory and plants, and it is for this reason that accident prevention and the prevention of occupational diseases remains a key objective. Reducing the number of accidents means improving the working environment and reducing staff absences, therefore, reducing costs and ensuring greater continuity in the production processes. | • Continuous update of the Safety Management system  
• Constant internal and external training  
• LIHS project                                                                                 | • Reduce of 25% the weighted accident rate (frequency index x severity index) with respect to the average for 2013-2015 |
| **Personnel development and management** | The Group strives constantly to develop professional growth objectives, acknowledging merits and thresholds reached. The Human Resource development processes are accompanied by communication initiatives that enable the activities to be supported and their implementation facilitated, also encouraging the sharing of goals and staff involvement. | • New organisational model  
• Development of a managerial culture  
• Futura2a project                                                                            | • Develop 15 new change management projects  
• 100% of graduates aged under 35 (as at 2015) subject to job rotation  
• 100% of managers with Sustainability MBO  
• 100% of employees, subject to performance management, assessed on CSR parameters |
| **Corporate welfare and diversity management** | The corporate welfare policy aims to improve the conciliation of life and work and seeks to increase the sense of belonging to the Group. A2A is involved on a daily basis in the development of Diversity & Inclusion projects to promote the change towards a new business culture, mainly based on issues of “gender balance”. | • Melograno project  
• Company daycare centre  
• Public transport subscriptions  
• Social-psychological assistance service                                                         | • 20% of employees involved in smart working projects, for the roles where it is applicable, in a systematic manner  
• 100% of employees involved in welfare and diversity initiatives |
8.1 | Responsible management of the human capital

The A2A Group Human Resources Development Plan aims to optimise the company’s resources and is based on human resource selection, training and management processes and compensation systems. The plan has been developed on the basis of an ideal route that accompanies the employee’s working life from when he enters the company until potentially reaching high levels of responsibility.

As at December 31, 2015, the total workforce of the A2A Group numbered **9,652 people** (9,614 as at December 31, 2014). During the year, 975 people were hired and 943 ended their employment contracts.

The recruitment process takes place in compliance with the principles of transparency, fairness and timeliness. The total number of new employees has increased on last year (+212% on 2014), with a constant increase of the female presence (17% of the total). The staff recruitment process is supported by Employer Branding activities, aimed at constantly consolidating the image and appeal of A2A on the employment market. Thanks also to the collaboration of universities, schools and research entities, in 2015, 25 internships and 149 placements were activated.

Of these, 42 were carried out in AMSA with the collaboration of the Municipality of Milan for the reintegration into work of people with social and economic disadvantages. To increase development opportunities and internal mobility, in 2015, 62 recruitments were made through job posting, a tool that allows enhancement of the professional skills of employees. Attention to the stability of work remains high: since 2012, in fact, Group employees hired on permanent contracts account for approximately 98% of the total. Only the remaining 2% are employed on fixed-term or inclusion contracts. The Group is also committed to a policy of reorganising the workforce with territorial relocation procedures, which involved some of the employees of the Generation and Trading BU.

Also due to the crisis in the thermoelectric sector, the employees in question have been relocated both to the hydroelectric area and other business areas, after a requalification process aimed at ensuring their reuse. All of the Group’s workers are covered by the National collective Labour Agreements (CCNL), which establish the means of dealing with trade union relationships at the various levels of representation: national, territorial and corporate.
Please note, in particular, two important trade union agreements that transversally involved all corporate business units, to guarantee a gradual generational handover and encourage corporate welfare initiatives. In all, in 2015, 91 agreements have been signed, which can be grouped according to the following classes of reference:

1. working hours and organization;
2. the use of technologies for the safety of work sites and work activities;
3. the transfer of companies, business units and contracts;
4. personnel management, training and education;
5. health and safety training;
6. functioning of industrial relations and social institutions;
7. reduction of surplus staff with the application of social guarantees and economic incentives;
8. productivity enhancement.

8.2 | Health and safety at work

98% of workers work according to the Health and Safety at Work Management System OHSAS 18001. This certification was obtained by 16 Group companies. The A2A Group companies that have a significant biological risk are those that operate in the sector of environmental sanitation and those that deal with civil water purification. Thanks to targeted activities of prevention and protection, in the last three years there have been no cases of illness caused by contact with work-related pathogens. The data on accident rates show a substantial, constant improvement in all values, showing the Group’s commitment to protecting its employees.

Once a year, all the A2A Group companies organise a meeting with the employer, the physician in charge, the Head of Prevention and Protection (RSPP) and the workers’ safety representative (RLS), representing all workers.
Prevention and safety of contractors

In 2015, 15 injuries were recorded to workers of contractors, with a prognosis of more than three days to recover, for a total of 467 working days lost. The frequency index therefore stands at 8.44 and severity at 0.26.

Studies conducted on injuries in the last 20 years show that the main cause of incidents in the workplace is insecure behaviour of workers. This is why A2A has developed and launched a programme of change “Leadership in Health and Safety (LiHS)”, which in 2015 involved the top management of the Networks and Heat business unit, with a first pilot workshop. The programme is based on strategies and instruments designed to give rise to a strong emotional impact, able to bring widespread beliefs into discussion and deep-rooted habits, preparing people to welcome the cultural change that affects workers’ behaviour and leads to greater awareness and responsibility. Moreover, the “Approach to risk” course has been organised for the District Heating Plant Operation function, which involved approximately 100 people with the aim of promoting a culture of safety at work, encouraging greater responsibility and more aware behaviour with regards to corporate risks. In 2015, more than 6,845 medical check-ups were held and approximately 11,345 clinical examinations. Moreover, more than 127 site inspections were carried out by appointed physicians at the workplaces, to verify the coherence between the medical monitoring programme and the activities carried out by workers. In 2015, activities carried out aiming to promote health in the A2A Group; in particular, we note:

- seasonal anti-influenza vaccination campaign with adhesion of 567 workers;
- Cuore project, i.e. a campaign for the prevention of cardiovascular risk;
- Promosalute Edipower, i.e. a series of clinical assessments to prevent cardiovascular disease and preventive controls for prostate cancer in men aged over 50.

Medical monitoring activities for Expo 2015

The A2A Group companies working in Milan have been involved in extraordinary activities for Expo; in particular, AMSA has hired 434 new workers of whom 311 as additional resources for waste collection and street sweeping in the city of Milan and 123 dedicated to the exhibition area alone. In all, the fitness for work has been assessed for 745 people.
A2A uses a performance management system which is gradually being extended to increasing sectors of the Company’s employees. This process was set up in 2009 and by 2015, its use had extended to appraising 48% of employees. In line with that announced in the 2015-2019 Business Plan and with reference to the “Dialogue” aimed at optimising employees, developing competences and quality of life in the communities, a new organisational and management model of the activities developed for projects, has been created. This context also includes the A2A new people strategy, which aims to create a more entrepreneurial managerial culture and develop resources, with the objectives of attracting, developing and retaining the human capital. The table below summarises the strategies and activities for the projects.

<table>
<thead>
<tr>
<th>Drivers</th>
<th>Commitments</th>
<th>Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisational culture</td>
<td>Continuous improvement</td>
<td>Simplify the processes, share best practices within and between the business units</td>
</tr>
<tr>
<td></td>
<td>Culture of the market and diversity</td>
<td>Promote the centrality of the employee, the merits, innovation and optimise diversity</td>
</tr>
<tr>
<td>Stakeholder engagement</td>
<td>Internal communication</td>
<td>Activate formal and informal listening initiatives on all levels, with different tools and methods</td>
</tr>
<tr>
<td></td>
<td>Employer branding</td>
<td>New synergies with secondary schools and universities</td>
</tr>
<tr>
<td>Resource development</td>
<td>Generational handover</td>
<td>Optimisation of the company’s silver population (over 55)</td>
</tr>
<tr>
<td></td>
<td>Young population</td>
<td>Free up the energy of the younger members of the Group to drive ideas and change</td>
</tr>
<tr>
<td>Optimisation of core competences and requalification</td>
<td>Managerial skills and requalification</td>
<td>Adjust competences in line with the change to business and strengthen managerial skills</td>
</tr>
<tr>
<td></td>
<td>Development of paths of accompaniment towards new roles</td>
<td>Development of paths of accompaniment towards new roles</td>
</tr>
<tr>
<td></td>
<td>Efficiency drive</td>
<td>Make the most of synergies between different businesses by means of organisational restructuring moves, to facilitate horizontal mobility, also on professional roles on an infragroup level</td>
</tr>
</tbody>
</table>
For the A2A Group, **training** is a key tool in stimulating and extending individual skills of its employees. During the year, 139 thousand hours of training were provided, for an average of 14.5 hours per person, with a peak of 24 hours for middle management. 75% of Group employees received training during the year. We also note that the investment made in training, of more than 2 million euros, has increased by 4.6% on 2014.

<table>
<thead>
<tr>
<th>Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pilot projects on continuous improvement</strong> - a pilot project for change management was developed in 2015, which involved 3 different corporate areas: district heating sites, expenditure cycle, protocol</td>
</tr>
<tr>
<td><strong>Melograno project</strong> - launched in collaboration with the “Valore D” Association to promote and contribute towards the “optimisation” of the female component in the Company, involving more than 40 employees</td>
</tr>
<tr>
<td><strong>Social policy</strong> - offer in terms of welfare for employees with numerous services described in the box on page 93</td>
</tr>
<tr>
<td><strong>SiAmo A2A</strong> - the new corporate magazine was launched in September 2015; its contents are: company news, in-depth information on the significant projects in progress and internal initiatives</td>
</tr>
<tr>
<td><strong>Revising of spaces</strong> - in 2015, the first pilot project was started in the offices of Via della Signora, Milan. It will continue in 2016 in Brescia too, at the offices of Via Lamaranta</td>
</tr>
<tr>
<td><strong>Events and collaborations</strong> - the partnership continues with 6 business schools, 22 universities and 27 secondary schools</td>
</tr>
<tr>
<td><strong>UNIversoA2A</strong> - open days for students have been organised at the waste-to-energy plants of Brescia and Milan Silla2</td>
</tr>
<tr>
<td><strong>Silver project</strong> - projects have been studied to optimise the over 55s, which will be launched in 2016 to convey and capitalise the distinctive competences of each</td>
</tr>
<tr>
<td><strong>Futuraza</strong> - project for the Group’s young graduates, which brought together more than 200 innovative ideas onto the dedicated on-line platform. Of these, 12 have been chosen and developed through to defining a real business plan. “From the bill to energy efficiency” was the winning idea, which proposes consultancy and products for energy efficiency in the homes of A2A customers. During 2016, some ideas will be implemented and included in the A2A Business Plan</td>
</tr>
<tr>
<td><strong>Meetings between the young and top management</strong> - with the aim of expanding upon the knowledge of the Group’s young graduates, top management has decided to organise dedicated meetings to provide an overview of the business and context, gaining ideas for the core business and ensuring more in-depth knowledge of the individual people as a time of visibility and involvement. In 2015, meetings were held of the younger members of the Networks and Heat Business Unit</td>
</tr>
<tr>
<td><strong>Skills laboratory</strong> - in 2015, the following projects were started:</td>
</tr>
<tr>
<td>• training sessions for the Networks and Heat BU</td>
</tr>
<tr>
<td>• “La Potenza dell’acqua” [The power of water] project to map skills, intended for employees of the Generation and Trading BU</td>
</tr>
<tr>
<td>• master ENVIRONMENT project intended for employees of the HSE structure</td>
</tr>
<tr>
<td>• training solutions for employees of the company Selene (Group telecommunications company)</td>
</tr>
<tr>
<td><strong>Managerial development project</strong> - to launch a workforce development programme that meets with the Company’s priorities and real needs, in 2015, a listening phase was designed, structured over transversal HR matters, by means of surveys, focus groups and interviews with the different company populations. In 2016, the project will start that is set to focus particularly on managerial training routes, starting from the top and middle management before thereafter involving all Group employees through dedicated projects on themes that will emerge along the way</td>
</tr>
<tr>
<td><strong>Gulliver project</strong> - to drive an organisational culture focussed on shared, transparent management of the Group value resources, in 2015 an overall map was prepared of the company managerial roles, with different levels of depth and risk margins, to identify and implement some rotations on the basis of the know-how and professional families, as well as support the definition of a succession plan on a Group level</td>
</tr>
</tbody>
</table>

