



2018

Supplement Integrated Report

Consolidated Disclosure of
Non-Financial Information
in accordance with Italian
Legislative Decree no. 254/2016

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Stakeholder engagement and materiality analysis

Figure 1_Stakeholder engagement initiatives activated in 2018

STAKEHOLDERS INVOLVED	MODE OF COMMUNICATION AND INVOLVEMENT	ISSUES ADDRESSED DURING ENGAGEMENT ACTIVITIES, IDENTIFIED BY BU
Consumer Associations	• Meetings (physical, telephone and Web) • Convention/press conferences/events • Work groups/committee • Plant tours	Group
		• Meeting with the various BUs of the Group to illustrate the news of the market and the activities that will be carried out in the territories. Presentation of conciliation data. A moment of dialogue with consumer associations.
		Environment BU
		Visit to the Acerra plant reserved for national and local president
		Networks and District Heating BU
		• Preparatory meetings for an out-of-court agreement with Codacons on the subject of incorrect commercial contracts on district heating to the detriment of certain condominiums • Advocacy Federconsumatori for intervention <i>referendum</i> public water Brescia • Codacons Agreement - district heating communication planning
		Market BU
		• Presentation of the proposed project communication on electric mobility • Meeting with consumer associations dedicated to A2A Energia: presentation of new commercial actions, actions designed to accompany consumers towards the free market, ADR updates • Verification of consumer association positions on AGCM survey towards A2A Energia • Verification and analysis of data from commercial survey results • Training meeting dedicated to Adiconsum operators on overcoming the protected market and on A2A Energia's activities
		Corporate BU
		• Participation in the events of associations with activities of social responsibility and environmental education • Meetings with new summits • Evaluation of collaboration proposals • Meetings of the ADR A2A Joint Guarantee Body 2018, conciliatory courses, presentation of conciliation data
Environmental associations	• Convention/press conferences/events • Meetings (physical, telephone and Web) • Plant tours	Smart City
		• Presentation of the A2A Smart City-Open Fiber optical fibre laying project
		Environment BU
		• Definition of activities A2A Ambiente 2018 • Distribution compost gardens Legambiente • Definition of 2018 collaboration activities with Legambiente Lombardia • Participation in the national conference on energy efficiency of Amici della Terra (Friends of the Earth)
		Networks and District Heating BU
		• Meetings in Brescia and Milan to define the stakeholder questionnaire on investments in the network managed by Unareti • Definition of 2018 collaboration activities with Legambiente Lombardia • Visit to the Vetrobalsamo plant to illustrate the recovery of heat fed into the grid • Presentation of the A2A Ciclo Idrico Investment Plan • Intervention at "Fa la Cosa Giusta" on investments and innovations in district heating in Milan
		Market BU
		• Proposed collaboration Legambiente on electric mobility
		Corporate BU
		• Presentation of activities to various environmental associations • Meetings with new summits • Evaluation of collaborations and ways of listening to territorial needs
		Generation and Trading BU
		• Meetings on the themes of decarbonisation and conversion of Monfalcone plant

STAKEHOLDERS INVOLVED	MODE OF COMMUNICATION AND INVOLVEMENT	ISSUES ADDRESSED DURING ENGAGEMENT ACTIVITIES, IDENTIFIED BY BU
Institutions Regulatory and Inspection Authorities	• Meetings (physical, telephone and Web) • Convention/press conferences/events • Work groups/committee • Plant tours	Environment BU • Start of relations with ARERA. Information meetings on the activities of A2A Ambiente, providing first priority points and "hot" themes • Meeting with administrators of the municipality of Pero for problems of fumes in the area near the waste-to-energy plant Silla2 • Plant/office visits • Hearings and commissions
		Networks and District Heating BU • Meeting of the AU Conciliation Service - assessment of the management and reporting of critical issues detected • Presentation of Unareti's first evaluations of the 2G smart meters commissioning plan for the areas for which it is responsible and initiation of discussions with Arera's Infrastructure Department on the main technical and regulatory criticalities • Meetings with institutions to review the prices of district heating and tax credit services • Visit to the site of the new Nuvolera purification plant by the mayors, assessors and councillors of the municipalities involved
		Market BU • Meeting of the AU Conciliation Service - assessment of the management and reporting of critical issues detected • With the support of the company Utilitatis, organized a workshop to present the Green Book to the Directorate of Energy and Basic Industry (DG Competition of AGCM) • Meetings for expansion of electric mobility Valtellina • Meetings for expansion of electric mobility Milan
		Corporate BU • Meetings with the representatives of the institutions in the territories in which the Group operates to listen to needs, report on activities and evaluate future projects
		Generation and Trading BU • Meeting with directors for various activities on hydroelectric plants in Calabria • Meeting with the Commission for the Project for the redevelopment of the chimney of the Ponti sul Mincio power plant • Meetings for activities related to the conversion of Monfalcone Plant • Delivery of Intercultura Scholarships at the Monfalcone Thermoelectric Power Plant • Meeting with administrators for requests for enhancement of the territory • Meeting for industrial heat recovery
Multi-stakeholders	• Conventions/press conferences/events • Meetings (physical, telephone and Web) • Work groups/committees • Studies/Surveys • Plant tours • The forumAscolto programme	Group • Materiality analysis
		Environment BU • Inauguration of the new plastic selection plant in Cavaglià • Visits to national and international delegation facilities • Presentation of the university study on energy/environment • Presentation with the Municipality of Brescia of the booklet "Il viaggio della materia" (The journey of matter) • Event DM Biomethane at the House of Energy - Training and public information on the new biomethane decree for exclusive use in transport • Compostable information campaign • Food Waste Reduction, project from forumAscolto Milan • Project Urban Decoration, project from forumAscolto Milan • Ecoisole Project • Project for the collection of waste from electrical and electronic equipment (WEEE) at large-scale retail • Project for the collection of used food oil at large-scale retail • Conference "The sustainable evolution of vehicles for environmental services" at the auditorium via Olgettina: a day of discussion between the most authoritative players in the market of reference that illustrated the developments of new technologies on vehicles for waste collection and street sweeping • Collaboration with the Bollate Prison for the introduction of separate collection within the Institute with the collaboration of prisoners • Presentation to Consumer Associations of the results of Customer Satisfaction on the services provided by AMSA

Stakeholder engagement and materiality analysis

Financial capital

Manufacturing capital

Natural capital

Human capital

Relational capital

The Acsm Agam Group

STAKEHOLDERS INVOLVED	MODE OF COMMUNICATION AND INVOLVEMENT	ISSUES ADDRESSED DURING ENGAGEMENT ACTIVITIES, IDENTIFIED BY BU
Multi-stakeholders	• Convention/press conferences/events • Meetings (physical, telephone and Web) • Work groups/committee • Studies/Surveys • Plant tours • The forumAscolto programme	Networks and District Heating BU • Presentation of the new decorations of the electrical stations of the municipality of Brescia • Plan advocacy <i>referendum</i> on public water • Training course for water and district heating conciliators • Participation in the Robot&scienza event with workshops on waste and water saving • Presentation of the new Valtrompia purification plant • Presentation of the works of the collector in the stretch between Brozzo di Marcheno and Tavernole sul Mella, as part of the project of the new collector Valtrompia • Presentation of the intervention on the river Mella prodromal to the realization of the purifier of Valtrompia • Inauguration of a drinking water treatment plant for the abatement of Chromium VI • Visit of the Korean delegation to the Verziano purification plant • Presentation of the project to phase out coal for the Lamarmora cogeneration plant
		Market BU • Research project for the creation of a new commercial offer • Table: What are the scenarios for the end of protection in energy markets? • Meeting ARERA - Adr organisms • Presentation of the installation of 32 new electric recharging stations in the municipality of Bergamo • Joint Board of Directors between Confindustria Bergamo/Varese and AIB Brescia tertiary sector with visit to the waste-to-energy plant
		Corporate BU • Meetings with authorities, consumer associations, competitors and other companies on the subject of ADR conciliation and definition of communication plans • Meetings with companies, start-ups and young entrepreneurs for possible collaborations • School-Work Alternation (lessons, visits to facilities and internships) • Presentation of 2017 Integrated Financial Statements • Presentation of territorial sustainability reports (Milan, Brescia, Bergamo, Valtellina and Valchiavenna, FVG, Piedmont) • forumAscolto Piedmont • Award ceremony for the territorial sustainability initiative CreiAMO FVG, from the forumAscolto FVG
		Generation and Trading BU • Ampezzo and Somplago open plants • Conference Ideas Competition - Renovation of the central chimney of Ponti sul Mincio and awarding
		Smart City • Delegation of young entrepreneurs to visit the waste-to-energy plant and smart city lab • Presentation of the Smart City project in collaboration with the Province of Brescia for fibre coverage and smart services in 26 Brescia municipalities
Shareholders Investors	• Meeting (physical, telephone and Web) • Work groups/committee	Environment BU • Intervention "Sustainability in A2A", with focus on the Circular Economy
		Corporate BU • Presentation of fiscal year 2017 Results and 2018-2022 Strategic Plan • Presentation of first quarter 2018 Results • Presentation of first half 2018 Results • Presentation of third quarter 2018 Results
Suppliers	• Conventions/press conferences/events • Meetings (physical, telephone and Web)	Market BU • Event with commercial suppliers to share strategies and objectives • Training events for sales network

STAKEHOLDERS INVOLVED	MODE OF COMMUNICATION AND INVOLVEMENT	ISSUES ADDRESSED DURING ENGAGEMENT ACTIVITIES, IDENTIFIED BY BU
Customers	• Convention/press conferences/events • Meetings (physical, telephone and Web) • Work groups/committee • Focus Group • Studies/Surveys	Environment BU • Mobile Office • Comieco and AMSA's "Virtual cart, real packaging" campaign • Communication and information activities on waste in favour of correct separate collection (administrators, citizens, foreign communities, residents of ALER houses) • Customer satisfaction surveys for environmental hygiene services in Milan and province (residential users, commercial users and facebook page)
		Market BU • Inauguration of A2A Energia temporary store to inform citizens about the free market • Online survey to verify the interest of domestic customers in the proposals of VAS products and services of A2A Energia in place and under study • Survey for the collection of opinions from A2A Energia customers for the activation of the new sales channel, consisting of physical stores, and of the local sales force to be combined with the traditional channels • Survey on the effectiveness of the brand awareness campaign, which for the first time saw the presence of a testimonial • Annual meeting events with major customers • Promotion of energy efficiency solutions (Brescia Sustainability Event, Brixia Forum, Temporary Management at Brescia Castle on the occasion of the event CIDNEON, Bergamo Environment Festival with electric car exhibition) • e-moving promotion fair/event (Fa' la cosa giusta, Quattroruote Street Show, e-Mob, Sustainability Week)
		Corporate BU • Presentation of the new call "Doniamo Energia 2" by Banco dell'Energia, in collaboration with Fondazione ASM and Fondazione CARIPLO • Customer satisfaction surveys for environmental hygiene services in Milan and province, Como, Bergamo
Local community Citizens	• Meetings (physical, telephone and Web) • Convention/press conferences/events • Studies/Surveys • Work groups/committee • Plant tours	Environment BU • Environmental education activities • Participation in the Neighbourhood Plan organized by the Municipality of Milan • Meetings open to all citizens to learn about activities and methods to make quality compost from organic and green waste in your garden using composters • Campaign to raise public awareness of the correct use of road bins
		Networks and District Heating BU • Meeting with the Civil Protection of the Municipality of Milan • Meeting Water Cycle, Purification and Aqueduct, Respect for water as a resource and Fight against waste • Presentation of new smart water meters and communication start replacement of old ones
		Market BU • BARCOLANA - event sponsorship and institutional relations • A2A Energia match sponsor of the Brescia Basketball match against Milan
Media	• Meetings (physical, telephone and Web)	Corporate BU • Testimonials and career days at universities • Environmental education initiatives for families • Support for innovative start-ups to promote territorial development
		Generation and Trading BU • Activity planning 2018 with local associations
		Corporate BU • Planning of communication initiatives with local media

Stakeholder engagement and materiality analysis

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The Acsm Agam Group

STAKEHOLDERS INVOLVED	MODE OF COMMUNICATION AND INVOLVEMENT	ISSUES ADDRESSED DURING ENGAGEMENT ACTIVITIES, IDENTIFIED BY BU
Employees	• Convention/press conferences/events • Meetings (physical, telephone and Web) • Work groups/committee • Focus Group • Studies/Surveys	Group • Induction A2A, a project dedicated to new recruits under 35 years of age who are professional graduates of the Group • As part of the Talent Management project, the Young Talent programme was launched, dedicated to the Group's potential young people (under 35 years of age, graduates with a professional role), about 130 • ABC Managerial Development - Start of the third, fourth, fifth and sixth Plenaries and 2 training modules of the managerial training course dedicated to the 1,100 managers • LiHS programme, aimed at developing the culture of safety within the organization through a cascading path • Awareness-raising activities for employers on the subject of procurement with regard to environmental and occupational safety aspects • Survey to understand the status of application and effectiveness of the currently adopted HSE organizational model
		Environment BU • Team building and change management initiatives
		Networks and District Heating BU • Network Day: 2,000 people from the Networks and District Heating BU were involved in 9 half-day training sessions on the following topics: Positioning and strategy of the BU; Projects in progress for the BU Companies; HR Themes; Lean and Mistral Sites and improvement paths
		Market BU • Change management initiatives • Various training initiatives: Digital Customer Experience (training project to support Digital Transformation), training aimed at the Group's Marketing function, aims to explore technical skills, industry developments, reference trends and customer-centric approach, issues related to SEUs and self-production to support new investments of the A2A Group internally or related to third parties
		Corporate BU • ABC Managerial Development - coordination with CoDir for the in-depth study of priority issues and in phase of innovation and process review related to the management model, issued after the first phase of the project ABC • Team building and change management initiatives • Meetings Ambassador Banco dell'Energia • Widespread training initiatives, both on site and through webinars on various topics (purchases, 231, sales, security...) • Events Ad Incontra • Sharing and openness to the use of the Bussola 2.0 tool and sharing with all Staff Directors of the Dynamic Dimensioning Model • Lean methodology application through 15 project initiatives in all BUs • Welfare day aimed at presenting the new welfare platform and its services to employees • Events of scholarship delivery to the children of employees • Survey of internal customers of corporate functions and BUs on the level of satisfaction perceived with regard to the services provided by the Staff functions • Participation in a survey by Panorama magazine. Results: A2A is one of the companies where the best work is done in Italy in the Raw Materials, Energy, Procurement and Disposal sectors
		Generation and Trading BU • Change management initiatives • Internal training initiative on market abuse regulation and the role of enforcement authorities
		Smart City • Smart City Day at "Campus Party": develop the ability to collaborate and work in teams; strengthen the sense of identity and increase engagement with the Group and the Company

