

# 2019 FINANCIAL REPORT

REPORT ON OPERATIONS

VOLUME 1

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## 2019 FINANCIAL REPORT

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This document has been translated into English for the convenience of readers outside Italy. The original Italian document should be considered the authoritative version.

## GROUP PROFILE

We are Europe's oldest energy company, active in the generation and sale of electricity, as well as the supply, distribution and sale of gas.

Our power generation capacity is based on increasingly more sustainable, flexible and efficient thermoelectric, hydroelectric, wind and solar plants. We have set ourselves the target of generating 40% of our productive mix from renewable sources by 2030, and we are working on the construction of latest-generation combined cycles able to complement renewable production.

We are committed to the diversification of sources and of gas procurement routes for the safety and competitiveness of the national system, as well as supporting the energy transition. We are building new infrastructures for importing gas and constructing a coastal depot and a LNG vessel geared towards creating the first liquefied natural gas integrated logistics chain in Italy for the decarbonisation of heavy road and maritime transport. We also manage gas storage and distribution activities.

We sell electricity and natural gas on the end market and offer value-added services aimed at savings and respect for the environment for Italian households and businesses.

We offer innovative, tailor-made solutions to the Public Administration, large industries and small and medium enterprises, for the efficient use of energy resources, and we are active in the environmental services sector.

# A Letter to Shareholders

Dear Shareholders,

in 2019, Edison took decisive steps to strengthen its profile as a responsible energy operator in support of the energy transition, placing at the centre of its development a significant commitment in the generation from renewable sources, the responsible use of natural gas and the renewed boost to energy efficiency activities.

The redefinition of the strategic direction in a sustainability perspective led to the decision to exit E&P activities, announced in July, a sector that is also characterised by a significant capital intensity and higher risk. The closing of the sale is expected in 2020 and will generate additional resources to support the development of the future industrial strategy.

As mentioned above, Edison intends to assume a leadership role in the energy transition and wants to be closer to the local communities and its customers. With the acquisition of EDF EN Italia, with its 300 MW of wind and photovoltaic facilities, and EDF EN Services Italia, Edison has become the second largest national operator in wind power generation, laying the foundations for future development in photovoltaic generation as well, and has created the conditions for synergies in the maintenance of renewable energy plants. In addition, during the year, the commissioning of the 8 E2i wind farms, whose production capacity had been obtained as part of the competitive auction at the end of 2016, was completed. Edison wants to be a utility company that proactively moves towards a model of sustainable, low-carbon and safe electric power generation. By leveraging the wealth of experience gained in the gas-fired generation sector, the company has reconfirmed its leadership by announcing the investment of about 700 million euros over the next three years for the construction of two latest-generation combined cycle power plants, with high efficiency and low environmental impact, in Marghera Levante and Presenzano, built with Italian technology. As part of hydroelectric generation, the Palestro mini-hydro power plant went into production and three new small-scale hydroelectric plants were acquired in Valle d'Aosta.

In the energy and environmental services area, Edison has developed a more comprehensive and diversified offer to grow in the end market, particularly in the industrial, tertiary and public administration segments, where, also through the most recent corporate acquisitions, it was awarded significant tenders for the energy efficiency of hospitals, especially in northern and central Italy.

Edison's proximity to the end market is a distinctive factor both in the area of energy and environmental services and in power sales, natural gas and value-added services to its customers. Edison closed 2019 with the opening of more than 360 stores, thanks in part to partnerships with installers and telephone centres, and increased volumes of electric power and natural gas sold in the B2B segment. The integration of Edison Energie (formerly Gas Natural Vendita Italia) was completed, with the merger of Edison Energie into Edison Energia. The acquisition of 100% of Assistenza Casa, previously 51% owned, will make it possible to more effectively develop a diversified offer - which includes home insurance, electric mobility services and small-scale photovoltaics - aimed at encouraging savings and respect for the environment.

In line with the European objectives for the reduction of polluting emissions, the construction of the Ravenna coastal depot and a small LNG carrier dedicated to Small Scale LNG activities started in the past year. This is the first step in the creation of the integrated logistics chain of small-scale liquefied natural gas that Edison is developing for the benefit of the decarbonisation of the transport sector. This supply chain will enable heavy road and maritime transport to be fuelled with reduced environmental impact fuel, drastically cutting NO<sub>x</sub>, SO<sub>x</sub> and CO<sub>2</sub> emissions. Also in this area, LNG sales activities have started, which will be integrated as soon as possible with bio-LNG and biomethane. The Company also confirmed the objective of increasing the flexibility of its gas supply portfolio with the renewal of the gas import contract with Algeria for 1 billion cubic meters until 2027, the extension to 2020 of the Russian gas import contract for an additional 1 billion cubic meters and the implementation of several initiatives to ensure the future availability and diversification of gas sources in Italy. Also in the midstream gas sector, the construction of the Greece-Bulgaria interconnector has begun. This is an important infrastructure built in partnership with the gas operators of the two countries and considered as a Project of Common Interest by the European Union.