2015 Sustainability Report
Human capital

8.4 | Welfare and diversity

In line with the provisions of the Business Plan guidelines on People Strategy, the Group has promoted the development of a great many initiatives, in order to create value and make the most of opportunities for growth and development, optimising diversity through the identification and overcoming of all stereotypes connected with gender, age, disability, ethnic origin, religious belief and sexual orientation. To help employees reconcile work and private life, the Group has granted 276 part-time jobs (2.9% of total employees), of which 87.6% have gone to women. Parental leave was granted to 660 people, of which over 50% women. 95% of the people granted parental leave in 2015 returned to work in the same year. A2A ensures working rights for people with disabilities, as required by current legislation. 456 disabled persons were employed by the Group in 2015, of whom 20.8% women. The offer in terms of company welfare comprises numerous services offered to employees:

Special training for Amsa employees during Expo 2015

For staff hired during the 2015 Universal Exhibition to clean the EXPO site, a dedicated route has been designed, which saw the employees involved in 2 days of training: the first of behavioural training entitled “Incontri con persone straordinarie” [Meetings with extraordinary people] provided notions on the habits and customs of the world’s main cultures, so as to ensure greater awareness of some key behaviour to adopt; the second instead focused on the English language to provide greater fluidity, confidence and competence in answering some of the most frequent requests by foreign visitors/exhibitors present at the site. The method adopted in both courses is based on training experience, with simple language based on simple analogies. Tests and simulations were used, as well as videos. The teaching material was then used to prepare a useful pocket guide to check terms and provide tourists and exhibitors with immediate responses. The experience, methods and tools activated by Amsa for training its EXPO staff represent a model of “good practice” for which Amsa has also received recognition from Fonservizi for the training of staff working in EXPO during the six months of the event.

Special mention of the Futura2a project

During the AIDAP AWARD 2015, the Panel of the Italian Association for Staff Management that rewards the most exciting staff management projects, rewarded A2A with a special mention for the “Futura2a” project for having facilitated - we read in the mention - the creation of innovative ideas, the collaboration and dissemination of a culture of knowledge sharing.
A2A social policies

**Work-life balance services**

**Mobility services**: again in 2015, beneficial tariffs were applied for the purchase by employees of subscriptions with local transport services; more specifically, in 2015 approximately 900 subscriptions were taken out at beneficial rates in Milan and Brescia.

**Company daycare at the Lamarmora offices in Brescia**: in 2015, 13 children of employees were registered; moreover, in 2015, by Decree of the Ministry of Education, University and Research, schooling equivalence was acknowledged for the nursery school section, which involved 7 children of employees.

**Personal services**

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

**Insurance**: against accidents and medical insurance.

**Health and well-being services**

**Social-psychological assistance services**: present in the main territories of the A2A Group (10 offices). In June 2015, the hours of attendance of company psychologists at the various local offices were extended. In 2015, the service involved 119 employees for a total of 1374 consultancy sessions.

In 2015, the A2A Group also launched the **Melograno** project, with the aim of starting a path of awareness and listening on gender diversity and promoting a change to it. The initiative involved more than 40 employees transversal to the Group, who were divided up into 5 working parties and worked on matters considered as essential to the Company (flexible work, training and involvement, company well-being, professional network and gender competences). In support of the initiative, 5 focus groups were also developed as an opportunity for company listening, transversal to the whole population.
8.5 | Remuneration

A2A pays new employees the minimum wage established by the applicable national collective employment agreement for the category into which they fall. In defining the type of contract and salary, A2A complies scrupulously with Italian legislation, which excludes any distinction of gender in remuneration. Although there are still slight differences in the average salary of the different categories, managers on average do not show any differences.

The Group’s remuneration policy is mainly conceived to acknowledge and optimise the commitment, competences and behaviour of employees and to guarantee the correct remuneration positioning of employees in connection with their duties.

For all employees, remuneration is structured into fixed and variable monetary components and provides for a package of benefits in support of income or similar such additions (medical and social security insurance, projects and initiatives for employees and their families, promotions and benefits of various types).

The variable monetary component is based on systems of a direct connection between company performance and individual performance (“MBO”) or on discretionary mechanisms for the recognition of working performance and conduct in terms of “one-off” bonuses.

The variable remuneration system is also supplemented by a collective incentive tool (a “results bonus”), which is based on Group productivity and profitability goals, aimed at guaranteeing the involvement of all staff, including those not assigned MBOs, in company performance.

To involve employees more closely in the Group’s objectives and increase their participation in the achievement of company results, the MBO system has been gradually extended over the years to include more and more people, in 2015 reaching around 100% of managers, 20% of middle managers and 1% of employees.

<table>
<thead>
<tr>
<th>Category</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers</td>
<td>98.9%</td>
<td>101.2%</td>
<td>101.0%</td>
</tr>
<tr>
<td>Supervisors</td>
<td>98.5%</td>
<td>97.5%</td>
<td>97.0%</td>
</tr>
<tr>
<td>White-collar workers</td>
<td>90.3%</td>
<td>89.5%</td>
<td>89.1%</td>
</tr>
<tr>
<td>Blue-collar workers</td>
<td>91.3%</td>
<td>91.1%</td>
<td>91.1%</td>
</tr>
</tbody>
</table>

Figure 56 | Average salary of men/woman by category
Support research and innovation initiatives, cooperating with universities and territorial networks of excellence with a particular focus on issues connected with the development of smart cities. The sustainability and innovation of the production processes is closely linked to the supply of cutting-edge services and is the result of research and development pursued with universities, partners and research institutes all closely linked to the territorial fabric where the Group operates.

- Smart Grid development projects
- E-Moving
- HR projects
- WFM and DMS projects
- IT platforms and studies for HR development
- Trademarks and patents

- Develop 5 research projects, initiatives or partnerships
- 100% of users with smart gas meters and 75% of users with smart electricity meters
- 5 services activated in the smart city environment in more than 3 municipalities

### Material matters

<table>
<thead>
<tr>
<th>Material issues</th>
<th>Management method</th>
<th>2015 actions</th>
<th>2016-2020 Sustainability Plan actions</th>
</tr>
</thead>
</table>
| Innovation and smart cities | Support research and innovation initiatives, cooperating with universities and territorial networks of excellence with a particular focus on issues connected with the development of smart cities. The sustainability and innovation of the production processes is closely linked to the supply of cutting-edge services and is the result of research and development pursued with universities, partners and research institutes all closely linked to the territorial fabric where the Group operates. | • Smart Grid development projects  
• E-Moving  
• HR projects  
• WFM and DMS projects  
• IT platforms and studies for HR development  
• Trademarks and patents | • Develop 5 research projects, initiatives or partnerships  
• 100% of users with smart gas meters and 75% of users with smart electricity meters  
• 5 services activated in the smart city environment in more than 3 municipalities |
9.1 | Research and development of smart grids

In line with the guidelines of the Business Plan, A2A undertakes to develop new business models and growth opportunities, under the scope of the smart networks and the green economy, particularly investing in the cities’ infrastructures. In these terms, all business sectors are involved in, the search for new solutions, both for optimizing processes and improving service quality and extending the offer. Numerous projects, stemming from this commitment, benefit from the collaboration of research entities and universities and participation in initiatives and congresses, all a useful way to gather needs and new ideas.

The development of the smart grids

The Networks Sector has considerable involvement, given the stimuli deriving from the evolutionary thrust of technological innovation, in developing new “smart” solutions and their derivatives: “smart grid”, “smartip”, “smartcity” and “smartcommunity”. The adjective “smart” is used to identify innovative digital technology, as an enabling tool for achieving greater “intelligence” in the product-service, on the one hand, adapting it to the requirements of the Regulator, on the other, making it more responsive to the expectations of customers who are increasingly technologically and cutting-edge orientated. Particular stimuli come from the evolution of the regulatory framework and networks market. Below are the main projects that have resulted in the evolution of processes and operative management, increasing quality of service.

The Work Force Management works progress reports projects

As regards assistance and maintenance work on the electricity and gas distribution networks, the Work Force Management (WFM) system has been introduced; this enables the integration of the Asset Management systems, the GIS geographic information system and GPS technology, to pinpoint plants and operating teams available throughout the area, thereby enabling a more effective, efficient management of activities. The digitisation of the intervention management system and the introduction of GPS and “Smart Gas” systems guarantee the traceability of all activities and improves quality of service. The main benefits are:

- better traceability of activities, lesser use of paper and standardisation of data (200,000 provisions per year; 150 processes catalogued, 40 of which account for 70% of provisions);
- optimisation of resource use;
- computerisation of processes and efficient data management;
- increased efficiency of emergency structures.

At present, the WFM project is currently being completed with its “mobile” component, whose adoption by all operative departments will be completed in 2016.
Smart Metering project

The Smart Metering Gas project has been launched with the aim of fulfilling the obligations laid down by resolutions AEEGSI ARG/gas 155/08 (1) and 631/2013/R/gas (2), as subsequently amended and supplemented. The aim of resolution 155/08 is to lay down the instructions for the start-up of gas meters, characterised by minimum functional requirements and with remote reading and remote management functions for the natural gas distribution network delivery points. Subsequent resolution 631/13 as subsequently amended and supplemented defined the timing and percentages of adjustment of the meters in order to apply remote reading of consumption. A2A Reti Gas and A2A Servizi alla Distribuzione have planned the processes and activities necessary to fulfil the obligations laid down by the resolution and to define and procure some of the technological solutions required. The targets envisaged by the legislation for 2015 have been incorporated. With the installation of radio frequency meters completed in June 2015, allowing for the test to be run, during the second half of the year, the radio frequency meters were installed en masse; as at December 31, 2015, 13% of the new meters had been installed, of which half had been commissioned.

The DMS project

The Distribution Management System (DMS) is the evolution of the SCADA (Supervisory Control And Data Acquisition) system used for the remote control and automation of the network and will effectively form the “brain” of the future A2A Smart Grid. A tender is currently being organised to assign the system development to a qualified supplier.

The Smart Domo Grid project

The project drew to a successful close during the first few months of 2015. A pilot system was installed in a district of Brescia actively involving twenty-one families, who were assigned fifty or so smart electrical appliances and tablets to try out an innovative, efficient form of managing them, with a view to achieving savings and better grid use. The results were encouraging and have enabled us to verify the possibility of reducing or moving a considerable percentage of the load, in relation to grid reliability needs. From the user’s standpoint, it has shown that savings can be obtained on the energy bill by making more energy-aware choices. The Smart Domo Grid project was co-financed by the Ministry of Economic Development, with A2A as project leader partnering the Department of Energy of Milan “Politecnico” University and Whirlpool.

Smart Domo Grid

Smart Domo Grid is a smart grid solution with demand/response functions that can allow for the interaction of the electricity grid with the devices controlling household appliances and energy storage devices, taking A2A directly into the future of the “Smart City”.