STAKEHOLDERS INVOLVED	MODE OF COMMUNICATION AND INVOLVEMENT	ISSUES ADDRESSED DURING ENGAGEMENT ACTIVITIES, IDENTIFIED BY BU
Auditors	• Meetings (physical, telephone and Web) • Focus Group	Environment BU • Performance bonus agreement years 2018-2019 • Provision of a business contribution in the event of obtaining a C licence and CQC certification • Annual education and training plan
		Corporate BU • Sharing with trade unions: • Conversion Welfare Project • Smartworking Project
Trade associations/ professional orders/Civic and spontaneous committees	• Meetings (physical, telephone and Web) • Convention/press conferences/events • Work groups/committee	Corporate BU • Meetings with new summits • Evaluation of possible synergies, partnerships and collaborations • Fundraising events for Banco dell'Energia
		Smart City • Meeting for possible collaboration in drafting the report "Osservatorio Milano 2019" with focus on smart cities
Schools	• Meetings (physical, telephone and Web) • Convention/press conferences/events	Environment BU • Exhibition workshop "The game of 4R - Reduction, Reuse, Recycling, Recovery" to raise awareness among new generations and their families on the theme of waste reduction and recycling in the philosophy of the circular economy; the exhibition and its free use by schools has had a very significant educational value. It has been set up in Milan, Brescia and Acerra • Involvement and participation in the STEM (Science Technology Engineering Mathematics) initiatives promoted by the Municipality of Milan to raise awareness among the new generations towards the study and professional path in the technical and technological field • Event Mission Earth for 35 classes of the city of Milan which challenged each other in skill games and quizzes on the listed themes - Civic Arena, April 19 • Development of differentiated waste collection in schools in Milan through the pilot project #Ambienteascuola involving 540 classes of primary and I and II grade secondary schools, distributed in about thirty school complexes in the nine municipalities, for a total of 12 thousand pupils. 2,400 containers were distributed in the classrooms and common areas as well as eight hundred informative posters
		Corporate BU • Event of presentation to teachers of activities for schools in Milan and Brescia on the themes of respect and enhancement of diversity • Training meetings with groups made up of school leaders, teachers, staff, student representatives and parents on the subject of separate collection • Award event for the 6 winning classes of the reality game "Our energy for the environment"
		Generation and Trading BU • Meetings with universities for possible collaboration activities and research grants • School-Work Alternation project: Promotion of environmental education initiatives, active citizenship and knowledge of the Group's activities, also through the organization of plant visits and internships for II grade secondary school students

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Figure 2_Material aspects and scope of application

MATERIAL THEMES FOR A2A	GRI CORRESPONDENT ASPECTS	SCOPE/ INTERNAL BOUNDARY	SCOPE/ EXTERNAL BOUNDARY
Ethical pursuit of business	• Anti-corruption (GRI 205) • Anti-competitive behaviour (GRI 206) • Environmental compliance (GRI 307) • Social compliance (GRI 419)	Group	-
Sustainability elements in corporate governance	• Non discrimination (GRI 406)	Group	-
Risk management and sustainability opportunities	• Social compliance (GRI 419) • Anti-corruption (GRI 205) • Research and development (EU Supplement)	Group	Community/ Customers/ Suppliers*
Respect and promotion of human rights in the Group's value chain	• Freedom of association and bargaining agreements (GRI 407) • Assessment of human rights (GRI 412)	Group	Suppliers*
Creation of sustainable economic value	• Economic performance (GRI 201) • Indirect economic impacts (GRI 203)	Group	Shareholders/ Institutions
Innovative development and efficient management of Group infrastructures	• Energy (GRI 302) • Efficient management (EU Supplement)	Group	-
Circular economy and responsible use of resources	• Materials (GRI 301) • Drains and waste (GRI 306)	Environment BU Networks and District Heating BU Generation and Trading BU	Community
Efficient water use	• Water (GRI 303) • Drains and waste (GRI 306)	Group	Suppliers*
Fight against climate change and containment of atmospheric emissions	• Energy (GRI 302) • Emissions (GRI 305)	Group	Suppliers*/ Customers
Safeguarding biodiversity	• Environmental compliance (GRI 307) • Biodiversity (GRI 304)	Group	Community
Quality of distributed water	• Environmental compliance (GRI 307)	Networks and District Heating BU	Community/ Customers
Sustainable mobility	• Energy (GRI 302) • Emissions (GRI 305) • Efficient management (EU Supplement)	Group	Community/ Customers
Protection of health and safety at work	• Health and safety at work (GRI 403)	Group	Contractors
Development of human capital	• Employment (GRI 401) • Development and training (GRI 404)	Group	-

MATERIAL THEMES FOR A2A	GRI CORRESPONDENT ASPECTS	SCOPE/ INTERNAL BOUNDARY	SCOPE/ EXTERNAL BOUNDARY
Diversity and company welfare	Diversity and equal opportunities (GRI 405)	Group	-
Technological innovation and Smart Cities	- Research and development (EU Supplement) - Demand side management (EU Supplement)	Group	Institutions
Responsibility and Safety in the provision of services and products	- Consumer health and safety (GRI 416) - Labelling of products and services (GRI 417) - Consumer privacy (GRI 418)	Market BU Networks and District Heating BU	Institutions/ Communities/ Customers
Quality and innovation in the provision of services and products	- Consumer privacy (GRI 418) - Service accessibility (EU Supplement) - Demand side management (EU Supplement)	Market BU Networks and District Heating BU Smart City	Institutions/ Communities/ Customers
Relationship with Group stakeholders	- Local community (GRI 413) - Public policy (GRI 415)	Group	-
Active local and environmental education	Local community (GRI 413)	Group	-
Responsible management of the supply chain	- Procurement practices (GRI 204) - Environmental assessment of suppliers (GRI 308) - Social impact assessment of suppliers (GRI 414)	Group	Suppliers*

* Limited scope: reporting relates solely to direct suppliers and not to level-two suppliers.

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Financial capital

Figure 3_Statement for calculating the global added value [GRI 201 - 1_4]

(millions of euro)		2016	2017	2018
+A)	Production value	4,860	5,796	6,494
	Revenue from sales and services (- revenue adjustments)	4,576	5,590	6,270
	Change in inventory of products in progress, semi-finished products and finished products	0	0	0
	Change in contract work in progress	5	0	1
	Other revenue and income	279	206	223
	Government grants	0	0	0
- B)	Intermediate production costs	3,382	4,000	4,740
	Raw materials and consumables consumption	176	296	344
	Energy and fuel consumption	1,938	2,554	3,038
	Costs for services	758	849	985
	Other operating expenses	108	106	93
	Accruals to bad debt provision - current receivables	21	35	25
	Provisions for risks	50	10	-5
	Other write-downs of fixed assets	245	34	160
	Other operating expenses	100	135	136
	Material own work capitalised	-14	-19	-36
	GROSS CORE VALUE ADDED	1,478	1,796	1,754
- C)	Financial balance	-2	4	4
	Financial income	16	19	16
	Financial expenses other than interest on loans	-15	-20	-16
	Unrealised gains and losses on equity investments in associates	-3	5	4
-D)	Auxiliary and extraordinary components	116	-145	56
	+/- auxiliary balance	64	-145	42
	+/- extraordinary balance	52	0	14
	GROSS GLOBAL VALUE ADDED	1,592	1,655	1,814
	- Depreciation and amortisation	403	410	463
	NET GLOBAL VALUE ADDED	1,189	1,245	1,351

Figure 4_Statement for distribution of the gross global added value [GRI 201 - 1_4]

(millions of euro)	2016	2017	2018
REMUNERATION OF PERSONNEL	450	475	492
Wages and salaries	389	420	428
Employees' leaving entitlement (TFR)	26	29	31
Other costs	35	26	33
REMUNERATION OF EQUITY CAPITAL	125	159	190
Profits distributed	126	153	180
Net Income attributable to minority Interests	-1	6	10
REMUNERATION OF DEBT CAPITAL	159	138	116
TRANSFERS TO THE GOVERNMENT	286	268	322
Direct taxes for the Treasury	139	106	148
Other taxes and duties for the Treasury	1	2	1
Social security charges	146	160	173
TRANSFERS TO THE LOCAL COMMUNITY	63	65	67
Direct taxes for local authorities	28	26	30
Local taxes and duties	31	33	33
Sponsorships	1	1	1
Contributions to AEM and ASM foundations, aid, donations and charity	3	5	3
COMPANY REMUNERATION	509	550	627
Reserves	106	140	164
Amortization, depreciation	403	410	463
GROSS GLOBAL VALUE ADDED	1,592	1,655	1,814

Stakeholder engagement and materiality analysis

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Figure 5_Gross operating margin by Business Unit*

(millions of euro)	2016	2017	2018
Generation and Trading	404	356	370
Market	144	216	206
Environment	240	261	268
Networks and District Heating	397	391	410
Smart City	6	7	11
Corporate	-29	-30	-34
International	69	-2	0
Total	1,231	1,199	1,231

* 2017 data have been restated as they reflect the reclassification of the EPCG Group's results in accordance with IFRS 5.

Figure 6_Balance Sheet - millions of euro

	2016	2017	2018
Net fixed assets	6,136	5,780	6,131
Working capital	278	235	302
Assets/liabilities held for sale	1	224	112
Net capital employed	6,415	6,239	6,545
Shareholders' equity	3,279	3,013	3,523
- Attributable to the Group	2,726	2,878	3,135
- Attributable to minorities	553	135	388
Net debt	3,136	3,226	3,022
Total sources	6,415	6,239	6,545
Gross debt	3,817	3,961	3,692

Figure 7_Main balance sheet indicators

	2016	2017	2018
Turnover by permanent worker (millions of euro)	0.44	0.51	0.54
EBITDA per permanent worker (millions of euro)	0.10	0.11	0.10
Average number of permanent workers	11,086	11,280	12,136

Figure 8_CAPEX* (capital expenses) - millions of euro [GRI 201_1]

	2016	2017	2018
Generation and Trading	36	64	57
Market	8	11	18
Environment	79	107	103
Networks and District Heating	213	229	261
Smart City	6	10	11
International	27	4	0
Corporate	17	29	29
Total	386	454	479

* Data 2017 reclassification has been restated to reflect the internal changes in the reporting scope, in particular: MARKET BU and NETWORKS & DISTRICT HEATING BU.

Figure 9_Share performance

	2016	2017	2018
Average capitalisation (millions of euro)	3,685	4,455	4,763
Capitalisation at December 31 (millions of euro)	3,853	4,831	4,926
Average volumes	11,140,269	9,729,351	9,807,945
Average share price* (euros per share)	1.176	1.422	1.520
Maximum share price* (euros per share)	1.287	1.635	1.687
Minimum share price* (euros per share)	0.956	1.232	1.392

* Euro per share (Source: Bloomberg)

Manufacturing capital

Energy production

Figure 10_Average availability factor for all plants [G4 - EU30]

A2A AVERAGE AVAILABILITY FACTOR (%)	2016	2017	2018
Traditional coal-powered	89%	81%	80%
Traditional heavy fuel oil	80%	75%	80%
Combined cycle natural gas	79%	82%	87%
Run-of-the river hydroelectric	86%	86%	86%
Basin hydroelectric	88%	89%	85%
Storage hydroelectric	88%	85%	87%

LGH AVERAGE AVAILABILITY FACTOR (%)	2016	2017	2018
Run-of-the river hydroelectric	-	90%	90%

Stakeholder engagement and materiality analysis

Financial capital

Figure 11_Net electricity produced divided up according to plant type and source – GWh [G4 - EU2]

		2016	2017	2018
Generation and Trading Business Units	Thermoelectric plants*	7,872	11,442	10,671
	Hydroelectric plants	4,218	3,464	4,464
	Photovoltaic plants (including energy consumed)	3	12	63
Networks and District Heating Business Units	Cogeneration plants	187	277	285
Environment Business Unit	Waste-to-energy plants (including biogas) and natural gas boilers**	1,002	1,141	1,183
Total***		13,282	16,336	16,666

Manufacturing capital

Natural capital

Human capital

* The data differ from those in the Report on Operations as the Scandale thermoelectric plant has been separated, as described in the Methodological Note, in line with the data of the natural capital and the Sustainability Plan.