On the international front the ownership structure of the production and sales activities in Greece has been simplified and consolidated in order to seize the opportunities for future growth deriving from the progressive liberalisation of the energy sector in the country.

In addition, Officine Edison was inaugurated in 2019 on the Bovisa campus of Milan's Polytechnic, a new energy innovation hub with the Polihub university incubator, continuing a similar project launched with Turin's Polytechnic in 2018. Also in the area of innovation, the process of digital transformation has continued to improve business efficiency and agility and enable new businesses.

The positioning as a leader in the energy transition and as a responsible operator was achieved in 2019 with an important step: the integration of ESG (Environmental, Social, Governance) risks into the business risk model and the approval by the Board of Directors of 10 quantitative targets related to the Sustainability Policy and concerning corporate responsibility, innovation, environmental protection, the fight against climate change, the enhancement of people and skills, the quality of services and relations with customers and other stakeholders. In the context of social responsibility, in particular, we have chosen to share our skills in the energy sector with local communities, developing innovative educational projects that enhance the territory. These include "Esperienze di Energia 4.0", based on digital technologies at the service of sustainability and Accademia del Sole e del Vento, aimed at providing professional education to young people in Southern Italy.

Last but not least, in order to ensure the adequacy of the electricity system, also in light of the closure of the coal-fired plants as indicated in the National Energy and Climate Plan, at the end of the year Terna launched the first two auctions for the capacity market, with delivery in 2022 and 2023. Edison participated with positive results, thanks in part to the projects for two new combined-cycle power plants.

Against a backdrop of stable demand for electric power, slightly higher demand for natural gas (+2.2%) and lower prices, except for rising CO<sub>2</sub> emissions prices, Edison's natural gas operations and electric power operations performed well, exceeding expectations, generating positive economic and financial results. The net profit from continuing operations, i.e., the gas operations and the electric power operations on which Edison is focused, grew moderately compared with 2018. The income statement, however, closed with a loss due to the write-down recorded on the E&P assets being sold. Edison's financial structure remains solid, even after the acquisition of EDF EN Italia and the adoption of IFRS 16, thanks to a strong cash flow generation in almost all business segments.

Ratings were confirmed, and Moody's improved the outlook from stable to positive thanks to Edison's solid financial structure and the strategic repositioning.

Furthermore, once the sale of the E&P activities, characterized by a peculiar capital use and risk profile compared to those of Edison's remaining core activities, has been completed, the Board of Directors will evaluate any proposals to reduce the share capital.

From the point of view of social performance, the accident frequency index remained stable below 2, at 1.8 at the end of the year, including recently acquired energy efficiency companies and contractors, which are characterised by a higher use of labour and higher frequency indexes. The company climate survey for 2019 also confirmed positive results with the increasing involvement of people, as well as the sharing and joint engagement towards the company's objectives.

In conclusion, as an "Edison manager," who developed his professionalism in this company and is now its Chief Executive Officer, I am proud to take the lead in a process of transformation and development to establish Edison as a leading player in the country's energy transition, recognisable by our stakeholders and close to our territories and customers. All the projects and initiatives I have described above, together with the energy of our women and men, will allow the company to re-establish, in the medium-term, greatly improved operating margins, characterised by greater predictability and less risk.

**Nicola Monti**  
Chief Executive Officer

# Operational presence

- Edison locations and offices

Officine Edison

Operating sites for environmental services

Managed production sites (Fenice and Edison Energy Solutions)

Thermoelectric power plants

Hydroelectric power plants

Wind farms (through E2i)