2015 Sustainability Report
The IDE4L (Ideal Grid for All) project

The project is at an advanced stage of development and scheduled to end in August 2016. This project is the natural continuation of the INTEGRIS project, complementing the Smart Domo Grid objectives. It was co-financed by the European Union as part of the FP7 research and innovation programme. The project covers extremely technically complex areas of considerable impact on the planning and operative management of electricity grids, such as:

- Congestion management, for the quality of service and an effective definition of development investments;
- Distributed Energy Resource (DER) - Distributed Generation (DG) integration, to facilitate the integration and management of renewable sources;
- Power Quality and DER to improve the quality of service.

More specifically, the pilot projects on the A2A Reti Elettriche network both in Milan and Brescia are currently under development and being completed, focused on advanced grid automation functions.

IDE4L (Ideal Grid for All) project

The Ideal project is hinged on the function of electricity networks, dealing with the matter of grid operative management. With the aim of improving quality of service, it integrates and manages the network of energy obtained from renewable sources.

Pilot projects on electricity stations

This year, A2A has obtained approval from AEEGSI to develop two pilot Smart Grid projects. The first concerns a primary station in the district of Lambrate, Milan, whilst the second regards a primary station in the municipality of Gavardo (Brescia). The aim is to encourage the development of distributed generation and hence the use of renewable sources for the production of electricity.

S.C.U.O.L.A. project

Implementation was completed in 2015, whilst tests and the publication of results will draw to a close during the first quarter of 2016. The SCUOLA - Smart Campus as Urban Open Labs - project tried out an evolved Smart Grid system to intelligently integrate various energy aspects of urban areas, in order to obtain high levels of:

- energy efficiency of enclosures and systems of buildings;
- advanced communications technologies to provide services to citizens.

For now, the trial is in place at:

- 2 buildings of Milan “Politecnico” University;
- 2 buildings of Brescia University;
- 1 domestic user in Brescia;
- some public charging points for electric vehicles.
The Brescia Smart Living project

The Brescia Smart Living project was launched in 2015 and earned first place in the hierarchy of assessment of the winning projects of the Call held by the Ministry for Education, University and Research in 2012, due to its multi-service approach, given that it involves various companies of the group (A2A Reti Elettriche, Selene, A2A Calore & Servizi, A2A Servizi alla Distribuzione, Aprica and A2A Ciclo Idrico), as well as third parties including research entities, universities and small and large enterprises. The project comes under the scope of Smart Cities, also dealing with social aspects.

The project trial will involve various areas of the city of Brescia, in which an experimental route will be launched combining technology for well-being, for the environment and systems to protect vulnerable citizens.

The issues at the heart of the improvement are energy consumption, public lighting, air and noise quality analysis, waste collection, social interaction, the protection of weaker members of society, safety, communication infrastructures, information and transparency. The analysis of the state-of-the-art is currently being completed, along with definition of the applicable specifications and the system design phase will soon be underway.

Sharing Cities project

Sharing Cities is a research project that is co-financed by the EU as part of the Horizon 2020, Call Smart Cities & Communities programme. The project began in January 2016 and is expected to be completed in April 2020.

The Greater London Authority is the lead partner of a group of 34 players. A2A is involved in the initiative with A2A Reti Elettriche and Selene. The total value budget is approximately 28 million euros.

The various partners include the municipalities of Milan, London and Lisbon (core cities) as well as those of Bordeaux, Burgas and Warsaw (follower cities).

The partnership aims to overcome some of the essential environmental challenges faced by a city: CO$_2$ emissions by buildings and transport and air quality.

The aims are to actively involve residents to develop participation and co-design mechanisms, the integrated management of energy systems, electrical mobility and services that can be combined with public lighting. In order to achieve these goals, IT platforms will be developed that can collect information from the field and transform it into services for locals.
The “E-MOVING” pilot project

December 31, 2015 marked the official close of the trial of electric mobility launched by A2A in collaboration with the municipalities of Brescia and Milan and the AEEGSI.

The project, which AEEGSI classified as the best in terms of completeness, and together with that proposed by Enel, the most extended throughout Italy, began in 2011. It consisted of the development of a network of public charging stations in the municipalities of Brescia and Milan, for a total of one hundred 22 kW charging points (64 in Milan and 32 in Brescia) in 50 columns and the installation of private columns at companies taking part in the initial stage of the trial.

The project aimed to test the complete mobility system (car, charging infrastructures, methods of use, public entity side service management and infrastructures manager), in order to help understand the actual needs, business opportunities, strengths and critical issues involved in the system as a whole.

To date, the service has around 400 customers, of whom 280 are private cars and the remainder company cars. The quantities of energy taken from the public network and private network dedicated to car sharing, are shown in the graph below:

A2A has obtained clearance from the municipalities of Brescia and Milan to pursue the public service throughout 2016. New specific products and services are being studied to offer to the community.

9.2 | Research and innovation for digital development

In line with the new human capital organisational model (the “People Strategy”), aimed at creating a managerial and organisational culture and develop a greater identity, new supporting tools have been implemented to guarantee greater flexibility with a view to change and innovation.
New IT human capital management system

A new IT platform has been developed, to facilitate and support the Change Management process, with a view to using two-way type systems.

On the one hand, the active participation of staff is assured, whilst on the other, HR (Human Resources Management and Organisation) and the Managers are provided with specific governance tools and measurement indicators (KPI-HR) that are both smart and user-friendly.

Study of the human capital management process

During the year, the Group ran a study focused on analysing the processes and work of the Human Resources Management and Organisation, with the following goal:

- the check-up of the current model of all processes, services and activities and systems relating to human capital management;
- the definition of a process model and management system in a short-/medium-term approach;
- the preparation of an evolutionary implementation route of processes, services and systems, to be pursued as from 2016.

En&A project

March 2015 saw the launch of the **En&A (Engage & Achieve) project**, a programme spanning several years and seeking to improve the Group’s processes in terms of effectiveness and efficiency.

Following a preliminary assessment phase, the programme involved all the Group’s management teams/business units in the identification and design of **more than 170 improvement initiatives**, which will gradually be implemented and integrated over the five years (2016-2020), involving around 600 people present in the various business units.

The first initiatives of the programme are already under development.

Smartcity LAB project

In the Selene offices, a Group company, there is a trial laboratory for transmission metering technology and smart cities (the Smartcity LAB).

As regards metering, readings from gas, water, district heating and heat exchange meters have all been tested. Under the scope of the Smart City, innovative solutions are being trialed by which to improve the quality of life and satisfy the needs of residents, businesses and institutions alike, thanks to the widespread use of new communication, mobility, environment and energy efficiency technology:

- car parking occupation sensors that can be used to manage car parking bookings and payments;
- intelligent rubbish bins that can detect the level to which they are full and thereby optimise emptying;
- management of public watering systems;
- digital islands with Wi-Fi and electric car charging stations and other devices;
- break-in sensors;
- weather and environmental data detection;
- smart LED lighting.
9.3 | Trademarks and patents as intangible resources

The term “Intellectual Capital” is used to refer to all the intellectual resources on which competitive advantage depends, including intellectual property, patents, copyright, software, industrial models, procedures and protocols, which the Group wishes to preserve and protect over time. The brand and reputation of the organisation are also associated with these aspects.

Below are the Group’s main patents and trademarks:

Figure 58 | Registered patents of the A2A Group as at 12.31.2015

<table>
<thead>
<tr>
<th></th>
<th>Italian</th>
<th>European</th>
<th>International</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2A Ambiente</td>
<td>22</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Amsa</td>
<td>5</td>
<td>2</td>
<td>-</td>
</tr>
</tbody>
</table>

The patents mainly refer to instruments and processes implemented by the Environment BU for waste collection and treatment, including, for example: procedure for the recovery of energy from solid urban waste; procedure for the neutralisation of acid substances present in industrial-origin gases; procedure for the elimination of organic chloride micro-pollutants present in combustion fumes; method and system for the treatment of biological sludge; device for supplying refuse-derived fuels (RDF) to combustion plants; device to facilitate road cleaning (for motorised cleaners used for municipal cleaning services); waste collection vehicles. A trademark identifies and values the products/services, distinguishing them from those of competitors and protecting them against counterfeiters and illegality. The Group’s registered trademarks include: A2A, E-MOVING, Casa dell’Energia AEM, Biocubi, ITS, Fertilvita, Chiara2a, Bollett@mail, and many more besides.

Figure 59 | Registered trademarks registered of the A2A Group as at 12.31.2015

<table>
<thead>
<tr>
<th></th>
<th>Italian</th>
<th>European</th>
<th>International</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2A SpA</td>
<td>11</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>A2A Ambiente</td>
<td>15</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>AMSA</td>
<td>6</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>A2A Energia</td>
<td>3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Selene</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
10.1 | Relations with customers

<table>
<thead>
<tr>
<th>A2A Group</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity customers (supply points)</td>
<td>990,098</td>
<td>970,408</td>
<td>985,070</td>
</tr>
<tr>
<td>Electricity sold (GWh)</td>
<td>8,400</td>
<td>7,537</td>
<td>7,026</td>
</tr>
<tr>
<td>Gas customers (supply points)</td>
<td>1,140,112</td>
<td>1,111,885</td>
<td>1,097,480</td>
</tr>
<tr>
<td>Gas sold (millions of m³)</td>
<td>1,402</td>
<td>1,100</td>
<td>1,117</td>
</tr>
<tr>
<td>Water customers (aqueduct service users)</td>
<td>279,188</td>
<td>280,092</td>
<td>282,254</td>
</tr>
<tr>
<td>Water supplied to users (millions of m³)</td>
<td>63</td>
<td>60</td>
<td>63</td>
</tr>
<tr>
<td>District heating customers (users served)</td>
<td>23,773</td>
<td>24,242</td>
<td>24,526</td>
</tr>
<tr>
<td>Heat sold (GWht)</td>
<td>2,396</td>
<td>1,951</td>
<td>2,297</td>
</tr>
<tr>
<td>Municipalities served for environmental hygiene</td>
<td>88</td>
<td>93</td>
<td>101</td>
</tr>
<tr>
<td>Waste collected (thousands of tonnes)</td>
<td>1,543</td>
<td>1,489</td>
<td>1,313</td>
</tr>
<tr>
<td>Municipalities served for electricity distribution</td>
<td>54</td>
<td>54</td>
<td>54</td>
</tr>
<tr>
<td>Municipalities served for gas distribution</td>
<td>202</td>
<td>204</td>
<td>204</td>
</tr>
</tbody>
</table>

1 Sold to customers of the free and protected market; the quantities sold are stated net of losses.
2 Municipal waste collected for the environmental hygiene service and special waste collected with services for payment by Amsa and Aprica.