** The 2017 figure has been updated by separating the production of the Acerra waste-to-energy plant, equal to 631 GWh.

*** For the reasons stated above, 2017 total production is modified.

Relational capital

Figure 12_Net thermal energy produced divided up according to plant type and source – GWh

		2016	2017	2018
Environment Business Unit	Waste-to-energy plants (including biogas) and natural gas boilers	1,348	1,362	1,403
Networks and District Heating Business Unit	Cogeneration plants, natural gas thermal, heat pumps, biogas, solar panels	931	1,324	1,213
Generation Business Unit	Heat recovery	20	40	33
Total		2,299	2,726	2,649

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Electricity distribution

Figure 13_Extension of electricity distribution service [G4 - EU4]

	2016	2017	2018
Km of electricity network	14,039	14,919	15,014
<i>of which underground cable</i>	<i>12,013</i>	<i>12,745</i>	<i>12,039</i>

Figure 14_Extension of the gas distribution service

	2016	2017	2018
Km of natural gas network	8,057	11,183	11,193

Figure 15_Electricity, thermal energy and gas released to the network

	2016	2017	2018
Electricity distributed (GWh)	11,204	11,590	11,747
Heating and cooling energy distributed (GWh)	2,885	3,133	3,130
Natural gas distributed (Mm³)	2,096	2,480	2,425
Natural gas transported (Mm³)	324	370	372

Figure 16_Public lighting

	2016	2017	2018
Light points (no.)	210,805	213,817	225,590

Integrated water cycle

Figure 17_Procurement and distribution

TECHNICAL DATA	2016	2017	2018
Wells (no.)	262	276	190
Sources (no.)	243	331	275
Drinking water conversion plants (no.)	65	94	122
Total network length (km)	4,878	5,305	4,010
Water delivered to the user and accounted for (Mm³)	62	69	54
Water withdrawn (Mm³)	112	124	94
Network losses and water not booked (Mm³)	38	44	41

Stakeholder engagement and materiality analysis

Figure 18_Collection and purification

TECHNICAL DATA	2016	2017	2018
Sewers - network length (km)	2,203	2,551	2,567
Waste water treated (Mm³)	46	49	52
Purifiers (no.)	54	73	61

Financial capital

Manufacturing capital

Waste management

Figure 19_Waste collected

	2016	2017	2018
Tonnes	1,320,938	1,605,000	1,584,955

Natural capital

Human capital

Figure 20_Waste processed by type of plant* (kt)

	2016	2017	2018
Waste-to-energy plants	1,411	1,676	1,790
Landfills	192	481	455
Bio-drying plants and production of RDF	481	541	545
Recovery of materials and processing	503	938	997
Total	2,587	3,636	3,787

Relational capital

The Acsm Agam Group

* All incoming waste to the Group's plants is considered. The 2018 portion of waste disposal, net of intermediation (467 kt) and elisions (-751 kt) is 3,504 kt. Waste treated in plants managed on behalf of third parties (Acerra waste-to-energy plant and Caivano CSS plant) is not included.

Figure 21_Intermediated waste

	2016	2017	2018
Tonnes	109,790	133,082	216,374

District heating and heat

Figure 22_Thermal energy sold (GWh)

	2016	2017	2018
Heating / cooling energy	2,412	2,682	2,620

Smart City

Figure23_Smart City Services- Smart Land

	2016	2017	2018
Video cameras (no.)	1,902	1,999	2,013
SOS bollards (no.)	196	250	250
Monitoring stations (no.)	48	51	51
Digital islands (no.)	29	29	29
WIFI antennas (no.)	1,140	1,140	1,198
Remote natural gas reading concentrators (no.)	170	540	555
Environmental sensors installed (no.)	50	100	118
Smart bins installed	-	300	6,500
Smart landsensors	-	-	62
Smart parking sensors	-	-	110
ZTL gates	-	-	9
Variable message panels + park	-	-	15
Museum sites			
Sites	-	27	31
Cameras	-	1,023	1,463
Break-in sensors	-	3,299	5,025
Fire sensors	-	2,622	3,373
IoT sensors (laser, protection, flooding)	-	-	216
Evac speakers	-	-	33
A2A offices			
Offices	-	159	159
Break-in sensors	-	1,908	2,754
Cameras	-	1,376	1,862
Presence/access readers	-	789	841

Natural capital

Figure 24_Percentages of electricity generated by type of source [G4-EU2]

	2016	2017	2018
Renewable sources (hydraulic, renewable fraction of waste*, biogas, solar)	36%	25%	31%
Coal	17%	13%	12%
Natural gas	34%	51%	49%
Petroleum products	9%	8%	4%
Non-renewable fraction of waste	4%	3%	4%

* For non-hazardous waste, a renewable fraction of 51% was assumed (ref. Decree of the Ministry of Economic Development of December 18, 2008). As a result, the non-renewable fraction considered was 49%.

Figure 25_Energy Performance [GRI 302-3; G4 - EU11]

	2016	2017	2018
Average yield of thermoelectric plants	41%	44%	45%
Yield of high-performance natural gas combined cycles	50%	51%	51%
Yield of multi-fuel plants	34%	33%	32%
Average cogeneration efficiency of fossil fuel plants	78%	77%	77%
Average electricity produced from 1 t waste (kWh/t)	803	778	754
Average thermal energy produced from 1 t waste (kWh/t)	918	816	780

Figure 26_Global impact indicators

	2016	2017	2018
Total emissions of gases harmful to the ozone layer (KgR11 _{eq})	4.7	0.1	1.0
Total acidifying emissions* (tSO _{2eq})	3,378	3,910	3,409

* 2017 data has been updated as the calculation method of Grottaglie Landfill has been realigned, and due to a material error in the transitory emissions data input of the Chivasso Plant.

Figure 27_Indicators of impact due to the purchase and use of fossil fuels [GRI 305-3]

	2016	2017	2018
Carbon footprint (tCO _{2eq} /year)	863,223	1,031,979	933,332
Water footprint (thousands of m ³ water)	24,048	28,583	20,597

Figure 28_Environmental sanctions* [GRI 307-1]

	2016	2017	2018
Number	3	8	18
Value (euro)	10,800	30,516	66,314

* The most significant sanctions relate to the biodrying plants of Villafalletto and the plant complex of Corteolona (13,000 euro each). All sanctions relate to infractions of authorisation measures or administrative imprecisions that did not result in any damages or concrete temporary or permanent danger to the environment.

All sanctions relate to breaches of authorisation requirements or administrative inaccuracies.

Stakeholder engagement and materiality analysis

Financial capital

Manufacturing capital

Natural capital

Human capital

Relational capital

The Acsm Agam Group

Natural capital in the Environment BU

Resources and materials used

Figure 29_Resources used - Environment Business Unit [GRI 301-1; GRI 302-1_2; GRI 303-1]

	2016	2017	2018
Fuel (TJ)			
Natural gas	464	656	694
Petroleum derivatives (heavy fuel oil and diesel)	24	67	71
Waste, biomass and CSS	15,889	19,317	21,095
Biogas (from landfills and treatment facilities)	624	631	484
Automotive fuels (TJ)			
Petrol	6	9	7
Diesel	398	552	504
Methane	96	98	111
Electricity (GWh)	52	53	54
Water resource consumed (thousands m³)			
From aqueducts	871	735	511
From wells	2,495	3,004	3,160
Chemical products and materials (t)			
Mineral acids	1,771	1,305	1,565
Water additives/conditioners	310	263	260
Ammonia (solution)	5,223	5,722	6,196
Lime and solid neutralisers	26,068	32,124	33,152
Active carbon	1,052	1,293	1,422
Cement, sand an inert materials	136,605	216,722	188,808
Sodium chloride	98	1,704	283
Technical gases (nitrogen, CO2, hydrogen, oxygen)	848	1,118	1,370
Sodium hydroxide (solution)	3,131	1,917	2,260
Methanol, solvents and other products	1,486	1,923	2,461
Oils and lubricants	58	141	100
Urea (solution)	1,139	2,032	1,704
Total chemical products	177,789	266,265	239,583

Effluents

Figure 30_Industrial waste water [GRI 306-1]

		2016	2017	2018
Volumes (thousands of m³)	Discharged into sewers	404	491	503
	Discharged into surface water	1,402	1,115	919
	Recovered in the production cycle	363	387	401
	% of total water withdrawn	9.9%	10.5%	10.9%
	Derivative waters for cooling	709	703	713
Pollutant discharges into surface water (t)	BOD	27	27	20
	COD	114	69	47

Waste

Figure 31_Special waste produced [GRI 306-2_4]

	2016	2017	2018
Special non-hazardous (t)	443,791	515,353	529,422
Special hazardous (t)	84,306	104,612	111,751
Total special (t)	528,097	619,965	641,173
Sent for recovery (% of total)	47%	52%	52%

Emissions

Figure 32_Total emissions – Environment BU [GRI 305-1_2_6_7]

	2016	2017	2018
CO ₂ from combustion processes (t)	904,171	1,147,430	1,209,825
Biogenic emissions	856,550	1,083,853	1,087,985
CO ₂ from motor vehicles (t)	35,060	46,430	43,434
CO ₂ indirect from energy acquisition (t)	16,982	17,558	17,148
Fluorinated gases (t CO _{2eq})	409	448	524
NO _x (t)	621	893	883
SO ₂ (t)	16	17	36
Powders (t)	2.8	5.7	6.2
Methane (CH ₄) – biogas losses released in landfills (t CO _{2eq})	49,092	94,452	90,188
Polycyclic aromatic hydrocarbons (kg)	0.04	0.37	0.07
Mercury (kg)	15	14	15
Other metals (Sb + As + Pb + Cr + Cu + Mn + Ni + V + Sn+Cd+Tl) (kg)	166	321	215
Dioxins* (grams - toxic equivalency)	0.015	0.033	0.039
Dioxin-like PCBs (polychlorinated biphenyls) (grams - toxic equivalency)	0.0043	0.0038	0.0079

* 2016 data have been updated in line with the scope of Environment BU compared to the following years.

Figure 33_Energy generated by waste-to-energy processes [G4-EU2]

	2016	2017	2018
Thermal energy from waste-to-energy and biogas process	56%	52%	55%
Electricity from waste-to-energy and biogas process	8%	7%	7%

Stakeholder engagement and materiality analysis

Financial capital

Manufacturing capital

Natural capital

Human capital

Relational capital

The Acsm Agam Group

Natural capital in the Generation and Trading BU

Resources and materials used

Figure 34_Resources used – Generation BU [GRI 301-1; GRI 302-1_2; GRI 303-1]

	2016	2017	2018
Fuel (TJ)			
Natural gas	31,661	56,472	56,336
Coal	23,315	20,999	19,577
Petroleum derivatives (heavy fuel oil and diesel)	14,771	16,415	9,342
Automotive fuels (TJ)			
Petrol	1.46	1.12	2.09
Diesel	5.09	3.99	5.44
Methane	0.04	0.02	0.00
Electricity (GWh)	172	154	162
Water resources consumed (thousands of m³)			
From aqueducts*	87	108	104
From wells	3,239	3,531	3,144
From surface water	660	984	802
Chemical products and materials (t)			
Mineral acids	307	280	251
Water additives/conditioners	77	98	130
Ammonia (solution)	1,191	998	1,067
Lime and solid neutralisers	30,399	27,088	23,615
Active carbon	-	-	2.7
Cement, sand an inert materials	-	-	0.5
Sodium chloride	5	6	9.25
Technical gases (nitrogen, CO2, hydrogen, oxygen)	39	66	87
Sodium hydroxide (solution)	227	243	192
Methanol, solvents and other products	8	29	39
Oils and lubricants	98	82	86
Total chemical products	32,351	28,890	25,479

* 2017 data have been updated due to an input material error.

Effluents

Figure 35_Industrial waste water - Generation and Trading BU [GRI 306-1]

		2016	2017	2018
Volumes (thousands of m³)	Discharged into sewers	204	207	281
	Discharged into surface water	1,927	1,924	1,919
	Recovered in the production cycle	1,088	1,084	1,258
	% of total water withdrawn	34%	33%	31%
	Derivative waters for cooling*	1,292,490	1,619,880	1,403,857
	Water extracted for hydroelectric generation	2,432,901	2,436,679	3,158,118
Pollutant discharges into surface water (t)	BOD	14.0	22.9	20.3
	COD	47.6	58.8	45

* 2016 and 2017 data have been updated due to an input material error.