Photovoltaic plants
- Gas storage centers

LNG storage under construction

Authorized LNG storage

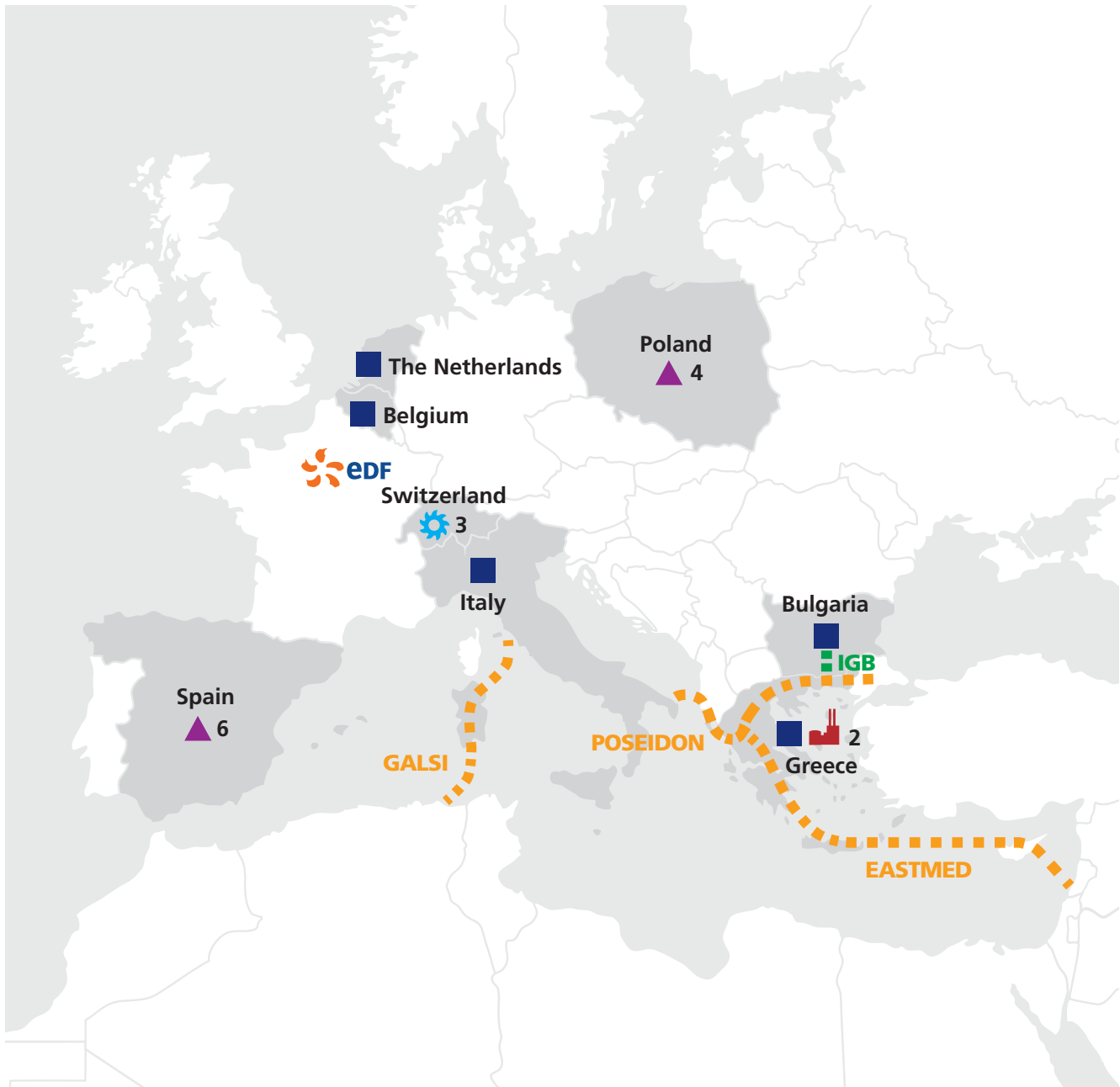
Merchant line

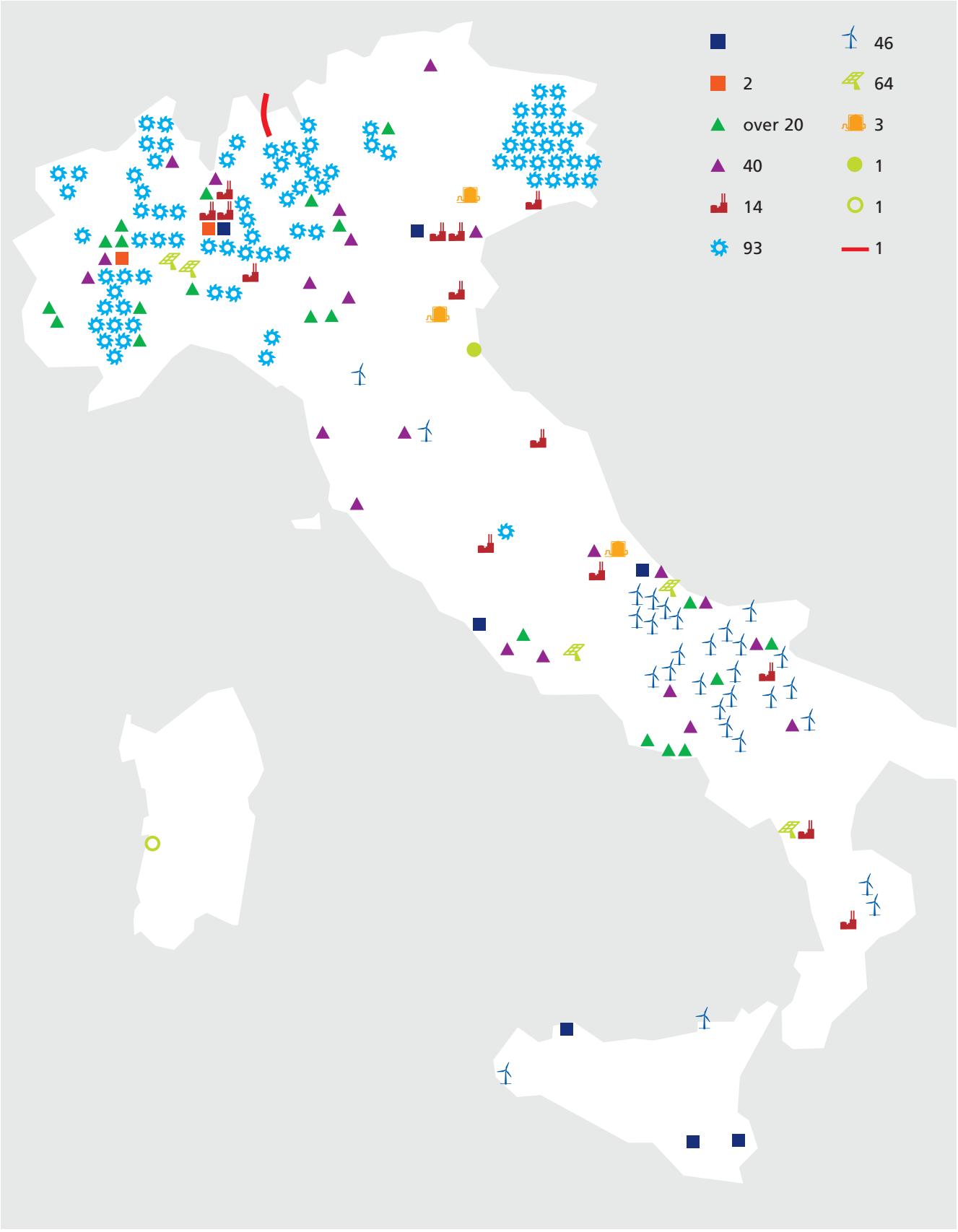
Gas pipeline under construction

Gas pipelines under development

30,000 mc - 1 under construction

174,000 mc - 1 under construction





# Value chain

## ACTIVITY

### Upstream

### Midstream

## ELECTRIC POWER



### Power assets & Engineering

Management and development of generating electric facilities in Italy and abroad

**6.5 GW\***

Net installed capacity in Italy

**1 HV**

merchant power line (150 MW)

**20.6 TWh\***

net production

93 hydroelectric power plants (of which 55 mini hydro)  
14 thermoelectric power plants  
46 wind farms  
64 photovoltaic systems

**4** gas pipeline projects

**12.4 bn m<sup>3</sup>/y\***  
(of which 6.4 bn from terminal)

## HYDROCARBONS

Development of gas transmission infrastructures abroad



Gas supply contracts (\*Annual Contracted Quantities)