New app for the collection of cumbersome waste: approximately 42,880 people have used the service

More than 1,000 supply vouchers requested from customers registered with the “Chiara2a” loyalty programme run by A2A Energia
<table>
<thead>
<tr>
<th>Material issues</th>
<th>Management method</th>
<th>2015 actions</th>
<th>2016-2020 Sustainability Plan actions</th>
</tr>
</thead>
</table>
| Management of categories of vulnerable clients     | The Group guarantees equal rights to all users, equal treatment and non-discrimination against any for any reason. The Group also undertakes to pay close attention to simplifying language, guaranteeing accessibility to the services offered. | • Disbursement of financial bonuses  
• “Banco dell’energia” [Energy bank] project  
• Braille bills  
• Multi-lingual documentation | • Achieve 0.1% of customer base (including employees) with the Energy Bank initiative |
| Fairness and transparency in customer relations     | Fairness and transparency towards customers and citizens served are always among the cornerstones of the A2A Group, essential to building and maintaining a lasting relationship that is expressed through multiple contact channels. Under this scope, the Group undertakes to ensure respect and courtesy with regards to the end user, offering multiple communication channels. | • Complaints and disputes management service  
• Joint settlement service  
• Information campaign on “fake workers” (Amsa)  
• Start-up of focus groups with customers, employee and consumer associations to present the new Bill 2.0  
• Self-regulation protocol against unfair commercial practices | • Reach 400,000 customers with the on-line services offered by A2A Energia  
• 400,000 customers registered with the A2A Energia bollett@mail service  
• Reach 100,000 citizens with the Group apps |
| Quality of services provided and attention to customers | The Group establishes principles and criteria for the supply of the service in addition to general and specific quality standards of the service, which it undertakes to respect. Moreover, the Group pursues the aim of continuously improving efficiency and effectiveness of the service, adopting the technological, organisational and procedural solutions that are most appropriate to the end. | • Customer satisfaction surveys  
• Service quality charter  
• Technological applications  
• Freephone number  
• Other related services | • “Reference multi-client customer satisfaction” results for A2A Energia higher than the industry national average  
• Maintenance of customer satisfaction levels measured with the 2013 survey for A2A Ciclo Idrico  
• -40% of average duration and -64% of average number of interruptions for LV customers in the city of Milan with respect to 2015 |
| Responsibility of customers                        | The Group has always been committed to promoting and supporting energy efficiency initiatives, increasing differentiated collection and environmental education, aiming to spread a growing concern for the environment and the correct use of resources. | • Promotion campaign for the use of low energy bulbs and offers of green energy  
• Separate waste collection sensitisation campaign  
• Campaign for the promotion of the disposal of “special” waste  | • 100% increase in the sale of green energy (renewable) from 400GWh to 800GWh, to the MASS market segment  
• Number of registered members of the loyalty programmes in education on the aware use of energy equal to 350,000 supplies |
10.1.1 | Relations with customers of the gas and electricity sales service

A2A Energia and Aspem Energia are the commercial companies of the A2A Group focused on the sale of gas and electricity to large industrial customers, SMEs, condominiums and domestic customers.

Figure 60 | Number of customers analysed by type

<table>
<thead>
<tr>
<th>Type</th>
<th>Electricity</th>
<th>Gas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>82%</td>
<td>94%</td>
</tr>
<tr>
<td>Large customers</td>
<td>12%</td>
<td>5%</td>
</tr>
<tr>
<td>SME</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>Condominiums</td>
<td>3%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Figure 61 | Number of electricity supply contracts by type of market

<table>
<thead>
<tr>
<th>Market Type</th>
<th>Electricity</th>
<th>Gas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protected</td>
<td>73%</td>
<td>20%</td>
</tr>
<tr>
<td>Free</td>
<td>27%</td>
<td>80%</td>
</tr>
</tbody>
</table>

Commercial practices

The intensive commercial campaign run by A2A Energia with a view to strengthening its identity as a leading company in the Lombardy region, continues over the years. In 2015, commercial action was taken to conquer new customers in Liguria, Piedmont, Veneto, Emilia Romagna, Friuli Venezia Giulia and Tuscany, through the support of focussed contact structures. And to further strengthen the Group’s presence, development has been launched of a new commercial network of direct agents dedicated to business customers.

New channels of listening to customers

In 2015, a chat service trial was started, managed by A2A Energia operators to guarantee proper listening to customer needs. The service generated more than 100 contacts per day. A call-back service has also been developed for customers wishing to stipulate a new gas and energy contract, who can express their preference on the time to be contacted.
For all supplies of electricity and gas A2A Energia issued in 2015 more than 11 million bills. At end 2015, activation of e-billing achieved 249,000 registrations, with an increase of 10% compared to the previous year.

Thank to bollett@mail about 58 15-m high-medium-sized trees were saved in 2015. Furthermore, it eliminated the pollution caused by transport for the production and distribution of over 1.3 million documents.

The new all-recyclable envelope has been introduced (no longer comprising acetate material), which, in 2015, replaced 99% of envelopes used for A2A Energia communications. Customers have various different methods available by which to pay the bills: SEPA direct debit, which is still the most widespread choice for 58% of all payments, followed by pre-filled postal bulletins, bank transfers, Sisal and Lottomatica lottery outlets, commercial branches and some supermarkets.

Moreover, in 2015 the consolidated partnership was renewed between A2A Energia and Apindustria, with the main aim of reducing the economic impact of the supplies of gas and electricity to Brescia businesses, as well as to develop energy efficiency initiatives and proposals for the integrated management of waste. At the same time, A2A Energia has also provided Apindustria with the possibility of using an electric vehicle with a view to promoting sustainable mobility.
Promote responsible energy consumption

In 2015, the new ECO LED offer was launched for domestic customers, which envisages the possibility of receiving two kits of LED lamps free of charge, by which to reduce electricity consumption, signing the related offer on the free market for electricity and gas (published on the website www.a2aenergia.eu). In 2015, more than 16,000 LED kits were requested. Another 8,000 kits were distributed in events to promote energy savings in the cities of Milan and Brescia. Moreover, in December a new sales campaign was launched of energy-savings lamps through which customers can benefit from the payment by instalments of their bills, with the total split over 36 months and a minimum debit, benefiting from 12% energy savings as compared with the purchase of the products on the market. This initiative represents a first step in the development of an offer that also envisages energy efficiency services and will be flanked by other similar products in 2016.

In 2015, 630.2 GWh of green energy was sold with an increase of 64% on 2014. The offers that promote green energy are identified by the “ENERGIA A2A Rinnovabile 100%®” brand, which ensures respect for the environment.

Figure 64 | Distribution of green energy contracts on the free market by segment of customers

Fairness and transparency in customer relations

A2A is particularly committed to ensuring customers with a service based on maximum transparency and fairness. The company has made available a whole series of tools, also in collaboration with Consumer Associations, which not only strengthen transparency but increasingly seek to simplify the information supplied and regulate behaviour clearly:

• in 2009 activation of the joint settlement service;
• in 2011, signing of the agreement establishing the Observatory on unfair commercial practices;
• since January 2011, application of the Commercial Code of Conduct;
• in 2012, activation of an “anti-fraud” freephone number;
• in 2013, signing of a self-regulation protocol;
• constant training of sales staff and service staff in direct contact with customers.

Energy customer settlement service

Established by AEESGI in April 2013, it is an additional tool available to consumers for simple and swift resolution of any disputes with providers. The service is managed by the Single Purchaser and is voluntary, free of charge, taking place entirely on-line, in accordance with European legislation.

In 2015, six cases were sent to A2A. Of these, four were not upheld, the fifth was closed with an agreement reached and the sixth, of Aspem Energia, is still underway.
In 2015, A2A received 28 requests for joint settlement from consumer associations on behalf of domestic customers. Under the scope of consumer protection, the “anti-fraud” freephone number received 2,858 calls. Of these, 2,479 related to unfair commercial practices implemented by other operators. In a parallel fashion, A2A Energia recorded a further 58 notifications of unfair commercial practice through its own channels. A2A Energia has equipped itself with a monitoring procedure of situations and cases of “non-conformity”. In 2015 too, the company did not receive any sanctions for situations of non-conformity with laws or regulations relating to the supply and related services, for marketing, sponsorship and communication activities.

Service accessibility

The Group is always close to citizens to improve and maintain access to electricity by more disadvantaged populations through the development of various solutions. A2A disburses the social bonus, as per provisions of the AEGSI, allowing family units in particular financial difficulties or in which one of the members suffers from severe physical difficulties, to save on the energy bill. In 2015, the feasibility study was started for the development of a social project - the Energy Bank - aiming to provide support for families experiencing temporary social-economic difficulties.

<table>
<thead>
<tr>
<th>Figure 65</th>
<th>A2A customers who have used the social bonus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2013</td>
</tr>
<tr>
<td>Gas bonus</td>
<td>21,863</td>
</tr>
<tr>
<td>Electricity bonus</td>
<td>18,717</td>
</tr>
</tbody>
</table>

Attention to vulnerable customers is evidenced by various solutions adopted to facilitate the different needs:

- blind customers - the issue of Braille bills is envisaged, as from the second half of 2012, they will be printed both in black and Braille (as an overlay), allowing sighted people to also read them. In view of the change to the layout envisaged by the Bill 2.0 project, the translation project has also been launched of the Braille bill, again for the most significant information;
- foreign customers - multilingual information brochures will be available in the main offices; for all customers, A2A Energia has developed a “Guide to reading the bill” in 7 languages: Italian, English, French, Spanish, Arabic, Chinese and Rumanian, which will be revised with Bill 2.0;
- customers with motor difficulties - at the main public branches, facilitated, priority access is available for customers with physical difficulties, including: disabled, pregnant women and the elderly.

Customer satisfaction

A2A monitors its customers’ satisfaction in order to analyse the perception of its services to identify areas for intervention with a view to ensuring the continuous improvement of the quality of services supplied.

Cerved survey

A2A Energia took part in the 2015 Cerved Energy Monitor to measure and monitor customer satisfaction on the main sales factors. The company is confirmed as amongst the top positions in all sectors, reaching first position for gas users, both domestic and VAT number and for domestic electricity.
In 2015, A2A Energia received a total of almost 2 million calls to the call centre. AEESGI carries out surveys every six months on the quality of national telephone services received by end customers.

Even in the first half of 2015, customers of A2A Energia confirmed the appreciation for the call centre service of the company, measured by a Customer Satisfaction Index (CSI) of 96.5% (+4% as compared with the national average).

The “after call” survey records the level of satisfaction of users with the call centre services after completing a telephone call. As is clear from the table, also for 2015 survey results were again very positive for A2A Energia, with more than 91% of customers satisfied and very satisfied.
Relational capital

Quality of branches
In 2015, the Group’s commercial branches (there is a branch in Milan, three in Brescia and province, four for customers of Bergamo and surrounding areas, Aspem Energia has a branch in the city of Varese) welcomed more than 275,000 visitors with an average wait time of approximately 5 minutes for A2A Energia (5 minutes less than in 2014). In 2015, a survey was run to analyse the level of approval of the service at the branches of Bergamo, Brescia and Milan. 92% of users gave a positive opinion that was aligned with the data of approval of call centres, as shown by the graph.

Figure 69 | Customer satisfaction on the services provided at the counter

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>79.50%</td>
<td>92.00%</td>
</tr>
<tr>
<td>Negative</td>
<td>20.50%</td>
<td>8.00%</td>
</tr>
</tbody>
</table>

Other surveys: Chiara2A and on-line surveys
During the year, the survey was run on the Chiara2a “Entra e vinci Luce&Gas” programme contest. For the survey, approximately 67,000 customers were contacted, who were registered with the programme, obtaining a 13% response rate. One in ten interviewees said that they had used the Chiara2a card at least once and, on average, in a year, the declared use was two and a half times; free time and shopping are the most recommended ways by which to obtain benefits and discounts. Of the new proposals that the Chiara2a programme may develop, the most popular is clearly the possibility of “Receiving discounts and vouchers for buying food products at the most well-known super/hypermarkets” with 73% “very much in favour”.

Chiara2a: the A2A Energia loyalty programme
During the year, activities relating to the Chiara2a loyalty programme increased. The “discount vouchers on the bill” initiative, operative since June 2015, provides the opportunity, on request, to convert the points accumulated with the programme into gas and electricity supply vouchers worth 25, 50 and 100 euros. The initiative has enjoyed a great deal of success and requests have been made by customers for more than 1,000 supply vouchers.

A2A Energia for Social - Together with Cesvi to bring energy to the children of Kinshasa
From July 15 to September 30, 2015, A2A Energia flanked Cesvi Onlus in the charity project “A meal for life”, created to offer support to the children of the community of Kinshasa, in the Congo. The project stimulated the activation by customers of A2A Energia of services such as: bollett@mail, registration with the on-line branch, direct debit of bills from bank or post office current accounts, in exchange for the donation of a meal, to help the young street children of the capital of the Congo. Thanks to customer generosity, more than 10,000 meals have been collected and donated, giving a smile and a little warmth to thousands of children.