Waste

Figure 36_Special waste produced - Generation and Trading BU [GRI 306-2_4]

	2016	2017	2018
Special non-hazardous (t)	36,040	42,322	47,842
Special hazardous (t)	4,903	3,064	3,113
Total special (t)	40,943	45,386	50,955
Sent for recovery (% of total)	72%	91%	92.4%

Emissions

Figure 37_Total emissions - Generation and Trading BU [GRI 305-1_2_6_7]

	2016	2017	2018
CO ₂ from combustion processes (t)	5,047,153	6,299,134	5,700,406
CO ₂ from motor vehicles (t)	483	376	553
CO ₂ indirect from energy acquisition (t)	55,647	51,261	51,045
Fluorinated gases (t CO _{2eq})	2,906	1,576	1,193
NO _x (t)	1,881	2,313	2,060
SO ₂ (t)	1,348	1,340	1,135
Powders (t)	114	127	109
Polycyclic aromatic hydrocarbons (kg)	0.02	0.02	0.16
Mercury (kg)	3	4	2
Other metals (Sb + As + Pb + Cr + Cu + Mn + Ni + V + Sn+Cd+Tl) (kg)	328	293	215
Dioxins (grams - toxic equivalency)	0.001	0.003	0.006

Stakeholder engagement and materiality analysis

Financial capital

Manufacturing capital

Natural capital

Human capital

Relational capital

The Acsm Agam Group

Natural capital in the Networks & District Heating BU

Resources and materials used

Figure 38_Resources used – Networks and District Heating BU [GRI 301-1; GRI 302-1_2; GRI 303-1]

	2016	2017	2018
Fuel (TJ)			
Natural gas	2,804	4,215	3,830
Coal	1,846	1,828	1,781
Petroleum derivatives (heavy fuel oil, diesel)	0.5	0.3	0.1
Biogas (from group purification plants)	7	7	6
Automotive fuels (TJ)			
Petrol	12	12	10
Diesel	18	18	18
Methane	10	7	9
Electricity (GWh)	128	145	118
Heat energy (GWh - purchased from external sources)	385	446	456
Water resources consumed (thousands of m³)			
From aqueducts	673	806	728
From wells	1,857	1,764	2,070
Chemical products and materials (t)			
Mineral acids	554	547	674
Water additives/conditioners	8,581	8,457	8,141
Lime and solid neutralisers	1,420	1,812	1,910
Active carbon	50	53	94
Sodium chloride	1	23.65	10.8
Technical gases (nitrogen, CO2, hydrogen, oxygen)	162	174	140
Sodium hydroxide (solution)	176	159	198
Methanol, solvents and other products	738	678	740
Odorants	48	52	57
Oils and lubricants	22	43	48
Urea (solution)	439	520	528
Total chemical products	12,191	12,519	12,541

Effluents

Figure 39_Industrial waste water - Networks and District Heating BU [GRI 306-1]

		2016	2017	2018
Volumes (thousands of m³)	Discharged into sewers	372	418	355
	Discharged into surface water	170	143	251
	Recovered in the production cycle	3.8	2.3	3.1
	% of total water withdrawn	0.1%	0.1%	0.1%
	Derivative waters for cooling	18	15	22
Pollutant discharges into surface water (t)	BOD	0.9	0.4	1.2
	COD	3.3	1.7	3.2

Waste

Figure 40_Special waste produced - Networks and District Heating BU [GRI 306-2_4]

	2016	2017	2018
Special non-hazardous* (t)	32,333	38,662	38,979
Special hazardous (t)	275	299	321
Total special** (t)	32,608	38,961	39,299
Sent for recovery (% of total)	92%	92%	91%

* 2017 data have been updated to correct an input material error.
** 2017 total value changed due to the update of the data relating to special non-hazardous waste.

Emissions

Figure 41_Total emissions - Networks and District Heating BU [GRI 305-1_2_6_7]

	2016	2017	2018
CO ₂ from combustion processes (t)	338,675	419,238	392,712
CO ₂ from motor vehicles (t)	2,721	2,608	2,541
CO ₂ indirect from energy acquisition (t)	41,854	48,100	37,237
Fluorinated gases (t CO ₂ eq)	2,154	292	960
Methane (CH ₄) - losses from natural gas distribution networks (t CO ₂ eq)	43,931	38,824	43,154
NO _x (t)	203	259	179
SO ₂ (t)	118	123	129
Powders (t)	0.4	0.5	0.7

Figure 42_Electricity losses in the grid [GRI EU 12]

	2016	2017	2018
GWh	323	389	354

Stakeholder engagement and materiality analysis

Financial capital

Manufacturing capital

Natural capital

Human capital

Relational capital

The Acsm Agam Group

Natural capital in the Corporate BU

Resources and materials used

Figure 43_Resources used – Corporate Business Unit [GRI 301-1; GRI 302-1_2; GRI 303-1]

	2016	2017	2018
Water (thousand m³)	184	169	168
Electricity (GWh)	17	16	14
Fuel (TJ)			
Methane	35	29	25
Fuels (TJ)			
Petrol	2	4	3
Diesel	12	56	48
Methane	2	3	3

Waste

Figure 44_Special waste produced – Corporate BU [GRI 306-2_4]

	2016	2017	2018
Special non-hazardous (t)	48	111	169
Special hazardous (t)	26	93	93
Total special (t)	74	204	262
Sent for recovery (% of total)	90%	90%	98.5%

Emissions

Figure 45_Total emissions – Corporate BU [GRI 305-1_2_6_7]

	2016	2017	2018
CO ₂ from combustion processes (t)	1,940	1,613	1,425
CO ₂ from motor vehicles (t)	1,070	4,601	3,927
CO ₂ indirect from energy acquisition (t)	5,454	5,368	4,377
Fluorinated gases (t CO _{2eq})	536	276	552

Human capital

Composition of personnel

Figure 46_Personnel by category and type of contract [GRI 102-8; 405-1]

	2016			2017			2018		
	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL
Managers	121	24	145	147	27	174	146	29	175
Supervisors	381	112	493	458	135	593	485	145	630
White-collar workers	2,844	1,141	3,985	3,185	1,416	4,601	3,213	1,421	4,634
Blue-collar workers	4,527	193	4,720	5,241	205	5,446	4,992	202	5,194
Permanent workers	7,873	1,470	9,343	9,031	1,783	10,814	8,836	1,797	10,633
of which, on-the-job training and first job contracts	5	-	5	11	-	11	-	-	-
Fixed-term workers	406	28	434	551	51	602	518	45	563
of which:									
Managers	1	-	1	1	-	1	1	1	2
Supervisors	1	-	1	2	-	2	2	-	2
White-collar workers	23	18	41	40	39	79	32	32	64
Blue-collar workers	381	10	391	507	11	518	483	12	495
TOTAL	8,279	1,498	9,777	9,582	1,834	11,416	9,354	1,842	11,196
of which workers with part-time contracts	51	244	295	38	286	324	75	275	350
of which workers with full-time contracts	8,228	1,254	9,482	9,544	1,548	11,092	9,279	1,567	10,846
Workers with non-standard contracts* (temporary/interns/collaborators)	26	9	35	84	44	128	118	40	158

* Workers under non-standard contracts do not include consultants.

Figure 47_Personnel by type of contract applied [GRI 102-41]

	2016	2017	2018
Executive contracts	146	174	177
Electrical contracts	3,160	3,387	3,473
Single natural gas and water contracts	1,250	1,781	1,567
Commercial contracts	341	389	453
Urban hygiene contracts	4,246	4,756	4,556
FISE contracts	456	661	735
Chemical contracts	178	178	178
Other contracts	-	90	57
Total	9,777	11,416	11,196

Stakeholder engagement and materiality analysis

Financial capital

Manufacturing capital

Natural capital

Human capital

Relational capital

The Acsm Agam Group

Figure 48_Personnel by workplace [GRI 102-8]

REGION	2016			2017			2018		
	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL
Abruzzo	51	5	56	51	5	56	50	5	55
Calabria	79	1	80	78	1	79	77	1	78
Campania	192	15	207	192	16	208	193	17	210
Emilia Romagna	47	6	53	46	6	52	54	10	64
Friuli Venezia Giulia	156	5	161	151	5	156	149	5	154
Lazio	2	1	3	2	1	3	3	2	5
Lombardy	7,491	1,440	8,931	8,757	1,769	10,526	8,508	1,770	10,278
Marches	-	-	-	7	4	11	8	4	12
Piedmont	78	21	99	88	21	109	100	22	122
Puglia	28	-	28	48	2	50	47	2	49
Sicily	151	4	155	160	4	164	160	4	164
Veneto	-	-	-	-	-	-	4	-	4
International	4	-	4	2	-	2	1	-	1
TOTAL	8,279	1,498	9,777	9,582	1,834	11,416	9,354	1,842	11,196

Figure 49_Number of hires and turnover rate, by age, gender and geographical area [GRI 401-1]

AGE BRACKETS	2016			2017			2018		
	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL
Permanent workers									
Up to age 30	83	12	95	108	26	134	130	26	156
From 31 to 40	67	8	75	90	16	106	114	26	140
From 41 to 50	36	6	42	84	4	88	61	12	73
Over 50	34	-	34	24	-	24	31	3	34
Fixed-term workers									
Up to age 30	224	24	248	221	24	245	188	22	210
From 31 to 40	144	8	152	157	6	163	141	12	153
From 41 to 50	58	2	60	108	1	109	97	5	102
Over 50	22	-	22	35	2	37	47	5	52
Total	668	60	728	827	79	906	809	111	920
Percentage of new employees out of total workforce	8.10%	4.00%	7.40%	8.63%	4.31%	7.94%	8.44%	6.05%	8.22%

Figure 50_Workers leaving, by gender [GRI 401-1]

ITALY	2016			2017			2018		
	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL
Retirement	133	7	140	168	10	178	251	9	260
Voluntary resignation	88	22	110	118	27	145	149	27	176
Decease	9	1	10	14	-	14	10	1	11
Dismissal	132	13	145	35	3	38	53	2	55
Other (e.g., end of fixed-term contract)	239	20	259	292	9	301	318	25	343
Total	601	63	664	627	49	676	781	64	845
Turnover rate*	7.30%	4.20%	6.80%	6.54%	2.67%	5.92%	8.15%	3.49%	7.55%

* The turnover rate was calculated according to the following formula: (outgoing) / (employees) at December 31.

Figure 51_Workers leaving, by age bracket [GRI 401-1]

ITALY	2016					2017					2018				
	UP TO 30	31-40	41-50	OVER 50	TOTAL	UP TO 30	31-40	41-50	OVER 50	TOTAL	UP TO 30	31-40	41-50	OVER 50	TOTAL
Retirement	-	-	-	140	140	-	-	-	178	178	-	-	-	260	260
Voluntary resignation	23	27	16	44	110	27	43	32	43	145	41	41	37	57	176
Decease	-	1	3	6	10	1	1	5	7	14	-	1	4	6	11
Dismissal	-	8	11	126	145	8	9	12	9	38	8	12	20	15	55
Other (e.g., end of fixed-term contract)	113	74	39	33	259	116	92	63	30	301	143	92	60	48	343
Total	136	110	69	349	664	152	145	112	267	676	192	146	121	386	845
Turnover rate	16.77%	6.08%	2.16%	8.81%	6.80%	15.80%	6.50%	3.14%	5.69%	5.92%	19.96%	6.50%	3.40%	8.23%	7.55%

Stakeholder engagement and materiality analysis

Financial capital

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The Acsm Agam Group

Welfare and diversity

Figure 52_Personnel by age bracket and gender [GRI 405-1]

AGE BRACKETS	2016									
	MANAGERS		SUPERVISORS		WHITE-COLLAR WORKERS		BLUE-COLLAR WORKERS		TOTAL	
	M	W	M	W	M	W	M	W		
Up to age 30			1		173	129	498	10	811	
From 31 to 40	4	1	52	23	406	292	971	60	1,809	
From 41 to 50	42	14	131	40	850	410	1,619	91	3,197	
Over 50	76	9	198	49	1,438	328	1,820	42	3,960	
Total	122	24	382	112	2,867	1,159	4,908	203	9,777	

AGE BRACKETS	2018									
	MANAGERS		SUPERVISORS		WHITE-COLLAR WORKERS		BLUE-COLLAR WORKERS		TOTAL	
	M	W	M	W	M	W	M	W		
Up to age 30	-	-	-	-	235	147	541	6	929	
From 31 to 40	5	-	83	27	562	404	1,103	48	2,232	
From 41 to 50	45	17	154	55	819	445	1,736	100	3,371	
Over 50	97	13	250	63	1,629	457	2,095	60	4,664	
Total	147	30	487	145	3,245	1,453	5,475	214	11,196	

Figure 53_Personnel by protected categories [GRI 405-1]

PROTECTED CATEGORIES	2016			2017			2018		
	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL
PRO.CAT. (ART.18 PARA.2 LAW 68/99)	34	16	50	36	18	54	36	18	54
PEOPLE WITH DISABILITIES	329	88	417	348	104	452	326	97	423
DISADVANTAGED GROUPS (MOBILITY-REDUNDANCY)	5	-	5	-	-	-	-	-	-
Total	368	104	472	384	122	506	362	115	477

Figure 54_Personnel by position and company seniority [G4-EU15]

COMPANY SENIORITY	2016						2017						
	MANAG-ERS	SUPERVI-SORS	WHITE-COLLAR WORKERS	BLUE-COLLAR WORKERS	TOTAL	%	MANAG-ERS	SUPERVI-SORS	WHITE-COLLAR WORKERS	BLUE-COLLAR WORKERS	TOTAL	%	
Up to age 10	58	145	1,066	2,142	3,411	34.9%	60	192	1,383	2,548	4,183	36.6%	
From 11 to 20	42	102	631	1,125	1,900	19.4%	59	141	845	1,433	2,478	21.7%	
From 21 to 30	35	160	1,495	1,403	3,093	31.6%	41	156	1,531	1,522	3,250	28.5%	
Over 30	11	87	834	441	1,373	14.1%	15	106	920	464	1,505	13.2%	
Total	146	494	4,026	5,111	9,777	100.0%	175	595	4,679	5,967	11,416	100.0%	

Figure 55_Personnel by educational qualification

	2016				2017				2018			
	MEN	WOMEN	TOTAL	%	MEN	WOMEN	TOTAL	%	MEN	WOMEN	TOTAL	%
Undergraduate degree	703	408	1,111	11.4%	927	533	1,460	12.8%	1,022	570	1,592	14.2%
Secondary school diploma	3,195	760	3,955	40.5%	3,548	917	4,465	39.1%	3,672	921	4,593	41.0%
Vocational degree	606	78	684	7.0%	796	93	889	7.8%	661	73	734	6.6%
Compulsory schooling	3,775	252	4,027	41.2%	4,311	291	4,602	40.3%	3,999	278	4,277	38.2%
Total	8,279	1,498	9,777	100.0%	9,582	1,834	11,416	100.0%	9,354	1,842	11,196	100.0%