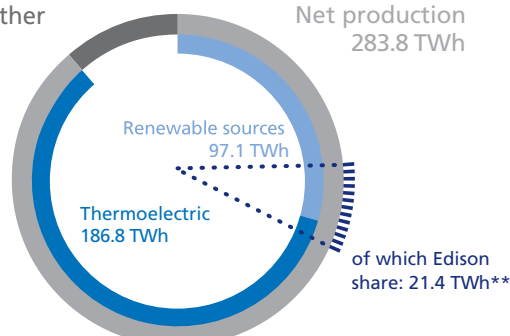
## ITALIAN MARKET

### Electric power

**2019** - Total gross Italian demand 319.6 TWh

Import and other  
35.8 TWh

Net production  
283.8 TWh



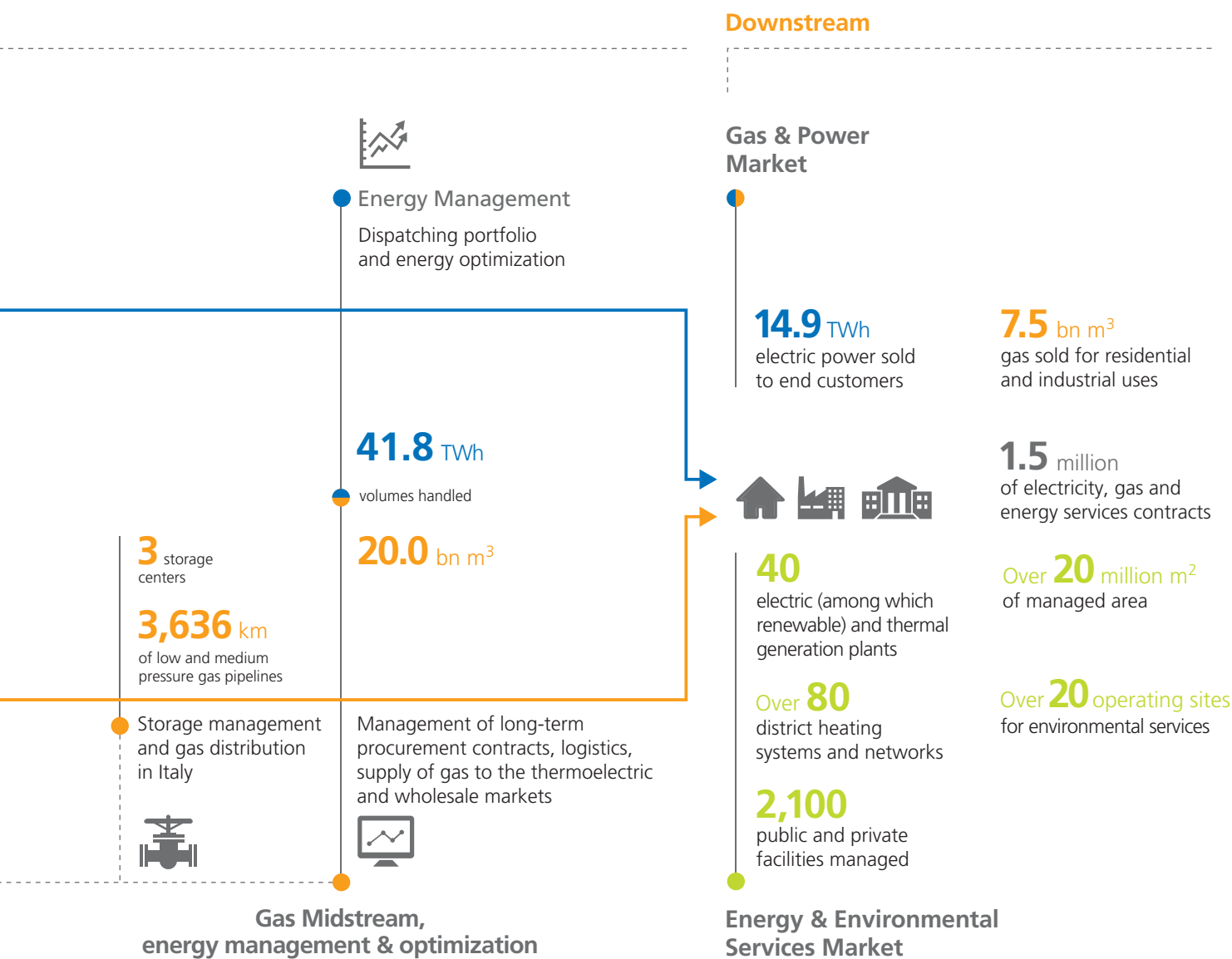
**8%**

Edison's share of total Italian production

\* Figures in line with the consolidation criterion.

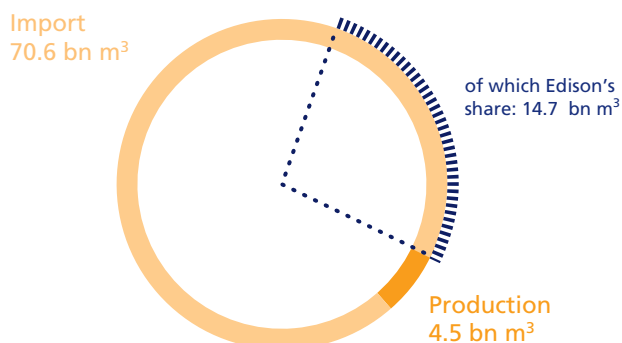
\*\* Including the production of electricity of the Energy & Environmental Services.





## Gas

**2019** - Total Italian demand 73.7 bn m<sup>3</sup>\*



\* Includes injections to/with drawals from storage.