For more information about the project please visit: www.a2aenergia.eu
10.1.2 | Relations with customers of the district heating service

Through the company A2A Calore e Servizi, the Group is involved in the production, distribution and sale of heat in the cities of Milan, Brescia, Bergamo and in the Varese area through its subsidiary Varese Risorse. This service, which continues to grow, is currently delivered to over 24,500 users (individual residential units in the case of independent heating or whole buildings in the case of centralised heating), for a total served volume of 96 million cubic meters (+3% vs. 2014).

Figure 70 | Volume served by the district heating network (Mm³)

<table>
<thead>
<tr>
<th>Year</th>
<th>Volume (Mm³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>89.2</td>
</tr>
<tr>
<td>2014</td>
<td>92.7</td>
</tr>
<tr>
<td>2015</td>
<td>95.7</td>
</tr>
</tbody>
</table>

Figure 71 | Geographical distribution of the volume served by district heating

- Province of Milan: 47%
- Province of Brescia: 6%
- Province of Bergamo: 44%
- Province of Varese: 3%

District heating: a new “model” city grows

District heating is helping define the new “model” city, which combines environmental sustainability with innovation, generating countless benefits to the quality of life. Since 2009, the European Commission has been rewarding the “greenest” cities according to a scale based on the achievement of ten “environmental goals” including district heating, which plays a key role: the first “Green City” was awarded in 2014 to Copenhagen, where district heating covers 98% of the city’s demand for heat, thanks to its 1,500 km of pipes. In Italy, the A2A Group plays a leading role in the district heating sector and in 2015, it received a special mention by the team of evaluators of the IEA (International Energy Agency) in the IV edition of the District Energy Award for projects to extend the network in Milan and for important results obtained to the benefit of the environment and quality of life.
Relational capital

The Group companies are also specialised in rationalising the energy management of buildings through measures to improve efficiency, such as:

- the conversion of heating plants fuelled by liquid fuels to methane;
- condominium heat management;
- energy management for large property complexes and public administrations.

In 2015, A2A Calore & Servizi made 18 changes to plants for a total capacity of 9,394 kW.

The increased efficiency of the plants/property fleet is assured through the use of environmentally-friendly solutions (sustainable models) that allow the customer to benefit directly from the financial and other benefits.

Responsibility of customers

The heating and cooling sector is responsible for half of the energy demand of end users in Europe. For this reason, the latest European directives and national legislation (Directive 2012/27/EU and Legislative Decree 102/2014) require an integrated approach to urban development planning, including energy, heating and cooling issues. The STRATEGO Project, of which A2A is a partner, aims to help the national authorities and local authorities in this task.

In 2015, A2A Calore & Servizi made 18 changes to plants for a total capacity of 9,394 kW.

The STRATEGO project has the following aims:

- provide concrete support to the development of National Plans for efficient heating and cooling;
- assist local authorities in assessing the potential for efficient heating and cooling of their territory;
- identify priorities for action;
- identify concrete projects to be implemented in the territory.

For more information about the project please visit: www.stratego-project.eu

Quality of services provided and attention to customers

To promote the district heating service and facilitate access to information, the Group offers multiple communication channels. More specifically, in 2014 the Group equipped itself with a Quality Charter establishing the principles and criteria for the management of the district heating service, so as to guarantee customer satisfaction. Moreover, citizens are provided with communication on the development of the district heating network in their district, through the capillary distribution of leaflets.

Main benefits of district heating for customers:

- **Reduction of costs**: connected with the purchase of heaters and maintenance work.
- **Greater security and innovation**: no need for cisterns, heaters and flues, no combustion and naked flames in heater rooms and consumption detection with heat meter.
- **Greater assistance**: convenience in the management and maintenance and greater duration of plants.

For more information on the advantages of district heating and on the Quality Charter, visit: www.a2acaloreservizi.eu
10.1.3 | Relations with customers of the integrated water service

Through the companies A2A Ciclo Idrico and Aspem, the Group manages the services connected with the integrated water cycle and the distribution of drinking water, operating with a constant focus on the needs of the general public and the complete satisfaction of its interlocutors in Brescia, Varese and province.

The Group promotes models of responsible consumption and conduct with regards to water so as to mitigate water lost through various initiatives. One example comes in the form of the Acquasicura Project developed to support users and help them take the necessary steps to control water losses and reduce the risks of economic damages. The promotion envisages a contribution for the expenses incurred for moving the water meter from the road well to the edge of private property and a contribution for the purchase of a manometer. An insurance policy can also be stipulated (reserved to domestic users) against water leaks, at beneficial conditions. As for the management of vulnerable customers, A2A Ciclo Idrico has a database with information on users that cannot be disconnected.

### Figure 72 | Integrated water service users

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aqueduct</td>
<td>282,416</td>
<td>280,092</td>
<td>282,254</td>
</tr>
<tr>
<td>Sewers</td>
<td>188,683</td>
<td>186,371</td>
<td>186,590</td>
</tr>
<tr>
<td>Purification</td>
<td>185,405</td>
<td>186,371</td>
<td>186,590</td>
</tr>
</tbody>
</table>

The Group companies undertake to provide a continuous, regular, uninterrupted service, developing multiple communication channels and information materials in support of this, including, in this case too, an Integrated water service charter, which lays down the principles and criteria for the delivery of the service and constitutes an attachment to the supply contract, stipulated between the manager and the individual users. In 2015, the call centre service of A2A Ciclo Idrico obtained excellent quality levels, reducing the average wait time (84 seconds) by 39% on 2014 and successfully completing 88% of calls. The drinking water distribution service was not interrupted in 2015, except for some segments that were disconnected to allow for the repair of accidental failures. The water undergoes special tests and disinfecting treatments, and chemical-physical or biological purification treatments where necessary before it is fed into the network. The primary objective is, in fact, to supply quality water and this is why, in compliance with regulations, qualitative checks are performed on the entire production chain. All the water supplied by the aqueducts of A2A Ciclo Idrico is compliant with the limits established by the law and, therefore, no orders of water being unfit for drinking have been issued.

For further information visit the Communication section at www.a2acicloidrico.eu and the Activities section of the site www.aspem.it.

Quality of services provided and attention to customers

Group companies undertake to provide a continuous, regular, uninterrupted service, developing multiple communication channels and information materials in support of this, including, in this case too, an Integrated water service charter, which lays down the principles and criteria for the delivery of the service and constitutes an attachment to the supply contract, stipulated between the manager and the individual users. In 2015, the call centre service of A2A Ciclo Idrico obtained excellent quality levels, reducing the average wait time (84 seconds) by 39% on 2014 and successfully completing 88% of calls. The drinking water distribution service was not interrupted in 2015, except for some segments that were disconnected to allow for the repair of accidental failures. The water undergoes special tests and disinfecting treatments, and chemical-physical or biological purification treatments where necessary before it is fed into the network. The primary objective is, in fact, to supply quality water and this is why, in compliance with regulations, qualitative checks are performed on the entire production chain. All the water supplied by the aqueducts of A2A Ciclo Idrico is compliant with the limits established by the law and, therefore, no orders of water being unfit for drinking have been issued.

For more information on water quality and data related to concentrations of the parameters characteristic of the water distributed, refer to the supplement to this Report or visit the Water Quality section at www.a2acicloidrico.eu and the Activities section of the site www.aspem.it.
10.1.4 | Relations with customers of the urban hygiene service

Through the companies Amsa (Milan and province), Aspem (Varese and province) and Aprica (Brescia, Bergamo, Como and provinces), the Group manages the urban hygiene services of 101 municipalities for a total of more than 2.5 million citizens served.

In 2015, Aprica acquired the waste collection service in 3 new municipalities (Nuvolento, Ospitaletto and Sarezzo, in the province of Brescia) and Amsa in another 2 (Corsico and Cesate, in the province of Milan).

Amsa and Expo Milan 2015

The commitment of 150 Amsa operators involved, with focussed training, in the daily cleaning and collection of waste, the quality of the technology made available and the scrupulous organisation of the service have enabled the efficiency of service to be increased at the Universal Exhibition site, from day to day, until reaching and exceeding the limit of 70% of separate waste collection, the quality objective established by Expo 2015 S.p.A. and Amsa when planning the management of the waste cycle for the Universal Exhibition.

The customer satisfaction survey carried out on a sample of 1,000 Milan citizens and 500 foreign visitors, has confirmed a high quality level also perceived for the strengthening of the services offered to the municipality of Milan, with scores higher than 8 (on a scale of 1 to 10).

Promote responsible service

Over the years, the Group companies’ commitment to promoting responsible behaviour in the management of resources and waste, in respect of the environment and people, has continued.

Below are the main initiatives and campaigns developed in 2015 in order to sensitise customers to the efficient collection of resources.

The “Milano è così” campaign was run by Amsa with the sponsorship of the municipality of Milan, to sensitise residents to the dispersion of cigarette butts in the environment and stimulate socially virtuous behaviour amongst smokers.

“The Amsa door-to-door separate waste collection system has made Milan a model in Italy and abroad, in terms of waste management. Approximately 53% of waste has been sent for recycling, a significant portion, indeed amongst the highest in Europe, of cities exceeding one million inhabitants, which drives the Company to do ever better".

The communication plan envisaged the affixing of 310 posters in the central areas of the cities and in underground stations and the distribution of 3,000 “Cenerino”, an ash tray designed for bars and restaurants made entirely from recycled materials and 25,000 pocket ash trays given out to smokers together with a campaign card, at the exit to the underground stations.
“Levissima and Amsa together to encourage separate waste collection”

Initiative promoted with the sponsorship of the municipality of Milan on the summer weekends of 2015, during which ecological cargo bikes sensitised citizens and visitors to transforming waste into resources, collecting it and sending it correctly for recycling.

To promote separate waste collection in Bergamo, Aprica is committed to distributing specific waste bags (transparent for mixed, yellow for plastic) to family units, entities and commercial, artisan and service activities, regularly registered with the waste management service of the city’s town hall.

The initiative is also promoted in Varese, through the customised distribution to citizens of specific kits of bags for separate waste collection.

Separate waste collection expands with the recovery of food oil

In Milan, the field of separate waste collection is expanded throughout the territory thanks to the experimental Amsa and Milan Municipality project carried out in collaboration with two wholesale operators (Coop Lombardia and Simply Market), which envisages the collection of used food oil from some supermarkets. At 8 sales points in the city, in the first 5 months of the initiative, 3,000 kg of oil was collected.

Quality of services provided and attention to customers

Amsa and Aprica maintain a direct relationship with the citizen and customer through different channels. As regards the call centre service, the levels of customer satisfaction are extremely high.

| Figure 74 | Quality levels of the call centre |
| --- | --- | --- |
| Accessibility of lines and services (time when line is free vs operator presence time) | AMSA | APRICA | ASPEM |
| Average wait time on the telephone (minutes seconds) | 97 | 62 | 199 |
| % of calls successful | 93% | 69% | 55% |
The “PULiamo” application, dedicated to separate waste collection and environmental services of the three Group companies, provides users with indications as to the days on which waste is collected from their homes and all the information necessary to ensure correct separation. Moreover, where available, it allows for a request to be made to collect cumbersome waste, abnormal situations to be reported and information to be provided on the location of the ecological platforms. Through the application, it is also possible to understand when the streets will be washed. The app has stood out particularly for the technical innovation and attention paid to customer reports, and has accordingly been awarded the “Customer Management Multimedia Competence” Club prize as best app for customer services.