	2017								TOTAL
	MANAGERS		SUPERVISORS		WHITE-COLLAR WORKERS		BLUE-COLLAR WORKERS		
	M	W	M	W	M	W	M	W	
	-	-	1	-	231	167	553	10	960
	5	1	76	29	502	388	1,152	47	2,200
	47	15	145	47	891	462	1,853	104	3,564
	96	11	238	59	1,600	441	2,190	55	4,690
	148	27	460	135	3,224	1,458	5,748	216	11,416

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	2018					
	MANAGERS	SUPERVISORS	WHITE-COLLAR WORKERS	BLUE-COLLAR WORKERS	TOTAL	%
	61	199	1,387	2,348	3,995	35.7%
	62	168	862	1,607	2,699	24.1%
	39	139	1,351	1,212	2,741	24.5%
	15	126	1,097	523	1,761	15.7%
	177	632	4,697	5,690	11,196	100.0%

Personnel training and development

Figure 56_Training delivered by role [GRI 404-1]

	2016		2017		2018	
	NUMBER OF HOURS	AVERAGE ANNUAL HOURS OF TRAINING PER EMPLOYEE	NUMBER OF HOURS	AVERAGE ANNUAL HOURS OF TRAINING PER EMPLOYEE	NUMBER OF HOURS	AVERAGE ANNUAL HOURS OF TRAINING PER EMPLOYEE
Managers	4,322	29.6	6,691	38.2	9,313	52.6
Supervisors	15,935	32.3	22,542	37.9	35,099	55.5
White-collar workers	78,124	19.4	96,744	20.7	116,255	24.7
Blue-collar workers	65,443	12.8	86,979	14.6	66,996	11.8
Total	163,824	16.8	212,956	18.7	227,663	20.3

Figure 57_Training delivered by gender [GRI 404-1]

	2016		2017		2018	
	NUMBER OF HOURS	AVERAGE HOURS PER EMPLOYEE	NUMBER OF HOURS	AVERAGE HOURS PER EMPLOYEE	NUMBER OF HOURS	AVERAGE HOURS PER EMPLOYEE
Men	144,317	17.4	185,338	19.3	186,109	19.9
Women	19,507	13	27,617	15.1	41,554	22.6
Total	163,824	16.8	212,956	18.7	227,663	20.3

Figure 58_Health and safety training

	2016	2017	2018
Training hours	86,492	112,023	102,776

Figure 59_Cost of training

	2016	2017	2018
€	1,800,223	3,013,190	2,520,072
% of training costs covered by inter-professional funds	30%	29%	29%

Figure60_Employees trained in the year (percentage of total)

	2016	2017	2018
%	87%	92%	85%

Figure 61_Attendance of training courses (total number)

	2016	2017	2018
no.	37,634	55,830	57,209

Figure 62_Percentage of employees who regularly receive performance assessments [GRI 404-3]

	2016	2017	2018
%	47%	47%	49%

Figure 63_Third-party employees that have undergone relevant health and safety training

	NO. EMPLOYEES INVOLVED	TRAINING HOURS PROVIDED
2016	1,691	6,011
2017	2,353	4,506
2018	1,291	3,876

Stakeholder engagement and materiality analysis

Health and safety at work

Figure 64_Data on injuries* [GRI 403-2]

	2016	2017	2018
Number of deaths	-	-	-
No. of incidents (excl. during travel)	556	577	521
Men	506	526	485
Women	50	51	36
No. of days absence	14,109	14,861	12,710
Average duration	25.42	25.76	24.21
Frequency index FI	35.66	31.80	29.14
Severity index SI	0.91	0.82	0.71
Incidence index II	11.52	10.0	8.0
Commuting accidents	112	113	90

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* When calculating indices, only professional accidents, that result in at least one day of absence, not including the day of the event, are considered. Medications and precautionary absences and unrecognised accidents are therefore excluded. Professional accidents also include those that occur in transit, with or without a vehicle. The table counts all injuries involving employees.

FI = frequency index (no. accidents x 1,000,000: hours worked)

SI = severity index (no days of absence x 1,000: hours worked)

II = incidence index (no accidents x 1,000: headcount) – it is calculated on the number of commuting accidents.

Commuting accidents: accidents suffered by workers while commuting from home to work and vice-versa (but not while in service).

Figure 65_Incident indices of contractors and subcontractors for construction and maintenance works [GRI 403-2_G4-EU17]

	NO. OF HOURS WORKED BY CONTRACTORS	DEATHS	NO. OF ACCIDENTS	DAYS LOST	FREQUENCY INDEX	SEVERITY INDEX
2016	1,720,753	-	11	464	6.39	0.27
2017	2,350,008	-	15	354	6.38	0.15
2018	2,264,294	-	22	169	9.72	0.07

Figure 66_Health data by BU

	GENERATION AND TRADING BU			MARKET BU			ENVIRONMENT BU			NETWORKS AND DISTRICT HEATING BU			CORPORATE			TOTAL		
	2016	2017	2018	2016	2017	2018	2016	2017	2018	2016	2017	2018	2016	2017	2018	2016	2017	2018
Visits as per 81/08	722	825	746	152	171	260	4,119	6,112	5,880	1,513	1,259	1,226	454	420	513	6,960	8,787	8,625
Tox visits	-	-	166	-	-	60	-	-	2,120	-	-	285	-	-	-	-	-	2,631
Assessments	1,414	1,715	1,833	95	174	277	7,604	8,789	11,045	1,793	2,633	2,533	366	461	494	11,272	13,772	16,182
Influenza Vaccination	-	-	35	-	-	39	-	-	223	-	-	198	-	-	129	-	-	624
Vaccinations	40	80	79	-	29	42	541	943	851	67	509	314	-	114	2	648	1,675	1,288
Site inspections	-	17	16	-	8	6	-	29	54	-	35	31	-	11	12	83	100	119
Reported professional disease	-	-	5	-	-	0	-	-	4	-	-	0	-	-	0	8	3	9
Health provisions	-	-	17	-	-	5	-	-	27	-	-	9	-	-	7	40	41	65
Specialist visits	-	7		-	-		-	272	68	-	3	7	-	-		191	282	75

Figure 67_Percentage of workers represented in formal health and safety committees [GRI 403-1]

	2016	2017	2018
Percentage of the total	100%	100%	100%

Absenteeism

Figure 68_Number of working days lost by gender [GRI 403-2]

	2016		2017		2018	
	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN
Illness	94,360	17,629	97,453	18,880	98,515	18,166
Unpaid leave/absence	5,761	1,681	6,461	1,473	6,008	698
Company strikes	2,926	209	-	-	-	-
National strikes	410	29	497	84	626	73
Accidents*	12,884	1,983	14,082	1,782	12,390	1,391
Total	116,340	21,531	118,493	22,219	117,539	20,327
Total days worked by the workforce in the reporting period	2,142,530	369,643	2,091,868	370,106	2,424,831	457,695
Absentee Rate	5%	6%	6%	6%	5%	4%

* It should be noted that the figures presented in this table refer solely to working days lost due to accidents and not to calendar days lost, which are used to calculate the severity index.

Figure 69_Lost day rate* (total number of days lost through injury or illness out of total working hours by the workforce in the reporting period) [GRI 403-2]

	2016			2017			2018		
	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL
Days lost to accidents	12,037	1,983	14,020	14,802	1,782	15,864	12,390	1,391	13,781
Total workable hours of the workforce in the reporting period	14,911,363	2,595,243	17,506,606	15,217,692	2,633,211	17,850,903	17,613,164	3,346,340	20,959,504
Total hours worked by the workforce in the reporting period	13,003,431	2,111,103	15,114,534	13,157,472	2,120,568	15,278,040	15,279,598	2,694,030	17,973,628
Lost day rate	0.08%	0.08%	0.08%	0.10%	0.07%	0.08%	0.07%	0.04%	0.07%

* Days lost means days on which work cannot be performed due to an occupational accident or occupational disease. They are not counted if there is a partial return to working activity. Occupational disease is defined as an illness caused by the working environment or professional activity (e.g., stress or regular exposure to harmful chemical substances) or resulting from an accident.

Figure 70_Return to work and retention rates after parental leave*

	2016		2017 **		2018	
	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN
Employees who took parental leave	119	133	229	195	325	208
of whom, employees who returned to work in 2016	103	103	-	-	-	-
of whom, employees who returned to work in 2017	13	25	216	165	-	-
of whom, employees who returned to work in 2018	1	-	13	30	302	176

* Employees who did not return to work relative to 2018 have not necessarily resigned, but are continuing their leave.
** Due to the change in the HR management software in 2017, errors were detected in the entries in the new system on data relating to parental leave when preparing the 2018 Integrated Financial Statements. For this reason, it was decided to extract the same data from the payroll system, and recalculate the data communicated in 2017.

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Figure 71_Registrations with trade union

	2016		2017		2018	
	N°	%	N°	%	N°	%
Italy - members of union federations	3,424	35.0%	3,662	32.1%	3,646	32.6%
Italy - members of other unions	1,062	10.9%	1,137	10.0%	1,188	10.6%
Employees not enrolled in unions	5,287	54.1%	6,617	58.0%	6,362	56.8%
Abroad - Employees not enrolled in unions	4	0.0%	-	0.0%	-	0.0%
Total	9,777	100.0%	11,416	100.0%	11,196	100.0%

Figure 72_Hours spent on strike

	2016	2017	2018
Total strike hours	22,700	4,402	502
Strike hours per capita*	2.3	0.4	0.0

* Per capita hours are calculated on the average headcount.

Benefits and remuneration

Figure 73_Contributions to Recreational and Welfare Circles

	2016	2017	2018
Total (€)	4,631,251	5,000,668	5,097,116

Relational capital

Relations with customers

Electricity and natural gas sales service

Figure 74_Electricity supply contracts by type of market

	2016	2017	2018
Protected market	674,551	619,114	547,994
Free market	321,746	472,003	586,998
Total	996,297	1,091,117	1,134,992

Stakeholder engagement and materiality analysis

Figure 75_Electricity supply contracts by type of customer [G4 - EU3]

	2016	2017	2018
Domestic	820,420	895,041	914,937
SME	111,179	128,704	133,237
Large customers	30,954	34,292	52,563
Condominiums	33,744	33,080	34,255
Total	996,297	1,091,117	1,134,992

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Figure 76_Gas supply contracts by type of market

	2016	2017	2018
Protected market	813,729	841,282	698,406
Free market	276,898	453,141	542,554
Total	1,090,627	1,294,423	1,240,960

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Figure 77_Gas supply contracts by type of customer [G4 - EU3]

	2016	2017	2018
Domestic	1,022,433	1,212,980	1,161,611
SME	53,859	64,933	63,722
Large customers	4,997	6,748	6,582
Condominiums	9,338	9,762	9,045
Total	1,090,627	1,294,423	1,240,960

Figure 78_Geographic breakdown of electricity sales volumes

	2016	2017	2018
Lombardy	78%	83%	76%
Rest of Italy	22%	17%	24%

Figure 79_Geographic breakdown of gas sales volumes

	2016	2017	2018
Lombardy	88%	90%	88%
Rest of Italy	12%	10%	12%

Figure 80_Number of fidelity programme adhesions

	2016	2017	2018
Adhesions	257,075	286,834	40,522
Increase (percentage)	31%	12%	-86%

Figure 81_Quality of the call centre

	ARERA TARGET	A2A ENERGIA			LINEA PIÙ		
		2016	2017	2018	2016	2017	2018
Percentage of successful calls	>=80%	95.5%	94.2%	96.7%	92.3%	97.4%	96.1%
Accessibility of lines and services (time when line is free vs operator presence time)	>=80%	98.8%	99.3%	100.0%	100.0%	100.0%	100.0%
Average waiting time on the telephone	<=240"	131	140	122	147	84	84

* The position in the rankings derives from the comparison of the performance of A2A Energia with that of the main market players, apart from the macro category of "Other suppliers", which combines several operators and whose results cannot be read individually due to the number of associated interviews.

Figure 82_Customer satisfaction on call centre operations

	FIRST HALF 2016	2ND HALF 2016	1ST HALF 2017	2ND HALF 2017	2018 (ANNUAL)
A2A Energia	97.1%	95.7%	95.7%	95.2%	98.1%
Linea Più	n.a.	94.5%	93.2%	90.5%	94.0%
National average	91.0%	92.4%	93.2%	91.7%	92.3%

Figure 83_Gas and electricity complaint trend

	2016	2017	2018
A2A Energia - number of complaints	2,823	3,447	3,550
Linea Più - number of complaints	-	2,399	1,682
A2A Energia - percentage "simple" complaints out of average no. of customers*	0.14%	0.17%	0.18%
Linea Più - percentage "simple" complaints out of average no. of customers*	-	0.82%	0.56%

* ARERA 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.

Figure 84_Electricity bill cost trends (in euro) for a typical household*

	A2A ENERGIA			LINEA PIÙ		
	2016	2017	2018	2016	2017	2018
Sales services	216.05	245.16	274.78	266.51	264.52	302.46
Network services	215.35	206.04	204.03	213.84	206.35	204.05
Tax	21.79	21.82	21.82	21.79	21.79	21.79
VAT	45.32	47.3	50.06	50.21	49.27	52.83
Total	498.51	520.32	550.69	552.35	541.93	581.13

* For electricity, the Authority took as an example a resident domestic use contract, with 3 kW of available power and an average annual use of 2,700 kWh.