**21%**

**Edison's share of total Italian imports**

## HIGHLIGHTS OF THE GROUP

In order to help the reader obtain a better understanding of the Group's operating and financial performance, the tables below contain "alternative performance indicators". The methods used to compute these indicators, consistent with the guidelines of the European Securities and Markets Authority (ESMA), are described in the footnotes to the tables.

<b>Income Statement Data (*)</b> (in millions of euros)	<b>Chapter (**)</b>	<b>2019 Full year</b>	<b>2018 Full year</b>	<b>% change</b>
Sales revenues	2	8.168	8.728	(6.4)%
EBITDA	2	587	426	37.8%
as a % of sales revenues		7.2%	4.9%	-
EBIT		176	126	39.7%
as a % of sales revenues		2.2%	1.4%	-
Profit (Loss) from continuing operations		98	93	5.4%
Profit (Loss) from discontinued operations	2; 9	(562)	(26)	n.m.
Group interest in Profit (Loss)		(479)	54	n.m.
<b>Financial data</b> (in millions of euros)	<b>Chapter (**)</b>	<b>12.31.2019</b>	<b>12.31.2018</b>	<b>% change</b>
Net invested capital (A + B) <sup>(1)</sup>		6,029	6,557	(8.1)%
Net financial debt (A) <sup>(1)(2)</sup>	6	516	416	24.0%
Shareholders' equity total (B) <sup>(1)</sup>	6	5,513	6,141	(10.2)%
Shareholders' equity attributable to Parent	6	5,327	5,886	(9.5)%
Company shareholders' <sup>(1)</sup>				
<b>Rating</b>		<b>12.31.2019</b>	<b>12.31.2018</b>	
Standard & Poor's				
-Medium/Long-term rating		BBB-	BBB-	
-Medium/Long-term outlook		Stable	Stable	
-Short-term rating		A-3	A-3	
Moody's				
-Rating		Baa3	Baa3	
-Medium/Long-term outlook		Positive	Stable	
<b>Key Indicators</b>		<b>12.31.2019</b>	<b>12.31.2018</b>	<b>% change</b>
Debt / Equity (A/B)		0.09	0.07	-
Gearing (A/A+B)		8.6%	6.3%	-
Number of employees <sup>(1)(3)</sup>		5,631	5,372	4.8%

The new accounting standard IFRS 16 "Leases" has been applied from January 1, 2019 prospectively without restatement of comparative data.

(1) End-of-period data. The changes in these values were calculated as at December 31, 2018.

(2) On January 1, 2019 the first application of IFRS 16 determined an increase on debts of 165 million euros. For further information refer to paragraph 1.1 newly applied standards of the Consolidated Financial Statements.

(3) Companies consolidated line by line. It includes employees of the Exploration & Production business, discontinued operations, amounted to 949

(\*) The figures for 2018 have been restated pursuant to IFRS 5 standard.

(\*\*) See the Notes to the Consolidated Financial Statements.

<b>Operating data</b>	<b>2019 Full Year</b>	<b>2018 Full Year</b>	<b>% change</b>
Net production of electric power (Twh)	20.6	18.8	9.7%
Sales of electric power to end users (TWh)	14.9	13.7	8.7%
Gas imports (Bn m <sup>3</sup> )	14.7	14.6	0.4%
Total net gas sales in Italy (Bn m <sup>3</sup> )	20.0	20.7	(3.5)%
Locations served power and gas (in thousands)	1,516	1,592	(4.8)%

## INFORMATION ABOUT THE EDISON SHARES

<b>Shares as at December 31, 2019</b>		
	<b>number</b>	<b>price</b>
<b>Common shares</b>	5,267,224,718	(*)
<b>Savings shares</b>	109,775,953	1.0339

### Shareholders with significant holdings as at December 31, 2019

	<b>% of voting rights</b>	<b>% interest held</b>
<b>Transalpina di Energia Spa <sup>(1)</sup></b>	99.477%	97.446%

(\*) Delisted as of September 10, 2012.

(1) 100% indirectly controlled by EDF Électricité de France Sa.