On-line collection of cumbersome waste

This year, 42,880 people have used the service; 41% booked the cumbersome waste collection service directly on the internet, with a significant increase of 18% on 2014.

The services offered by Amsa and Aprica are regulated by a specific Service Charter, which describes the terms, methods and quality of services offered to citizens in the municipalities served.

The Service Quality Charter for Lombardy

A2A has taken part in the project developed by Federconsumatori Lombardia on the Quality of services, under the scope of which a survey was organised on the adoption of the Quality of Services Charter by integrated water service companies and those involved in the collection and disposal of municipal waste. The Amsa and Aprica service charters have been noted as best practices. The Service Charters of Amsa and Aprica are available respectively on the sites www.amsa.it and www.apricaspa.it in the Citizens section.

Amsa conducts regular surveys to verify the quality of service offered and user satisfaction. As part of this survey, carried out on a sample of 5,000 citizens, the results were very positive indeed with an index of approval of 7.5, slightly up on the 7.4 noted for 2014. Waste collection has obtained excellent appraisals, representing a strength of AMSA. The street and pavement cleaning service has also obtained very good results, with all opinions above 7. The same survey was then conducted on 200 commercial operators in Milan, operating in various sectors, and 1,240 citizens resident in the other municipalities served by Amsa, obtaining respectively an index of approval of 7.3 and 7.8.
In 2015, Aprica ran a customer satisfaction analysis with regards to the urban hygiene service provided in the city of Como. Good results were obtained, with a total average index of approval of 7.2, significantly up on the 2013 figure (5.9) - the year in which the service was provided by a company other than Aprica. Good results were achieved in relation to the waste collection part, whilst activities relating to street and pavement cleaning remained subject to improvement.

Customer Satisfaction Amsa – Milan (July 2015)

- Home collection of cumbersome waste (8.8)
- Collection of municipal waste (8.4)
- Collection of organic (8.1)
- Freephone number (8.1)

Customer Satisfaction Aprica – Como (January 2015)

- Almost 60% of those interviewed were extremely satisfied with the collection method.
- Those interviewed declared that they knew how to separate waste (average value: 8.6) and believed that the new collection method had increased separation (7.8).
- 53% of those interviewed were aware of the service offering home collection of cumbersome waste. Satisfaction amongst those who had used it was very high. Almost all those interviewed were aware of the collection centre (90.2%).
- Those interviewed were very satisfied with the freephone service and branch (7.7).
10.1.5 | Complaint management

The A2A Group companies handle the management of disputes with customers or situations that require investigations to establish the facts scrupulously and with the help of several tools. In 2015, throughout the A2A Group there have been 5,400 written complaints (in line with 2014). For the specific nature of the service offered and the large number of customers served, the companies that receive the highest number of complaints are those involved in the sale of energy. The number of written complaints received, in respect of the number of customers of electricity and gas is in any case very low and below market data, as can be seen from the graph below.

Figure 75 | Commercial BU complaints trend

| % “simple”* complaints out of average no. of customers |
| --- | --- | --- |
| 2013 | 2014 | 2015 |
| 0.18% | 0.15% | 0.14% |

* AEEGSI defines complaints as “simple” when they refer exclusively to the seller and do not require any data pertaining to the distribution company in order to prepare the answer. The number of customers used to perform the calculation refers to the type indicated by the AEEGSI.

An analysis of the reasons for complaint reveals that approximately two thirds are due to: disputes of consumptions or meter readings; contractual and tariff-related matters; aspects concerning the management of late payments; payments, including direct debits.

For other services, the Group undertakes to respect the parameters given in the “quality charter” with the aim of achieving continuous improvement of service provisions. For A2A Calore&Servizi, for example, the comparative analysis of 2015 results with those of 2014 has confirmed compliance with the terms for processing requests and complaints as less than 10 days in 89% of cases, as compared with 85% the previous year. Positive data also comes from the significant reduction of 56% of the number of complaints received in 2015 as compared with 2014.
10.2 Relations with the community

**Material issues**

- Support for initiatives and projects in the region
  - A2A supports projects and initiatives that are able to generate shared value in the community in which it works and stimulate the growth of the people and territories.
  - AMSA partner of EXPO 2015
  - Collaborations with Universities and Research Institutes
  - Support of cultural and sports events
  - Energy box project

- Environmental education programs and initiatives
  - The environmental education initiatives promoted by the Group are an important tool by which to contribute towards the spread of the sustainability culture amongst the younger members of society.
  - Sustainability and environmental education are well-established issues, involving all stakeholders and are among the fundamental objectives of the 2020 Europe agenda.
  - School Project and environmental education routes

- Public policy
  - Dialogue and discussion with the national and supranational institutions in connection with the matters of energy and the environment play a key role in the development of all Group activities.
  - Participation in national round tables concerning the main matters of interest to A2A

- Internal and external communication to stakeholders
  - Correctness and transparency are two cornerstones of the communication with stakeholders of reference in order to clearly share the Group’s performance and objectives.
  - New territorial monitoring

**Management method**

- AMSA supports projects and initiatives that are able to generate shared value in the community in which it works and stimulate the growth of the people and territories.

**2015 actions**

- AMSA partner of EXPO 2015
- Collaborations with Universities and Research Institutes
- Support of cultural and sports events
- Energy box project

**2016-2020 Sustainability Plan actions**

- 100% of the Foundations’ initiatives, in line with the Sustainability Policy
- Increase the number of students involved in A2A initiatives for the school by 20%
- Increase visits to the Group’s plants by 20%
- 100% response to requests/demands for sustainability ratings
- Develop 8 territorial reports
- Develop 15 territorial workshops, from which 30 actions should ensue

**More than 80 initiatives promoted with Consumer or Environmentalist Associations**

**More than 5,000 visitors to the “Home of Energy and the Environment”**

**150 traffic light control units transformed into works of art with the Energy box project**

**4.3 million euros invested in activities in the favour of the territory**

**17,690 visitors to the various Group sites, of which 89% are students of all ages**

**Environmental education programs and initiatives**

**More than 80 initiatives promoted with Consumer or Environmentalist Associations**

**More than 5,000 visitors to the “Home of Energy and the Environment”**

**150 traffic light control units transformed into works of art with the Energy box project**

**4.3 million euros invested in activities in the favour of the territory**

**17,690 visitors to the various Group sites, of which 89% are students of all ages**
Relational capital

Relations with entities and institutions

The nature of the work of A2A requires constant dialogue and a comparison of notes with the institutions of the government, with parliament, the regions and local entities, in an active participation to produce shared interests.

The tool that defines and regulates relations with entities and institutions is the A2A Code of Ethics, the update of which was approved by the BoD in its meeting held on June 22, 2015. With reference to the international aspects, in 2015 a specific organisational function was established, with the task of guaranteeing relations with the international institutions.

The following national issues had the greatest impact:

- reorganisation measures of local public administrations;
- legislation for calling tenders for the distribution of gas and renewing hydroelectric concessions in Italy;
- legislation on the identification of the residual need to be covered by means of the development of incineration plants with the recovery of energy from municipal waste or equivalent;
- rules on the cover of expenses in favour of the government for the reimbursement of A2A credits with regards to the public administration.

Category associations

A2A is a member of Utilitalia, the Federation of companies operating in the public services of water, the environment, electricity and gas. The association is currently chaired by the Chairman of A2A and represents all businesses of local public services of an industrial value (more than 570 associates). In addition, A2A is part of Confindustria, within which it adheres to Assoelettrica (National Association of Electricity Enterprises).

A2A actively collaborates with the academics world and research institutions, developing projects and new solutions in the energy and environment for process optimization, improving the quality of services. This commitment is realised through projects, in some cases co-funded, also resulting from the continued development and expansion of relations with entities, such as:

- RSE (Research on the Energy System);
- ENEA (National agency for new technology, energy and sustainable economic development);
- Brescia University;
- CNR ISAFOM Naples;
- Partenope University of Naples;
- CNR IBIMET Bologna;
- Politecnico University of Milan

In November 2015, A2A, Cattolica University of Brescia and Brescia University Health & Wealth stipulated a two-year collaboration agreement to promote studies and research, financed by A2A and initiative to disclose the results to the population of Brescia and encourage development of a sustainable environmental energy culture.

AEM Foundation supports some university masters courses on energy and sustainability: the masters course “RIDEF 2.0 – Reinventare l’energia”, managed by Politecnico University of Milan and Milan University, and the “MaGER – Master in Green Management, Energy and Corporate Social Responsibility” run by Bocconi University. The AEM Foundation also collaborates, as founding member, with EnergyLab: a research centre on matters relating to energy that has developed intense investigations on the evolution of innovation in progress (from renewables to nuclear, smart grids, etc.).
The A2A Group foundations

The AEM Foundation has always been committed to supporting scientific research, training and the development of innovative knowledge and skills in the field of energy and environmental sustainability throughout Lombardy. The ASM Foundation is based in the territories of Brescia and Bergamo, supporting the activities dedicated to social aspects, the promotion of art and culture, as well as support for training and environmental protection. In 2015, the collaboration between the two foundations was strengthened.

A2A is also one of the founding members of WAME, an association founded in July 2013 by eight important European energy companies and the organisers of Expo 2015, with the support of some entities, including the AEM Foundation. WAME aims to sensitize public opinion to the scope and consequences of a persistent exclusion from the access to energy of a large part of the world population. It seeks to spread awareness of the projects aiming to overcome this “modern energy gap”, for these initiatives to be supported, developed and multiplied.

A2A and the regulation stakeholders

The A2A Group operates in numerous industrial sectors, some under a natural monopoly (like the distribution networks under concession of the integrated water service awarded), whilst others are managed on the free market (like energy management or the sale of energy and smart services and efficiency to end customers): in both cases, the impact of the economic and technical, national and international regulation affects the generation of value. The regulation has a direct effect on the economic results and profitability in the medium and long-term. 40% of the EBITDA of A2A is generated by regulated activities (energy, gas and water distribution networks), whilst 24% by “almost regulated” activities (district heating).

A2A structures its relationship with reference stakeholders, incorporating and interpreting the rules necessary to the conduct of its business and reading the medium/long-term trends so as to share its requests and also make its competences in service available to regulatory subjects.
Since 2015, in order to better make the most of the opportunities and challenges offered by the world of regulation, a specific “Regulatory Affairs and Market” organisational structure has been implemented, reporting directly to the Chief Executive Officer. The new structure has the task of implementing a quarterly flow of information through the preparation of a “Regulatory Review” through which to convey information on regulatory changes and their economic impact in connection with the work of each business unit. In thus doing, the whole structure has been able to draw an even closer connection with all the Group’s activities. An important part of the activities is also dedicated to the organisation of public opportunities for discussion and participation, such as, for example, the seminar organised on June 5, 2015, entitled “Network remuneration: key assets for the future of energy”, in which sector operators and financial analysts took part, representing the authority for electricity, gas and water (AEGSI). On this occasion, some specific urban area investment projects were launched.

A2A and relations with national and territorial institutions

The A2A Group has always maintained dialogue with national and local entities hinged on a solid basis for collaboration and also in order to improve the degree of acceptance of the infrastructures and plants in the territory. In 2015, A2A established a specific organisational structure called “Institutional and Territorial Relations”, with the specific responsibility for coordination relations with the territories, with the national and local associations (20 national consumer associations and all local consumer associations, nationally and locally recognised environmentalist associations and various committees present in the territory) as well as the various organisational units on a local level.