Figure 85_Gas bill cost trends (in euro) for a typical household*

	A2A ENERGIA			LINEA PIÙ		
	2016	2017	2018	2016	2017	2018
Sales services	401.88	411.56	454.70	488.88	421.68	478.95
Network services	209.62	214.75	224.25	212.75	212.16	221.24
Tax	224.68	224.68	224.68	224.68	224.68	224.68
VAT	170.55	173.2	182.61	165.68	153.55	185
Total	1,006.73	1,024.19	1,086.24	1,091.99	1,012.08	1,109.87

* For gas, domestic use with independent heating in the north-east and an annual use of 1,400 cm was considered by the Authority.

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Figure 86_Affluence at branches

	2016	2017	2018
Total number of customers served	300,814	285,550	246,409
A2A Energia	300,814	200,140	170,513
Linea Più	-	85,410	75,896
Average office waiting time in minutes			
A2A Energia	13:48	07:30	06:18
Linea Più	-	12:13	09:51

Figure 87_Customer satisfaction on the services provided at AEN counters

	2016	2017	2018
Positive	95.90%	96.84%	98.30%
Negative	4.10%	3.16%	1.70%

Figure 88_Number of electricity and gas contracts with the Bollett@mail service

	2016	2017	2018
A2A Energia	289,613	325,580	367,018
Linea Più	-	47,231	66,315
Total	289,613	331,985	433,333
Increase (percentage)	16.5%	14.6%	30.5%

* The 2017 data for Linea Più has been modified to align it with the methodology used by A2A Energia.

Figure 89_Number of visits to the commercial websites

	2016	2017	2018
Total number of visits	2,686,178	4,144,495	4,153,558
Registered with the online counter	-	-	391,626
Number of self-readings via web A2A Energia	-	-	49%
Number of self-readings via web Linea Più*	-	n.a.	33%

Figure 90_Green energy sold (GWh)

MARKET SEGMENT	2016	2017	2018
Government	1%	1%	2%
Mass market	71%	68%	45%
Others	28%	31%	53%
Total GWh	769	1,273	2,229

Electricity and natural gas distribution service

Figure 91_Extension of the electricity distribution service* [G4 – EU3_EU4]

	2016	2017	2018
Customers connected	1,135,038	1,176,799	1,183,035

* Weighted average number of POD active during the year calculated on the basis of ARERA and CSEA provisions and valid for tariff purposes.

Figure 92_Extension of the gas distribution service*

	2016	2017	2018
Customers connected	1,259,287	1,469,330	1,511,748

* Weighted average number of PDR active during the year calculated on the basis of ARERA and CSEA provisions and valid for tariff purposes.

Figure 93_Technical quality of electricity [G4 – EU29_EU28]

SERVICE CONTINUITY INDICATOR	MILAN											
	HIGH DENSITY AREA				MEDIUM DENSITY AREA				LOW DENSITY AREA			
	2016	2017	2018	OBJECTIVE ARERA 2018	2016	2017	2018	OBJECTIVE ARERA 2018	2016	2017	2018	OBJECTIVE ARERA 2018
Average annual minutes of outage per LV user due to long outages without notice	26.63	24.83	27.61	25	36.67	13.43	24.42	40	n.a.	n.a.	n.a.	/
Average annual number of outages per LV user due to long outages without notice	1.54	1.36	1.39	1.1	1.71	0.88	1.46	2.04	n.a.	n.a.	n.a.	/

SERVICE CONTINUITY INDICATOR	BRESCIA											
	HIGH DENSITY AREA				MEDIUM DENSITY AREA				LOW DENSITY AREA			
	2016	2017	2018	OBJECTIVE ARERA 2018	2016	2017	2018	OBJECTIVE ARERA 2018	2016	2017	2018	OBJECTIVE ARERA 2018
Average annual minutes of outage per LV user due to long outages without notice	5.24	4.92	7.39	25	9.92	8.03	16.97	40	21.77	26.46	31.65	60
Average annual number of outages per LV user due to long outages without notice	0.69	0.58	0.76	1.00	1.33	1.18	1.67	2.00	2.46	2.88	3.10	4

SERVICE CONTINUITY INDICATOR	CREMONA								
	HIGH DENSITY AREA			MEDIUM DENSITY AREA			LOW DENSITY AREA		
	2017	2018	OBJECTIVE ARERA 2018	2017	2018	OBJECTIVE ARERA 2018	2017	2018	OBJECTIVE ARERA 2018
Average annual minutes of outage per LV user due to long outages without notice	4.54	2.44	25	n.a.	n.a.	-	10.41	27.90	60
Average annual number of outages per LV user due to long outages without notice	0.31	0.13	1	n.a.	n.a.	-	0.88	0.78	4

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Figure 94_Electricity emergency service [G4 – EU28]

	MILAN			BRESCIA			CREMONA	
	2016	2017	2018	2016	2017	2018	2017	2018
No. MV customers with more than 6 interruptions per year for high density areas	35	14	25	-	-	-	-	-
No. of MV customers with more than 8 interruptions a year for medium-concentration areas	-	-	-	-	-	5	n.a.	n.a.
No. MV customers with more than 9 interruptions per year for low density areas	-	-	-	18	12	12	-	-

In the event of an electricity shortfall, Terna - National Electrical Network requests that distributors implement a scheduled rotating outage plan in order to avoid a general blackout. There are five levels of severity of electricity shortfall used to determine the number of users involved and the frequency of outages. The disconnections, which will last up to 90 minutes, are notified by Terna 30 minutes in advance and can take place at any time during the specified time frames and not necessarily at their start. The scheduled outage plan prepared by A2A Reti Elettriche, by day and time slot, is available from the company's website.

Figure 95_Commercial quality of electricity: specific indicators for the Milan-Brescia area [G4 – EU21]

SIMPLE INDICATORS	ARERA LEVEL RES. 646/15	SERVICES PROVIDED ON THE INDICATED TIMETABLE (%)			AVERAGE TIME TO EXECUTE THE SERVICE (DAYS)		
		2016	2017	2018	2016	2017	2018
Time to prepare estimate for work on the network	15 working days for LV 30 working days for MV	99.61%	98.66%	98.40%	6.38	6.61	6.89
Execution time for simple work	10 working days for LV 20 working days for MV	99.71%	99.32%	98.66%	5.06	4.71	5.43
Execution time for complex work	50 working days	100.00%	99.86%	99.46%	9.19	10.14	10.21
Activation time for LV/MV supply	5 working days	99.89%	99.84%	99.68%	0.73	0.63	0.62
Supply de-activation time	5 working days for LV 7 working days for MV	99.81%	99.86%	99.59%	0.64	0.59	0.64
Reactivation time following suspension due to non-payment	1 working day	99.87%	99.90%	99.70%	0.1	0.08	0.08
Observance of time bracket for appointments	Two hours	99.85%	99.84%	99.45%	n.a.	n.a.	n.a.
Time to restore service following failure of meter equipment during business days from 8 AM to 6 PM on the LV network	Three hours	90.42%	88.01%	81.87%	1.77	2.01	2.31
Time to restore service following failure of meter equipment during non-working days from 6 PM to 8 AM on the LV network	Four hours	98.28%	97.02%	93.73%	1.4	1.52	2.11
Time to report results of testing of LV/MV meter equipment	15 working days	97.16%	92.70%	92.45%	9.2	11.40	10.62
Time for notifying the result of the verification of voltage	20 working days	96.55%	95.45%	84.62%	15.76	15.28	20.93

Figure 96_Commercial quality of electricity: specific indicators for the Cremona area [G4 – EU21]

SIMPLE INDICATORS	ARERA LEVEL RES. 646/15	SERVICES PROVIDED ON THE INDICATED TIMETABLE (%)		AVERAGE TIME TO EXECUTE THE SERVICE (DAYS)	
		2017	2018	2017	2018
Time to prepare estimate for work on the network	10 working days for LV 30 working days for MV	100% 100%	98.64% 81.82%	3.34 8.88	4.39 20.91
Execution time for simple work	10 working days for LV 20 working days for MV	98%; 100%	99.45%	2.98 3.00	2.62
Execution time for complex work	50 working days for LV 50 working days for MV	100% 100%	100% 100%	14.45 10.50	16.50 10.50
Activation time for LV/MV supply	5 working days	100%	99.96% 100%	0.58	0.31 3
Supply de-activation time	5 working days for LV 7 working days for MV	100% 100%	99.98% 100%	0.5 4.00	0.43 6
Reactivation time following suspension due to non-payment	1 working day on zeroed 1 working day reduced 15%	100% 100%	99.83%	0.11 0.6	0.08
Observance of time bracket for appointments	Two hours	100%	100%	-	-
Time to restore service following failure of meter equipment during business days from 8 AM to 6 PM on the LV network	Three hours	100%	100%	1h and 10 min	1h and 22 min
Time to restore service following failure of meter equipment during non-working days from 6 PM to 8 AM on the LV network	Four hours	100%	100%	1h and 10 min	1h and 48 min
Time to report results of testing of LV/MV meter equipment	15 working days	100%	78%	13	9.67
Time for notifying the result of the verification of voltage	20 working days	n.a.	n.a.	n.a.	n.a.

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Figure 97_Commercial quality of electricity: general indicators for the Milan-Brescia area [G4 – EU21]

TYPE OF SERVICE	ARERA LEVEL - LV	SERVICES PROVIDED ON THE INDICATED TIMETABLE (%)		
		2016	2017	2018
Minimum percentage of detailed responses to written complaints or requests for information provided within the maximum period of 30 calendar days	95%	99.41%	93.93%	96.59%

TYPE OF SERVICE	ARERA LEVEL - MV	SERVICES PROVIDED ON THE INDICATED TIMETABLE (%)		
		2016	2017	2018
Minimum percentage of detailed responses to written complaints or requests for information provided within the maximum period of 30 calendar days	95%	99.72%	98.93%	99.50%

Figure 98_Commercial quality of electricity: general indicators for the Cremona area [G4 – EU21]

TYPE OF SERVICE	ARERA LEVEL - LV	SERVICES PROVIDED ON THE INDICATED TIMETABLE (%)	
		2017	2018
Minimum percentage of detailed responses to written complaints or requests for information provided within the maximum period of 30 calendar days	95%	100%	100%

TYPE OF SERVICE	ARERA LEVEL - MV	SERVICES PROVIDED ON THE INDICATED TIMETABLE (%)	
		2017	2018
Minimum percentage of detailed responses to written complaints or requests for information provided within the maximum period of 30 calendar days	95%	100%	n.a.

Figure 99_Technical quality of natural gas [G4 – EU21]

	BASE LEVEL	BASE REFERENCE	BASE ACTUAL 2016							
			MILAN	BRESCIA	BERGAMO	VARESE	CREMONA	LODI	PAVIA	
Annual percentage of the high and medium pressure network inspected	30%	90%	73%	100%	100%	65%	-	-	-	
Annual percentage of the low pressure network inspected	20%	70%	62%	63%	100%	77%	-	-	-	
Annual number of leaks located per km of network inspected	0.8	0.1	0.09	0.083	0.005	0.229	-	-	-	
Annual number of leaks located in response to reports from third parties per km of network	0.8	0.1	0.232	0.081	0.031	0.063	-	-	-	
Conventional number of measurements of degree of natural gas odorant per thousand end customers	0.19	0.5	0.94	1.73	4.8	1.39	-	-	-	

Figure 100_Natural gas emergency service [G4 – EU21]

ANNUAL NUMBER OF CALLS TO THE SWITCHBOARD WITH A TIME TO ARRIVAL OF THE TEAM AT DESTINATION <= 60 MIN BASE LEVEL 90% REF. LEVEL 95%	2016	2017	2018
Milan	98.85%	99.00%	98.65%
Brescia	99.72%	99.81%	99.90%
Bergamo	100.00%	100.00%	100.00%
Cremona	-	99.80%	99.60%
Lodi	-	100.00%	100.00%
Pavia	-	100.00%	100.00%

	BASE ACTUAL 2017							BASE ACTUAL 2018					
	MILAN	BRESCIA	BERGAMO	VARESE	CREMONA	LODI	PAVIA	MILAN	BRESCIA	BERGAMO	CREMONA	LODI	PAVIA
	72%	78%	n.a.	85%	100%	100%	100%	75%	100%	100%	100%	100%	100%
	56%	56%	n.a.	97%	100%	100%	100%	65%	70%	100%	100%	100%	100%
	0.13	0.07	n.a.	0.00	0.01	0.02	0.05	0.15	0.08	0.06	0.01	0.01	0.03
	0.20	0.07	0.03	0.08	-	0.01	0.02	0.17	0.05	0.03	0.03	0.01	0.02
	0.63	1.70	4.48	1.39	1.70	1.80	1.10	0.95	1.81	2.23	1.70	1.80	1.10

Figure 101_Natural gas commercial quality: general indicators [G4 – EU21]

SERVICE PROVIDED WITHIN THE TIMEFRAME SPECIFIED (%)	LEVEL ARERA	UNARETI			LD RETI			ASVT		
		2016	2017	2018	2016	2017	2018	2016	2017	2018
Percentage of requests to execute complex work completed within the maximum period of 60 working days	90%	99.70%	98.83%	97.69%	-	100.00%	100.00%	-	n.a.	n.a.
Percentage of detailed responses to written complaints or requests for information provided within the maximum period of 30 working days	95%	99.21%	94.56%	97.37%	-	100.00%	100.00%	-	100.00%	100.00%

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Figure 102_ Natural gas commercial quality: specific indicators: Milan, Brescia, Bergamo and Chieti Area [G4 – EU21]