## CORPORATE GOVERNANCE BODIES

### Board of Directors <sup>(\*)</sup> <sup>(1)</sup>

<b>Chairman</b>	Marc Benayoun <sup>(2)</sup>
<b>Chief Executive Officer</b>	Nicola Monti <sup>(3)</sup>
<b>Directors</b>	Béatrice Bigois <sup>(4)</sup>
<b>Independent Director</b>	Paolo Di Benedetto <sup>(5)</sup>
<b>Independent Director</b>	Fabio Gallia <sup>(6)</sup>
	Xavier Girre <sup>(7)</sup>
	Jean-Bernard Lévy <sup>(8)</sup>
<b>Independent Director</b>	Nathalie Tocci <sup>(9)</sup>
	Nicole Verdier-Naves <sup>(10)</sup>

<b>Secretary to the Board of Directors</b>	Lucrezia Geraci
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### Board of Statutory Auditors <sup>(11)</sup>

<b>Chairman</b>	Serenella Rossi
<b>Statutory Auditors</b>	Lorenzo Pozza Gabriele Villa

<b>Independent auditors <sup>(12)</sup></b>	Deloitte & Touche Spa
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(\*) At the document publication date.

(1) Elected by the Shareholders' Meeting of April 2, 2019 for a three-year period ending with the Shareholders' Meeting convened to approve the 2021 financial statements, with the exception of what is specified in note 3).

(2) Confirmed as Director by the Shareholders' Meeting on April 2, 2019 and as Chief Executive Officer by the Board of Directors on April 2, 2019. Elected to the position of Chairman by the Board of Directors on June 19, 2019, effective as of July 1, 2019 after Jean-Bernard Lévy renounced the position (see notes 3) and 8)).

(3) Co-opted by the Board of Directors on June 19, 2019 to replace Sylvie Jéhanno, who resigned, and elected Chief Executive Officer by the same Board, effective as of July 1, 2019 after Marc Benayoun renounced the position. In office until the next Shareholders' Meeting.

(4) Confirmed as Director by the Shareholders' Meeting on April 2, 2019.

(5) Confirmed as Director by the Shareholders' Meeting on April 2, 2019. Chairperson of the Compensation Committee and the Related Party Transactions Committee (formerly the Committee of Independent Directors), Lead Independent Director and member of the Control and Risk Committee and the Oversight Board.

(6) Elected Director by the Shareholders' Meeting on April 2, 2019. Chairperson of the Control and Risk Committee and member of the Related Party Transactions Committee (formerly the Committee of Independent Directors).

(7) Elected Director by the Shareholders' Meeting on April 2, 2019. Member of the Control and Risk Committee.

(8) Confirmed as Director and Chairman by the Shareholders' Meeting on April 2, 2019; this latter position was renounced effective as of July 1, 2019.

(9) Confirmed as Director by the Shareholders' Meeting on April 2, 2019. Member of the Compensation Committee, the Related Party Transactions Committee (formerly the Committee of Independent Directors) and the Oversight Board.

(10) Confirmed as Director by the Shareholders' Meeting on April 2, 2019. Member of the Compensation Committee

(11) Elected by the Shareholders' Meeting of March 30, 2017 for a three-year period ending with the Shareholders' Meeting convened to approve the 2019 financial statements.

(12) Audit engagement awarded by the Shareholders' Meeting on April 26, 2011 for the nine-year period from 2011 to 2019.

# Report on Operations

## KEY EVENTS

### Edison and Ansaldo reach an agreement for the new combined cycle of the power plant in Marghera Levante

On March 5, 2019, Edison and Ansaldo Energia signed a contract for a new, latest-generation combined gas cycle that will use the most advanced Italian technology and make the thermoelectric power plant of Marghera Levante (VE) the most efficient in Europe. The agreement is part of Edison's plan to support the Country's energy transition with investments of 2 billion euros in Italy over the three-year period 2019-2021.

The overall investment amounts to over 300 million euros, which will also be used to create the power island, made up mainly of the GT36 high-efficiency gas turbine developed by the Genoese company. The new turbine will supply the Marghera combined cycle, which will have total electricity generation capacity of 780 MW and an energy performance of 63%, the highest output currently available from technologies. This will translate to a 40% reduction of specific CO<sub>2</sub> emissions compared to the average of the current Italian thermoelectric plants and a reduction of more than 70% in emissions of nitrogen oxides (NO<sub>x</sub>).

The refurbishment works on the power plant will last for 3 years and employ around 600 people, in addition to the associated industries. Once completed, the Marghera Levante plant will employ 31 people, making it possible to confirm the current employment level of the plant.

The new combined cycle of Marghera Levante will contribute to the Country's energy transition, ensuring the security and flexibility of production required to balance the intermittent nature of renewable sources.

In April, Edison obtained the Sole Authorisation which enable the launch of the project.