More specifically, under the scope of Local Institutional Relations for the South Area, two new units have been envisaged: one for the Region of Campania (based in Acerra) and one for the Region of Sicily (based in Palermo). The main activities of 2015 of the meetings with the Associations regarded:

- participation in the projects financed by the Lombardy Region for Expo 2015 in collaboration with the Consumers’ Associations;
- collaboration with the associations operating in Campania: Accsa, Adiconsum, Amici della Terra, Lega Consumatori, for the participation in the project “Raccogli, Trasforma, Crea” and the “Ecoreporter” project;
- organisation in Brescia of a cycle of meetings, reserved to representatives of the consumer and environmentalist associations, committees and local councils, for the presentation and investigation of initiatives carried out by all Group companies;
- organisation in Milan, Bergamo, Varese and Como of a cycle of meetings, reserved to representatives of the consumer associations, for the presentation and investigation of initiatives run by all Group companies.

The Networks and Sustainability project - Adiconsum

A2A has been involved in the Networks and Sustainability workshop promoted by Adiconsum through the participation in a round table, with other national companies, aimed at focusing on the sustainability issues with the greatest impact for the networks.

Responsible investments in the community

The Group has offered its support to multiple social, environmental, sports and cultural activities and these have seen A2A collaborate closely with the various local contexts involved.

In 2015, the Group’s investment in the community came to approximately 4.3 million euros including contributions made in sponsorships, donations and support of the Group Foundations.
Sponsorships of sports, social, environmental and cultural activities in favour of the territory come to 1,150,741 euros.

A2A supports and encourages social, cultural, sports and environmental events that can optimise the distinctive characteristics on a local, national and international level in the territories in which it operates and are able to show that it stands close to the community.

Some of the most important include:
- the XX edition of the “Sondrio Film Festival”, an important international event dedicated to nature documentaries and the spread of awareness of the protection of natural heritage;
- the “Carnia Classic International Fuji – Zoncolan” an international cycling event with participants from all over the world and which is twinned with the event by the same name run in Japan;
- the XXII edition of the “Magna Grecia Film Festival”, the national event dedicated to the main emerging directors on the national and international scene.

Energy box: 150 traffic light control units transformed into works of art

AEM Foundation and A2A, sponsored by the municipality of Milan, have adhered to the “Urban Art Renaissance”, one of the most prestigious Urban Art exhibitions to be held in Italy, under the scope of the ExpoinCittà calendar.

From September 10 to 30, 2015, as part of the “Energy box”, the initiative run by A2A and the AEM Foundation, designed by Atorno Tinelli, an employee of A2A and famous urban artist, 50 artists, selected by Atorno and the historic art critic Flavio Caroli, performed their live painting on 150 traffic light control units around Milan.

In 2015, A2A provided the Brescia unit of the A2A Civil Protection Group with some areas of the offices in Via Lamarmora. The organisation has been registered in the regional volunteer registry of the Lombardy Region since 2000 and as it is the only association that guarantees specialized work on electricity, gas and water distribution plants, in 2013, it was declared the “Association of National Interest” by the National Department of Civil Protection.
Relational capital

Education and training

For A2A, the promotion of the culture of sustainability takes concrete form through the support of initiatives of sensitisation and education on matters of climate change, energy efficiency and sustainable development, particularly targeting the younger generation. For A2A, the education of children is the main and most strategic tool towards establishing a culture of sustainability and innovation.

Under the scope of the School Project, guided tours are offered all year round in Group plants, with approximately 16,000 students from more than 2,200 institutes involved in 2015.

The environmental education projects involved primary and secondary schools:

- “Percorso Naturacqua” project - in collaboration with AmbienteParco, offered primary and secondary school in the city of Brescia a teaching laboratory on the integrated water cycle;
- “L’ambiente che ho in mente” project - a competition designed to involve the fourth and fifth year classes of first schools and middle school students of Brescia and Bergamo in matters relating to the reduction of waste, separate waste collection, recycling, energy recovery and district heating;
- television quiz on sustainability “La nostra energia per l’ambiente” - now at its seventh edition, which has involved 5 primary schools and 6 secondary schools in Brescia;
- “Vesti tu la bottiglietta” initiative - involving almost 4,000 students in the separate waste collection of 41,500 bottles of Pet. By using their imagination and recycled materials, the students creatively “dressed” a plastic bottle;
- “Arte e Energia” project - promoted by Edipower, which saw approximately a thousand first and middle school students from Chivasso, Messe, Piacenza, Sermide and San Filippo revise works of art in an environmentally-sustainable fashion;
- “Ecoreporter” initiative proposed by A2A Ambiente, in the province of Naples, which transformed approximately a thousand first and middle school students into reporters preparing a newspaper on virtuous waste practices.

Additionally, there were more than 5,000 visitors to the Home of Energy and the Environment in Milan. This structure, the operational premises of the AEM Foundation, is a museum open to schools and to the public, where it is possible to learn about and explore the issues relating to the world of energy and sustainability.

A2A study grants

In November, the S. Giulia auditorium in Brescia hosted the usual ceremony for the delivery of study grants to children of employees in the Brescia-Bergamo area. The support is assigned according to school merits. In 2015, 25 boys and girls were rewarded who had achieved their middle school diploma, 51 students from the middle secondary school classes and 21 who had completed secondary school. In 2015, A2A and Edipower, in collaboration with Intercultura, an association that has been operating for sixty years in international cultural exchanges, gave the possibility of a free study stay abroad to students of Crotone, Cosenza, Catanzaro, Monfalcone, Valtellina, Brindisi, Chivasso, Mese, Piacenza, San Filippo del Mela, Sermide and Udine, for a total of 10 study grants.

The winners of the grants will enjoy their training experience in summer 2016. In a parallel fashion, Edipower has promoted a contest to assign the most worthy students of secondary schools twenty-one study grants to support university studies in all territories in which it works.

The support to the territory does not end with environmental education and the promotion of cultural activities and events. A2A in fact also makes an active contribution to the sharing of knowledge and innovation. Through its support to Apindustria, in 2015 important initiatives were developed in energy efficiency, sustainable mobility and integrated waste management. The initiative aims to reduce the economic impact of energy supplies to Brescia businesses, at the same time as encouraging technical and cultural innovation.
AMSA takes part in the Expo of consumers

The “Expo of consumers. Food: Energy for life” optimised the connection between quality produce and territory. AMSA has teamed up with Novamont to partner the project, presenting the re-adaptation of the video “from food to compost” to highlight the virtuous issue of separate waste collection from organic waste to its transformation into compost.

The factory of dialogue

AMSA has attended the “Suq delle culture” event organised by the Sunugal Association aimed at encouraging intercultural dialogue, with a stand. Multilingual information was given out on AMSA and A2A Reti Gas, about gas safety, and seminars held on ecology and sustainability.

External communication

In 2015, the Press Office produced a total of 224 media communications. 82% of the communications were given out as press releases with the remaining 12% taking the form of letters. In 2015, there were 300 opportunities to meet with journalists, amongst interviews and one-to-one dialogues, press conferences and press visits. As part of the start-up of a path to listen to citizens, the A2A Group has increased its presence on the social channels: Facebook and Twitter. Communication using these channels enables a more direct contact with citizens, sensitising them to Group issues, including: separate waste collection and energy saving initiatives. It is also possible to start up social media caring flows to promptly intercept critical issues and reports to be conveyed to customer care channels and, finally, to get to know and collect the main issues discussed on the internet, as opportunities for development to be implemented in new services and products.
relations with suppliers

The relationship between A2A and its suppliers is based on respect for the principles of economy, efficiency, quality, fairness, equal treatment, transparency and impartiality. The Group is committed to promoting professional growth and accompanies supplies in the responsible management of the supply chain.

- New supplier qualification portal
- Future supplier audit plan
- Keep 75% of the value of orders to certified suppliers as a percentage of the total value of orders
- Achieve 50% of qualified suppliers with sustainability requirements

For A2A, this issue is of great importance as it has implications of social responsibility and safety towards workers, internal and external (contractors), and citizens concerned with the sites. The Group strictly controls the management of sites for work on infrastructure, expansion of networks and plants, as well as for maintenance tasks entrusted to external companies.

- Site audits, verifications and monitoring
- Anomaly and critical issue management service
- Monitoring of scores on the supplier injury indices for activities carried out at the A2A Group
- Carry out 4,000 inspections at road sites

During the year, 6,703 orders were issued for a total value of more than 690 million euros.

81% (+9% on 2014) of the tenders were managed under e-procurement.

3% of the value of contracts was awarded to social cooperative companies and non-profit organisations.

48% of qualified suppliers received at least one order in 2015.

Geographic breakdown of orders

<table>
<thead>
<tr>
<th>Material issues</th>
<th>Management method</th>
<th>2015 actions</th>
<th>2016-2020 Sustainability Plan actions</th>
</tr>
</thead>
</table>
| Responsible management of the supply chain | The relationship between A2A and its suppliers is based on respect for the principles of economy, efficiency, quality, fairness, equal treatment, transparency and impartiality. The Group is committed to promoting professional growth and accompanies supplies in the responsible management of the supply chain. | • New supplier qualification portal  
• Future supplier audit plan | • Keep 75% of the value of orders to certified suppliers as a percentage of the total value of orders  
• Achieve 50% of qualified suppliers with sustainability requirements |
| Effective management of roadworks for digging and pipe-laying | For A2A, this issue is of great importance as it has implications of social responsibility and safety towards workers, internal and external (contractors), and citizens concerned with the sites. The Group strictly controls the management of sites for work on infrastructure, expansion of networks and plants, as well as for maintenance tasks entrusted to external companies. | • Site audits, verifications and monitoring  
• Anomaly and critical issue management service | • Monitoring of scores on the supplier injury indices for activities carried out at the A2A Group  
• Carry out 4,000 inspections at road sites |
For the A2A Group, sustainability is an important management driver also as regards purchases made and relations with suppliers. This approach has allowed for the consolidation over time of relations of trust that are fair and timely, looking to the future and investing to create long-term value. During the year, 6,703 orders were issued by Group companies, for a total value of more than 690 million euros. The table below shows that chains of activities with the highest impact in terms of the number of orders and total value ordered are those of Environment and Energy.

Figure 78 | Number of orders and value ordered by value chain*

<table>
<thead>
<tr>
<th>Type</th>
<th>Number of orders</th>
<th>Value ordered (euros)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>2,890</td>
<td>326,750,436</td>
</tr>
<tr>
<td>Environment</td>
<td>3,248</td>
<td>308,294,904</td>
</tr>
<tr>
<td>Water</td>
<td>321</td>
<td>29,688,801</td>
</tr>
<tr>
<td>Other</td>
<td>245</td>
<td>25,298,069</td>
</tr>
</tbody>
</table>

* To calculate the number of orders and value ordered, divided up according to the 3 value chains, all companies operating in the 3 different sectors were considered, with A2A S.p.A. being included in the Energy chain (the corporate activities were therefore also included) and the value of 1/3 the number of orders and value ordered of Aspem S.p.A. for each of the 3 chains (Aspem manages gas distribution, the environmental hygiene service and the integrated water service in Varese and province). The “other” category includes A2A Logistica and Selene S.p.A. operating in telecommunications).

Approximately 909.8 million euros was spent on the purchase of fuels, 19% of which came from Russia, 40% from Colombia, 39% from Kazakhstan and 2% from Indonesia.

Figure 79 | Geographical breakdown of orders by value chain

<table>
<thead>
<tr>
<th>Value ordered (euros)</th>
<th>Energy chain</th>
<th>Environment chain</th>
<th>Water chain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lombardy</td>
<td>226,985,765</td>
<td>197,152,594</td>
<td>25,819,225</td>
</tr>
<tr>
<td>Other regions of Italy</td>
<td>96,872,868</td>
<td>98,562,694</td>
<td>3,837,733</td>
</tr>
<tr>
<td>EU</td>
<td>2,871,373</td>
<td>12,579,615</td>
<td>31,842</td>
</tr>
<tr>
<td>Non-EU</td>
<td>20,430</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Most qualified suppliers are micro or small businesses, respectively 39% and 31%, with only 16% being medium enterprises and 8% large businesses (6% of businesses do not record their type). For all value chains more than 95% of total orders concerned Italian suppliers.
Sustainable management of the value chain

Sustainability is considered an important element in supplier qualification. The Group operates with suppliers that apply high standards in terms of staff health and safety and environmental protection.