TYPE OF SERVICE	ARERA LEVELS RES. 574/13	SERVICES PROVIDED ON THE INDICATED TIMETABLE (%)			AVERAGE TIME TO EXECUTE THE SERVICE (DAYS)		
		2016	2017	2018	2016	2017	2018
Estimate time (simple work)	15 working days	96.34%	85.86%	93.96%	9.03	10.58	9.37
Execution time (simple work)	10 working days	92.79%	80.97%	80.41%	7.13	8.5	8.34
Estimating time (complex works)	30 working days	94.24%	96.08%	96.39%	15.09	13.92	14.89
Supply activation time	10 working days	99.93%	99.86%	99.88%	3.72	3.31	3.1
Supply de-activation time	5 working days	99.49%	99.51%	99.58%	3.09	3.05	2.8
Reactivation time following suspension due to non-payment	2 working days	97.59%	97.07%	98.14%	1.24	1.18	1.15
Observance of time bracket for appointments	Two hours	99.79%	99.83%	99.83%	n.a.	n.a.	n.a.
Time to notify results of testing of meter equipment	20 working days	62.86%	96.39%	77.08%	20.11	18.01	15.6

Figure 103_ Natural gas commercial quality: specific indicators for ASVT [G4 – EU21]

TYPE OF SERVICE	ARERA LEVELS RES. 574/13 OF 01/01/2014	SERVICES PROVIDED ON THE INDICATED TIMETABLE (%)		AVERAGE TIME TO EXECUTE THE SERVICE (DAYS)	
		2017	2018	2017	2018
Estimate time (simple work)	15 working days	96.64%	100.00%	4.96	4.45
Execution time (simple work)	10 working days	98.96%	100.00%	1.96	1.04
Estimating time (complex works)	30 working days	100.00%	n.a.	3.00	n.a.
Supply activation time	10 working days	100.00%	99.89%	1.72	1.74
Supply de-activation time	5 working days	100.00%	100.00%	1.70	1.88
Reactivation time following suspension due to non-payment	2 working days	100.00%	100.00%	0.65	0.52
Observance of time bracket for appointments	Two hours	100.00%	99.74%	n.a.	n.a.
Time to notify results of testing of meter equipment	20 working days	100.00%	80.00%	16.20	26.20

Figure 104_ Natural gas commercial quality: specific indicators for LGH [G4 – EU21]

TYPE OF SERVICE	ARERA LEVELS RES. 574/13 OF 01/01/2014	SERVICES PROVIDED ON THE INDICATED TIMETABLE (%)		AVERAGE TIME TO EXECUTE THE SERVICE (DAYS)	
		2017	2018	2017	2018
Estimate time (simple work)	15 working days	100.00%	99.61%	3.95	4.43
Execution time (simple work)	10 working days	99.81%	99.50%	3.16	3.14
Estimating time (complex works)	30 working days	100.00%	100.00%	5.33	6.08
Supply activation time	10 working days	99.58%	99.83%	3.05	3.19
Supply de-activation time	5 working days	96.06%	96.85%	2.65	2.60
Reactivation time following suspension due to non-payment	2 working days	97.33%	98.10%	1.23	1.23
Observance of time bracket for appointments	Two hours	98.89%	99.12%	-	-
Time to notify results of testing of meter equipment	20 working days	67.35%	59.65%	18.31	20.72

Integrated water service

Figure 105_Extension of integrated water service

	2016	2017	2018
Municipalities served by Integrated Water Service	114	129	95
Municipalities served by aqueduct service	108	120	86
Customers served - aqueduct	283,479	308,178	194,362
Inhabitants served - aqueduct	812,654	886,195	614,896
Inhabitants served by sewer systems	563,516	652,956	652,754
Inhabitants served by purification services	549,311	641,194	640,967

Figure 106_Call centerquality [GRI 102-43_44]

	A2A CICLO IDRICO		
	2016	2017	2018
Service accessibility rate (free lines with respect to operator presence time)	100%	100%	100%
Number of calls to the call centre	79,277	118,231	94,205
Average telephone waiting time for calls from end customers (sec)	73	78	72
Percentage of successful calls	87.70%	64.67%	94.06%

Figure 107_Quality of the A2A Ciclo Idrico and ASVT service

Data in days	A2A CICLO IDRICO			ASVT		
	2016	2017	2018	2016	2017	2018
Response time to requests for estimate for connection to the aqueduct	7.37	5.16	10.5	-	2.3	2.73
Response time to requests for estimate for connection to the sewers	4.6	3.21	9.64	-	1.67	0.85

District heating and heat management

Figure 108_Transformations*

	2016	2017	2018
Transformations (no.)	13	40	28
Capacity installed (kW)	16,950	16,918	17,400

* These refer to replacement of methane with methane with a condensing boiler, of methane with district heating, of diesel with methane with a condensing boiler and of diesel with district heating.

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Integrated waste cycle

Figure 109_Population served by the urban hygiene service

	2016	2017	2018
Municipalities served	117	258	215
Population served	2,646	3,549	3,376

Figure 110_Customer Satisfaction of the urban hygiene service carried out by AMSA (average vote)

SERVICE	2017	2018
Urban waste collection	7.8	7.74
Road and pavement cleaning and washing	7.29	7.57
Emptying of large road bins	7.27	7.32
Cleaning of market areas	7.78	7.61
Cleaning of green areas	7.06	7.52
Cleaning and collection during and after events	7.57	7.61
Cumbersome waste collection	8.3	7.88
Clarity and completeness of the communication on separate collection	7.86	7.61
Toll Free Number	7.59	7.9
Amsa counter	7.33	7.63
Website	7.57	7.68
App Puliamo	-	8
Recycling	8.2	7.78
Snow service	-	7.56

Figure 111_Customer Satisfaction of the urban hygiene service carried out by Aprica (average vote)

SERVICE	2016*	2018
Overall satisfaction with the service	7.77	7.84
Urban waste collection	8.28	8.29
Home collection of cumbersome waste	8.83	8.7
Vegetable oil collection	-	8.61
Ecological platform	8.55	8.67
Road and pavement cleaning	7.12	7.44
Road bins	7.55	7.62
Toll Free Number	8.06	8.55
Website	7.66	8.03
Counter	8.28	8.79

* The survey is carried out every two years.

Figure 112_Services in exchange for payment (waste disposal and other services specifically for private customers)

CUSTOMERS SERVED	2016	2017	2018
Amsa	9,206	9,091	9,899
Aprica	1,357	1,397	1,375
La.Bi.Co. Due	-	259	260
LGH Group	n.a.	n.a.	744

Figure 113_Waste disposal service

	2016	2017	2018
Municipalities served	962	988	992
Companies served	1,860	3,160	3,150

Figure 114_Call centre services

	AMSA			APRICA		
	2016	2017	2018	2016	2017	2018
Number of calls to the call centre	321,778	376,027	419,383	45,901	80,962	57,618
Accessibility of lines and services (time when line is free vs operator presence time)	100%	100%	100%	100%	100%	100%
Average waiting time on the telephone (seconds)	70	76	47	60	52	45
Percentage of successful calls	94%	94%	97%	82%	72%	93%

Conciliation management

Figure 115_ADR A2A-Consumer associations conciliation procedures

ISSUES OF DISPUTES RECEIVED	GAS	%	ELECTRICITY	%	DUAL FUEL	%	TOTAL REQUESTS	%	WATER	%
Invoicing	5	31%	8	31%	-	-	13	30%	-	-
Size	9	56%	16	62%	-	-	25	58%	-	-
Contracts	-	-	1	4%	-	-	1	2%	-	-
Market	-	-	1	4%	1	100%	2	5%	-	-
Connections, works and technical quality	1	6%	-	-	-	-	1	2%	1	100%
Other (not included in protocol)	1	6%	-	-	-	-	1	2%	-	-
Overall total	16	37%	26	60%	1	2%	43	100%	1	100%

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Relations with suppliers

Figure 116_Number and value of orders by supply type [GRI 204-1]

TYPE	2016		2017		2018	
	NO. ORDERS	AMOUNT (€)	NO. ORDERS	AMOUNT (€)	NO. ORDERS	AMOUNT (€)
Supplies	2,649	220,281,621	7,158	304,069,078	7,058	350,425,198
Works	1,842	340,739,182	2,723	324,169,902	2,233	489,485,553
Services	2,088	273,847,724	7,127	250,124,004	7,062	484,878,866
A2A Group orders	6,579	834,868,527	17,008	878,362,983	16,353	1,324,789,616
LGH orders	-	-	4,541	124,628,004	3,767	150,408,338
Total	6,579	834,868,527	21,549	1,002,990,987	20,120	1,475,197,954

Figure 117_Fuel suppliers

2018	COAL	HEAVY FUEL OIL	DIESEL	NATURAL GAS	TOTAL
Value of orders issued towards European suppliers (total only) - millions of euro	88.9	92.1	2.4	1,499.0	1,682.4

Figure 118_Geographic breakdown of orders [GRI 204-1]

% ORDERED	2016	2017	2018
Lombardy	57.1%	64.0%	62.7%
Other regions of Italy	39.6%	31.2%	28.9%
EU	3.2%	4.5%	7.5%
Non EU	0.1%	0.3%	0.9%

Figure 119_Suppliers with at least one A2A Group certification

	2016	2017	2018
Total suppliers with at least one certification	2,843	2,215	2,306
<i>of which activated with order</i>	-	-	1,144

Figure 120_Value of orders issued by the A2A Group to suppliers in possession of at least one certification

	2016	2017	2018
%	77%	80%	82%

Figure 121_Validated suppliers, by type

A2A GROUP QUALIFIED SUPPLIERS	2016	2017	2018
Large business (more than 250 employees)	307	276	317
Medium business (50-250 employees)	804	687	729
Small business (10-50 employees)	1,745	1,459	1,641
Micro business (1-10 employees)	1,854	1,456	1,523
n.a.	198	567	362
Total	4,908	4,445	4,572

Dispute management

EMPLOYEES

A total of 54 labour disputes were pending or concluded in 2018 involving employees of A2A Group companies (excluding AMSA and including the LGH group), of which 4 concerned the assessment of the illegitimacy of dismissals for just cause or dismissal for justified subjective reason and 3 concerned the assessment of the illegitimacy of dismissals for justified objective reason and 1 concerned the assessment of the illegitimacy of dismissals for exceeding the period of conduct. In addition, 14 plaintiffs applied for a finding that the sale of the business unit was unlawful, with the result that it was reinstated in the transferor company, and 5 applicants applied for a finding that they were entitled to a higher level of classification and order to pay the relevant differences in remuneration. Then there were 3 plaintiffs seeking compensation for the damage caused by the demotion of which 2 also requested a finding that the measure of secondment ordered against them was unlawful. In addition, in 2018, five cases were pending concerning the determination of the entitlement to compensation for damages arising from occupational illness or accident. The remaining cases concerned various requests, such as appeals against disciplinary measures and requests for payment of salary differences other than requests for a higher level of classification.

With regard to AMSA, there were a total of 132 labour disputes in progress or concluded in 2018, of which 8 concerned the assessment of the illegitimacy of dismissals for just cause or justified subjective reason, 2 concerned the assessment of the illegitimacy of dismissals for justified objective reason and 3 concerned the assessment of the illegitimacy of dismissals for exceeding the period of conduct.

In addition, 8 plaintiffs challenged the fixed-term contracts, 23 requested a determination of the right to recognition of the higher classification and an order for payment of the relevant salary differences, 69 a determination of fictitious interposition of labour and determination of the right to the establishment of an employment relationship and 7 a determination of the unlawfulness of the transfer of a business unit. The remaining cases concerned various requests, such as requests for payment of salary differences other than requests for a higher level of classification.

SUPPLIERS

There were 29 labour disputes in progress or concluded in 2018 initiated by workers of contracting firms that worked on contracts awarded by A2A Group companies (excluding AMSA and including the LGH Group). There have been 5 proceedings for compensation for damages resulting from accidents or occupational illnesses allegedly contracted within the framework of the contract and 1 proceeding for an order for the company to pay compensation arising from the agency relationship and to ascertain the right to compensation for damages from pre-contractual liability. Moreover, 2 plaintiffs claimed the ascertainment of the right to the establishment of a subordinate contract of employment with the client company and 14 plaintiffs summonsed the contractor, their employer, to court as well as the A2A Group company as client, so as to obtain, by virtue of the joint liability pursuant to Art. 29 of Italian Legislative Decree 276/2003 and Art. 1676 of the Italian Civil Code, their sentencing to pay the salary differences claimed or remaining salaries. Finally, seven of the claimants sought a judgement ordering the contractors and principal, jointly and severally, to compensate them for damages deriving from failure to grant them employment at the enterprise that they alleged intermediated in the cleaning contract ordered by the A2A Group company.

As far as AMSA is concerned, in 2018 a judgement was defined in which 1 worker applied for the conviction of the contractor (the employer) and of AMSA - jointly liable pursuant to Art. 29 of Legislative Decree 276/2003 and Art. 1676 of the Italian Civil Code in its capacity as client - to the payment of the salary differences claimed by the same.

CUSTOMERS [GRI 206-1]

2018 ended with 22 open legal proceedings relating to billing disputes, due to the application of excise duties on gas supplies, incorrect detection of consumption due to malfunctioning of the meters, incorrect configuration of the available power of the electricity supply, incorrect termination of supply and, more generally, the failure and/or incorrect detection of electricity and/or gas consumption. There was also 1 ongoing case involving damages claimed due to delays in the activation of supply.

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In addition, in 2016, A2A Reti Elettriche was charged by the Milan Chamber of Commerce Metric Office with alleged administrative violations concerning 63 electric meters, establishing an administrative sanction of 500 euro per meter. A fine was also ordered against A2A Energia as the "intermediary" in the supply arrangement through the distributor's meters for 47 of these meters. All of the notices of violations and related penalties have been appealed by the two companies. As regards the sanctions charged by the Metrics Office of Milan Chamber of Commerce and as challenged, in 2017, the competent authority had not yet ruled.