To this end, A2A has adopted a specific system by which to assess the suitability of companies, so as to ensure the technical and economic-financial capacity in line with the legal requirements and the provisions of the Group Code of Ethics (in respect of the Organisational Model pursuant to Italian Legislative Decree no. 231/2001).

In the selection and validation of suppliers, A2A is open to all companies interested in participating in tenders called by the Group, ensuring the maintenance of a Qualified Vendor List by product category, which buyers can refer to for the definition of “vendor list” of a tender.

In 2016, a New Supplier Portal will be activated, a single one for all Group companies, which will introduce specific questionnaires depending on the product category of the supply. The questionnaires will enable a more careful investigation of the aspects relevant to sustainability (such as, for example, the impact deriving from waste, the carbon footprint, impact on safety, etc.).

The results of the questionnaires, together with the company data and documents and certificates owned by the company, can prepare a specific rating of qualification (RQ), which classifies each supplier on the portal. This project will include the implementation of audit plans to be conducted at suppliers with the greatest critical issues.

Figure 80 | Validated suppliers, by certification held

<table>
<thead>
<tr>
<th>Year</th>
<th>ISO 9001</th>
<th>ISO 14001</th>
<th>OHSAS 18001</th>
<th>At least one certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>618</td>
<td>377</td>
<td>455</td>
<td>2,115</td>
</tr>
<tr>
<td>2014</td>
<td>756</td>
<td>455</td>
<td>620</td>
<td>2,360</td>
</tr>
<tr>
<td>2015</td>
<td>920</td>
<td>620</td>
<td>920</td>
<td>2,741</td>
</tr>
</tbody>
</table>
Site management

The Group strictly controls the management of sites for work on infrastructure, expansion of networks and plants, as well as for maintenance tasks entrusted to external companies.

Checks particularly regard: effective implementation of the commissioned works, respect for timing, use of established materials, performing the tests requested, environmental and social impact and the provisions of the tender specifications. The plan “Audit Environment, Health and Safety 2015” was scheduled on a regular basis, conducting monitoring visits on a sample of road works, in accordance with the provisions on health and safety at work (Legislative Decree 81/2008) and the environment (Legislative Decree 152/2006), to verify the performance of work on the distribution networks of electricity, gas, water, telecommunications and telematic networks.

The methodological approach adopted for carrying out checks on road work sites considers the following aspects:

- current legislative references and company procedural framework;
- census of road works in progress and selection of sites to visit;
- acquisition of information and data on the work sites (ex. location, type of intervention, companies, etc.) and contacting the internal managers;
- perform verifications at construction sites with the support of the functions that are entrusted with the management of the site and with the help of special check lists and photographic surveys;
- sharing the results of the verifications with the competent internal managers;
- drafting of the final report and presentation of the conclusions to the Management.

In 2015, approximately 30 verifications were performed at road construction sites managed by Group companies. The sites were found to be correctly managed. In 2015, a total of 1,416 reports of road anomalies were received (of which 440 through the CRM Ambrogio portal of the municipality of Milan).
INDEPENDENT REPORT ON THE LIMITED ASSURANCE ENGAGEMENT OF THE SUSTAINABILITY REPORT 2015

To the Shareholders of A2A SpA

We have carried out a limited assurance engagement on the sustainability report of A2A Group (hereinafter the “Group”) for the year ended 31 December 2015, composed by two documents, the Sustainability Report (hereinafter the “Report”) and its Supplement (hereinafter the “Supplement”).

Responsibility of the Directors for the sustainability report

The Directors are responsible for preparing the Report in compliance with the G4 Sustainability Reporting Guidelines defined in 2013 by the GRI - Global Reporting Initiative and, in case it is comprehensive of its Supplement, are responsible for preparing the sustainability report in compliance also with the G4 Sector Disclosure - Electric Utilities defined in 2013, as indicated in the paragraph “Note on method” of the Report. The Directors are responsible for that part of internal control that they consider necessary to prepare a sustainability report that is free from material misstatement, whether due to fraud or unintentional behaviours or events. The Directors are also responsible for defining the sustainability performance targets of A2A Group, for reporting the sustainability results, as well as for identifying the stakeholders and the significant aspects to be reported.

Auditor’s responsibility

We are responsible for the preparation of this report on the basis of the work performed. We conducted our engagement in accordance with International Standard on Assurance Engagements 3000 – Assurance Engagements other than Audited or Reviews of Historical Financial Information (ISAE 3000), issued by the International Auditing and Assurance Standards Board for limited assurance engagements. The standard requires that we comply with applicable ethical requirements, including professional independence, and that we plan and perform our work to obtain limited assurance that the sustainability report, composed of the two documents cited above, is free from material misstatement. The procedures consisted in interviews, primarily of company personnel responsible for the preparation of the information presented in the sustainability report, analysis of documents, recalculations and other verification procedures.
The procedures we performed on the sustainability report consisted in verifying its compliance with the principles for defining the content and the quality of a sustainability report set out in the G4 Sustainability Reporting Guidelines and, in case it is considered comprehensive of its Supplement, in the G4 Sector Disclosure - Electric Utilities; the verification procedures performed are summarised as follows:

- comparing the financial information reported in the sustainability report with the information included in the Group’s consolidated financial statements as of 31 December 2015 on which we issued our audit opinion, in accordance with articles 14 and 16 of legislative decree n° 39 of 27 January 2010, on 5 April 2016;
- analysing, through inquiries, the governance system and the process for managing the sustainability issues relating to the Group strategy and operations;
- analysing the process aimed at defining the significant reporting areas to be disclosed in the sustainability report, with regard to the methods for their identification, in terms of priority for the various stakeholders, as well as the internal validation of the process findings;
- analysing the processes underlying the generation, recording and management of quantitative data included in the sustainability report. In detail, we carried out:
  - meetings and interviews with the representatives of A2A SpA, AMSA SpA, A2A Ambiente SpA, A2A Energia SpA, A2A Cielo Idrico SpA to achieve a general understanding of the information, accounting and reporting systems in use to prepare the sustainability report, as well as of the internal control processes and procedures supporting the collection, aggregation, processing and submission of the information to the function responsible for the sustainability report preparation;
  - a sample-based analysis of the documents supporting the preparation of the sustainability report, in order to obtain evidence of the reliability of processes in place and of the internal control system underlying the treatment of the information relating to the objectives disclosed in the sustainability report;
- analysing the internal consistency of the qualitative information described in the Report and its compliance with the guidelines identified in the preceding paragraph “Responsibility of the Directors for the sustainability report”;
- analysing the engagement of stakeholders and its results through the existing documentation concerning the significant matters arisen during the Group dialogue initiatives;
- obtaining a representation letter, signed by the legal representative of A2A SpA, on the compliance of the sustainability report with the guidelines identified in the paragraph “Responsibility of the Directors for the sustainability report”, as well as the reliability and completeness of the disclosed information.

Our limited assurance work was less in scope than a reasonable assurance engagement performed in accordance with ISAE 3000 and, consequently, it does not provide us with a sufficient level of assurance necessary to became aware of all significant facts and circumstances that might be identified in a reasonable assurance engagement.
Conclusion

Based on the work performed, nothing has come to our attention that causes us to believe, as indicated in the paragraph “Note on method” of the Report, that:

- the Report of A2A Group as of 31 December 2015 has not been prepared, in all material respects, in compliance with the G4 Sustainability Reporting Guidelines defined in 2013 by the GRI - Global Reporting Initiative;
- the sustainability report of A2A Group as of 31 December 2015, composed by the two documents, the Report and its Supplement, has not been prepared, in all material respects, in compliance with the G4 Sustainability Reporting Guidelines defined in 2013 by the GRI - Global Reporting Initiative and with the G4 Sector Disclosure - Electric Utilities defined in 2013.

Torino, April 6th 2016

PricewaterhouseCoopers Advisory SpA

Signed by

Paolo Bersani
(Partner)

This report has been translated from the original, which was issued in Italian, solely for the convenience of international readers.
Statement of the level of compliance with GRI guidelines

General Standard Disclosure

* = full correspondence    † = partial correspondence    0 = no correspondence

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Correspondence</th>
<th>Main</th>
<th>Supplement</th>
</tr>
</thead>
<tbody>
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<td><strong>Strategy and analysis</strong></td>
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<td>G4-1 Letter to stakeholders</td>
<td>•</td>
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<td>G4-2 (comp) Impacts, risks and opportunities</td>
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<td>15-18</td>
<td>4-5</td>
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<td><strong>Organizational profile</strong></td>
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<td>G4-3 Name of the organization</td>
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<tr>
<td>G4-4 Services provided</td>
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<tr>
<td>G4-5 Location of company headquarters</td>
<td>•</td>
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<tr>
<td>G4-6 Countries where the organization operates</td>
<td>•</td>
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<tr>
<td>G4-7 Ownership structure</td>
<td>•</td>
<td>colophon</td>
<td></td>
</tr>
<tr>
<td>G4-8 Markets served</td>
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<td></td>
</tr>
<tr>
<td>G4-9 Scale of the organization</td>
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<td>10</td>
<td></td>
</tr>
<tr>
<td>G4-10 Employees by type of contract, gender, geographic area, category</td>
<td>•</td>
<td>75,77</td>
<td>24-25</td>
</tr>
<tr>
<td>G4-11 Employees covered by collective agreements</td>
<td>•</td>
<td>77</td>
<td></td>
</tr>
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### Specific Standard Disclosure

- **= full correspondence**
- **= partial correspondence**
- **= no correspondence**

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<tr>
<td>DMA</td>
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</tr>
<tr>
<td>EU3 Number of customers analyzed by type</td>
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<tr>
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</tr>
<tr>
<td>EU22 Number of people physically displaced or economically compensated</td>
<td>•</td>
<td>N/A</td>
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<tr>
<td>EU25 Number of injuries and fatalities to the public, including legal proceedings</td>
<td>•</td>
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<td>45</td>
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<tr>
<td>PR4 Non-compliance concerning product and service information and labelling</td>
<td>•</td>
<td>N/A</td>
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<tr>
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<td>•</td>
<td></td>
<td><a href="http://www.a2a.eu/it/clienti/gas/sicurezza_gas">www.a2a.eu/it/clienti/gas/sicurezza_gas</a></td>
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<tr>
<td>EU26 Population unserved in distribution areas</td>
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<tr>
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Statement of the level of compliance with GRI guidelines
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We would like to thank all our colleagues of A2A who worked on the preparation of this Report and, in particular, the members of the working group:
Alessandra Adamoli, Fausto Antonioli, Luca Attardi, Manuela Baudana, Marco Bassanese, Lamberto Bortesi, Alessandra Carrettoni, Valeria Casula, Giuseppe Cerrato, Paola Colombo, Rachele Donati, Anna Ferrari, Giovanna Gesi, Michele Mincuzzi, Matteo Neri, Antonella Osbello, Emilio Pafumi, Valentina Piroso, Marta Simoni, Elisetta Turci, Corrado Vicardi, Anna Villari and Saverio Zetera.

Graphic design and layout:
Boutique Creativa, www.boutique-creativa.com
Cabiria BrandUniverse, www.cabiriabrand.com

Printed by:
Staged SrI Officine Grafiche

Milan, April 2016