Lastly, in 2018, a dispute continued brought by a customer of AMSA, A2A Ambiente and Aprica, who is claiming termination of contract due to it having become excessively expensive; moreover, A2A Ciclo Idrico has been notified of a petition brought pursuant to Art. 702 bis of the Italian Code of Criminal Procedure by a credit institute, which has brought a suit opposing the transfer of credit, which has subsequently been joined by a parallel request for payment (for invoices issued in respect of works partially carried out) by the receiver of the contractor (which has, in the meantime, been declared bankrupt).

COMMUNITY [G4 - EU25]

At the end of 2018, 75 cases of claims by citizens, mostly small amounts, for financial or property damage and 35 cases of physical damage related to personal injury were pending; of these, one relates to a fatal road accident involving a Group company (an operating vehicle for cleaning a cycle path) and one relates to a fall due to an uneven road surface due to work in progress on the electricity distribution network, but the company contracted to excavate and repair the road surface was held liable.

Finally, 3 cases of alleged infringements of property rights and 2 cases of alleged damage to neighbouring crops from previous years are pending.

Non-compliance with environmental regulations [GRI 307-1]

At December 31, 2018, there were 14 ongoing or concluded environmental proceedings, of which 4 closed proceedings, 1 new proceeding and 9 already ongoing proceedings, concerning challenges in various capacities of integrated environmental permits (A.I.A.) issued to Group companies, various alleged irregularities in waste management and other alleged violations of other laws or regulations. In addition, in 2018, 2 Linea Green S.p.A. employees were notified of their identification reports for the alleged violation of environmental regulations in relation to the Isola plant at the intake on the Val delle Valli stream in the Mantelera locality in the Municipality of Bienno (BS). With regard to pre-existing disputes, the following are the 4 proceedings closed in 2018:

- the GIP (Preliminary Investigations Judge) of Pavia has declared closed, due to the extinction of the crime, the procedure in progress for alleged violations of A.I.A. regulations;
- the GIP of Pavia decided not to proceed and revoked the decree of condemnation for alleged violations of A.I.A. prescriptions;
- the Milan Public Prosecutor's Office has ordered the definitive closure of certain criminal investigations against former AMSA executives;
- the Ivrea Public Prosecutor's Office has asked for a case to be dismissed for harmful emissions and the GIP has definitively dismissed it.

In addition, by opposing the criminal decree of conviction for violations of A.I.A. regulations, the GIP accepted the request for oblation that was paid. The sentence of extinction of the crime is awaited.

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Group Profile

The Acsm Agam Group includes 11 companies and is divided into 4 Business Units (BUs):

- **Networks BU** includes the companies that deal with:
 - water service and gas distribution for the provinces of Monza, Como and Varese;
 - only gas distribution in the provinces of Lecco and in Veneto;
 - gas and electricity distribution in the province of Sondrio.
- **Environment BU** deals with waste collection activities (in the province of Varese and Como) and waste-to-energy (Como);
- **Sales BU** to which the Group companies operating in the sale of natural gas and electricity refer;
- **Energy and Smart Technologies BU** oversees the activities of energy efficiency, electricity generation, heat management, new innovative and smart city services, public lighting and district heating.

AEVV Farmacie s.r.l., which operates three pharmacies in the city of Sondrio, should also be added to these BUs.

Governance

The Company is listed on the Italian stock exchange in Milan and has adopted, since 2016, the Corporate Governance Code promoted by Borsa Italiana. The company's Corporate Governance structure is based on the traditional organizational model. Currently, all Group companies adopt their own Organization, Management and Control Models in accordance with Italian Legislative Decree No. 231/01 (MOG), covering 100% of the Group's employees (at December 31, 2018 only the subsidiary Serenissima did not have a 231 Model, which however approved one of its own on February 26, 2019).

In addition to the control instruments provided for in the Legislative Decree, 231/01, the Company has adopted a Code of Ethics, which also contains the main elements of its human rights policy: in 2018, there were no episodes of violation of the Code.

The Group companies are monitored with regards to risks connected with corruption. In accordance with the provisions of the Company's Code of Ethics, the Group does not allow active or passive corruption or collusion of any nature or form. In 2018, there were no cases of corruption and no cases of corruption are pending.

Finally, the company policy does not provide for the payment of contributions of any kind to parties or politicians.

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Economic value generated and distributed

Figure 122_Statement for distributing the gross global added value - millions of euro

(millions of euro)	2018
Remuneration of personnel	36.41
Wages and salaries	34.35
Employees' leaving entitlement (TFR)	1.72
Other costs	0.34
Remuneration of risk capital	6.2
Profits distributed	5.16
Net Income attributable to minority Interests	1.06
Remuneration of debt capital	0.92
Transfers to the government	6.96
Direct taxes for the Treasury	6.6
Other taxes and duties for the Treasury	0.32
Social security charges	0.04
Transfers to the local community	2.65
Direct taxes for local authorities	1.55
Local taxes and duties	0.52
Sponsorships, contributions to foundations, aid, donations, charities	0.58
Remuneration of the company	296.9
Reserves	269.81
Amortization, depreciation	27.09
Gross global value added	350.06

Figure 123_Investments in Group infrastructure

	2018
millions of euro	31.7

Efficient infrastructure management

Figure 124_Installed capacity

	2018
Electric (MW _e)	45
Thermal (MW _t)	245

Figure 125_Energy produced

	2018
Electricity (GWh _e)	149
Thermal energy (GWh _t)	301

Figure 126_Gas and electricity distribution

GAS	2018
Distributed natural gas (Mm ³)	621
Gas network extension (km)	3,247
ELECTRICITY	2018
Electricity distributed (GWh)	161
Electricity losses in the grid (GWh)	4
Extension of the electricity distribution service (km)	556
<i>of which underground cable (km)</i>	427

Figure 127_Thermal energy released to the network

	2018
GWh	191

Figure 128_Water service

	2018
Wells (no.)	96
Sources (no.)	168
Drinking water conversion plants (no.)	18
Total network length (km)	1,659
Water delivered to the user and accounted for (Mm ³)	27.8
Water withdrawn (Mm ³)	43
Network losses and water not booked (Mm ³)	15

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Figure 129_Municipal waste collected and separate collection

	2018	
	QUANTITY COLLECTED (t)	INDEX %
Varese	40,207	68.5%
Province of Varese	31,265	81.3%
Province of Como	4,568	74.5%
Total	76,040	74.1%

Figure 130_Urban waste collected by destination - tonnes

	2018	% OF TOTAL
Disposal (landfill or other type D destination)	2,791	4%
Waste-to-energy plant	14,378	19%
Recovery	58,871	77%
Total	76,040	100%

Environmental responsibility

Figure 131_Resources used

RESOURCES USED	2018
Fuel (TJ)	1,985
Automotive fuels (TJ)	36
Electricity (GWh)	46
Water resource consumed (thousands m³)	368
Aqueduct	356
Well	12
Chemical products and materials used (t)	6,269

Figure 132_Greenhouse gases emissions¹ – tonnes of CO_{2eq}

	2018
Direct emissions (Scope 1)	144,359
Indirect emissions (Scope 2 - location based)	14,632

Figure 133_Emissions of pollutants

	2018
Nitrogen oxides (NO _x) (t)	82
Sulphur oxides (SO _x) (t)	0.6
Powders (t)	0.1
CO (t)	22
Fluorinated gases (kg)	13

1. Source of emission coefficients for natural gas/methane, diesel and oil, petrol and waste: Ministry of the Environment and Protection of Land and Sea, National Standard Parameter Table, 2018.

Figure 134_Industrial waste water

		2018
Volumes (thousands m³)	Discharged into sewers	165
	Discharged into surface water	15
	Water extracted for hydroelectric generation	93

Figure 135_Special waste produced

		2018
Special non-hazardous waste (t)		17,475
Special hazardous waste (t)		2,233
Total (t)		19,708
Sent for recovery (% of total)		93%

Responsible management of people

Figure 136_Personnel by gender and type of contract

	2018		
	MEN	WOMEN	TOTAL
Workers	641	224	865
Permanent contract	627	219	846
Temporary Contract	14	5	19
Workers with non-standard contracts (temporary/interns/collaborators)	39	19	58
Total	680	243	923
of which with part-time contract	6	45	51

Figure 137_Number of hires, outgoing and turnover rate

		2018
Hires		36
Outgoing		33
Turnover rate		4%

Figure 138_Workers represented in formal health and safety committees

		2018
Percentage of the total		100%

Stakeholder engagement and materiality analysis

Financial capital

Manufacturing capital

Natural capital

Human capital

Relational capital

The Acsm Agam Group

Figure 139_Number of accidents and days lost by gender - (number)

	2018		
	MEN	WOMEN	TOTAL
Accidents at work	25	1	26
Days lost due to accidents at work	1,041	52	1,093
Commuting accidents	2	2	4
Days lost due to commuting accidents	18	17	35

Figure 140_Personnel by qualification, gender and age bracket

	2018				
	MANAGERS	SUPERVISORS	WHITE-COLLAR WORKERS	BLUE-COLLAR WORKERS	TOTAL
Men	20	36	218	366	641
Women	2	14	208	1	224
Total	22	50	426	367	865
<30	-	1	35	23	59
30-50 years	7	27	252	168	454
>50	15	22	139	176	352
Total	22	50	426	367	865

Figure 141_Personnel covered by collective bargaining agreements

	2018
Percentage of the total	100%

With regard to employee training on human rights, the Code of Ethics and Model 231, in 2017, 580 hours of training sessions were provided with approximately 250 participants for a total of approximately 250 trained employees of the Group (approximately 60% of the company population).

In 2018, a training programme called "In.Te.Gr.A." was also launched, which will start in 2019, in order to guide the change and facilitate the progress of the individual projects that make it up:

- *INtegration*, with the aim of coordinating the Group's integration projects;
- *Territory*, with the aim of enhancing the best practices and ideas of employees;
- *Efficiency*, with the aim of simplifying and streamlining the processes of the organization, increasing their effectiveness and efficiency, also through a lean approach;
- *GRowth*, with the aim of creating a common corporate culture based on shared values and an evolved management model by developing people's transversal skills;
- *Agile*, with the objective of digitization and automation of activities, supporting the transformation of the business with integrated and intelligent systems.

Within the Acsm Agam Group, the well-being of workers is considered a key element for the achievement of company objectives and for this reason, many projects have been implemented, such as: the implementation of flexible working hours, smartworking, the addition of bonus hours for parent employees to accompany the integration of children at the beginning of the school year.

Relations with customers

Figure 142_Gas distribution: connected customers and municipalities served

	2018
Customers connected	314,066
Municipalities served	88

Figure 143_Electricity distribution: connected customers and municipalities served

	2018
Customers connected	25,757
Municipalities served	4

Figure 144_Urban hygiene: number of customers and municipalities served

	2018
Population served	154,858
Municipalities served	19

Figure 145_Water service: number of customers and municipalities served

	2018
Municipalities served by aqueduct service	37
Customers served aqueduct	83,178
Inhabitants served aqueduct	312,958

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Figure 146_Extension of the district heating service

	2018
Users (no.)	623

Figure 147_Gas supply contracts by type of market

	2018
Protected market	165,175
Free market	101,094
Total	266,269

Figure 148_Electricity supply contracts by type of market

	2018
Protected market	18,196
Free market	42,791
Total	60,987

Supply Chain

The Group adopts a register of suppliers (divided into product categories) whose qualification criteria do not constitute barriers to entry. Each selection procedure must be carried out in accordance with the widest possible conditions of competition. There are no evaluations of suppliers, who intend to qualify, on environmental or social issues. Almost all orders are from Italian suppliers, of which about 77% are based in Lombardy. In addition, 1,032 suppliers were activated with at least one order as at December 31, 2018, all in the Group's register of suppliers.

Figure 149_Number and value of orders by supply type

ORDERS	2018	
	NO. ORDERS	AMOUNT (€)
Supplies	863	19,258,619
Works	164	17,553,382
Services	1,078	23,930,446
Sponsorships	96	270,049
Other	12	272,923
TOTAL	2,213	61,285,419

Disputes

With regard to any cases of non-compliance with environmental laws and regulations, the inspection of the subsidiary Varese Risorse S.p.A., which began in 2016, concluded with the recording of a failure by the company, in accordance with AIA requirements, to comply with an acoustic campaign within the set time limits, punishable by a fine of between 5,000 and 15,000 euro.

With regard to the labour disputes in progress or concluded in 2018 by employees of the companies of the Acsm Agam Group (understood as a group resulting from the effectiveness of the merger known as MNL), there were a total of 14, relating to: appeals against dismissals for just cause, requests for recognition of the right to recognition of the performance bonus accrued before termination and claims for differences in remuneration other than higher classification.

With regard to disputes regarding suppliers, in 2018, Enerxenia received notification of a writ of summons from a company with which it had a contractual agency relationship, for a failure to pay commissions for a total amount of about 20,000.00 euro.

With reference to the community, in 2018, Acsm Agam received notification of a lawsuit for damages, quantified in approximately 9,000.00 euro.

No disputes have arisen with Group customers (with the exception of those relating to debt collection in which the company is a plaintiff), either for non-compliance linked to impacts on consumer health and safety or for supply services and related marketing activities.

There are no legal actions for recourse due to sanctions by the AGCM for causes related to anti-competitive conduct or unfair market practices.
With respect to the management of privacy, in 2018, the Group did not record evidence of theft of information on customer data, or complaints from private individuals or institutions regarding possible violations.

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