### Edison completes the acquisition of EDF EN Italia

On July 17, 2019, Edison has completed the acquisition by EDF Renouvelables of EDF EN Italia which owns 265 MW of wind capacity<sup>1</sup> and 77 MW of photovoltaic; the final consideration, taking into account the contractual adjustments, was € 182.6 million. Thanks to this transaction, Edison becomes the second wind operator in Italy, consolidating 975 MW of capacity, and will lay the foundations for a significant development in photovoltaics in collaboration with EDF Renouvelables.

The deal is consistent with the strategic guidelines outlined by Edison in recent years and with the aim to become a "low carbon" company with a sustainable development model. The transaction is in fact consistent with one of the main pillars of Edison's medium and long-term development plan, which envisages a significant growth in the power generation from renewable sources - business in which the company already has a significant presence thanks to its hydroelectric production portfolio -. The final objective is to produce by 2030 40% from renewable sources and limit emissions to 260 grams of CO<sub>2</sub>/kWh, thus contributing to the country's energy transition.

### Edison signs the final agreements for the construction of the Greece-Bulgaria (IGB) interconnection gas pipeline

On October 16, 2019, Edison, through IGI-POSEIDON - a 50-50 joint venture with the Greek company DEPA SA -, signed agreements to begin construction of IGB, an 182 km-long gas pipeline (31 km in Greece and 151 km in Bulgaria) that begins in Komotini in Greece and ends in the city of Stara Zagora in Bulgaria, connecting the Greek natural gas system with the Bulgarian one. In addition, in the Komotini area, interconnection with the TAP (Trans-Adriatic gas pipeline) is planned.

The IGB project, which is developed by ICGB AD – an equal *joint venture* between IGI Poseidon SA and Bulgarian Energy Holding (BEH) - is part, with the Poseidon and Eastmed projects, of an infrastructure system promoted by IGI Poseidon that contributes to the expansion of the Southern Gas Corridor and the diversification of routes and sources of gas towards Europe in support of the objectives of energy security, competitiveness and sustainability of the European Union.

In addition to the agreements between shareholders and governments, ICGB agreements were also signed in Sofia with *shippers* for gas transportation, Corinth Pipeworks for the supply of pipes and AVAX for the construction of the infrastructure.

On this occasion, agreements were also signed with the European Investment Bank ("EIB") for 110 million euros, which, with European contributions of 84 million euros and the capital injections of shareholders, ensure the financial resources for the implementation of the project.

### **Edison and the municipality present the project for the new district heating network in Ciriè**

On November 4, 2019, ETC Ecotermica Ciriè together with the municipality of Ciriè presented the project for the construction of a district heating network that will provide heat to families in the city north of Turin.

The new power plant, which will start operating at the beginning of the 2020/2021 thermal season, will efficiently and sustainably produce all the thermal energy to meet the needs of the users that will be connected, reducing atmospheric emissions of carbon dioxide (5,000 tons of CO<sub>2</sub> less per year). The investment for the construction of the new plant, amounting to approximately 15 million euros, will be fully supported by ETC Ecotermica Ciriè. Edison thus confirms its commitment to a sustainable use of resources and to support the country's energy transition.

### **Edison extends the gas supply contract with Sonatrach until 2027**

On November 12, 2019, Edison and Sonatrach (Algeria's national hydrocarbons company) have concluded an agreement to extend the existing gas supply contract until 2027. The contract will grant Edison an eight-year supply from Algeria of one billion cubic meters a year.

This Agreement, strengthening the long-term relationship between the two companies, provides Edison and Italy with more diversified and reliable sources of natural gas, diversifying its supply sources, increasing security and gaining access to a reliable source of natural gas.

### **Edison invests almost 400 million in Campania in support of the country's energy transition and sustainability**

On November 29, 2019, Edison invests in the country's development and growth and announces the construction of a latest-generation combined cycle thermoelectric power plant powered by natural gas in Presenzano in the province of Caserta.

The Power Plant will have a total capacity of roughly 760 MW and will employ the best technology currently available, capable of ensuring an energy yield of approximately 63%, which makes it possible to obtain approx. 40% less specific CO<sub>2</sub> emissions compared to the average of Italian thermoelectric power plants. The technologies adopted will allow the company to ensure better environmental performances, guaranteeing a reduction of more than 60% in nitrogen oxide (NOX) emissions compared to current combined cycle plants of the same size, as well as limited use of the water resource. The total investment amounts to 370 million euros and fully meets the criteria of economic viability, taking into account its technical efficiency and the method of operation of the market in which it is destined to operate. A high-efficiency GT36, H class, gas turbine will be installed in the Presenzano Thermoelectric Power Plant, developed by Ansaldo Energia, an example of national excellence and the best Italian technology. Construction is expected to commence at the start of 2020. Works to commission the power plant will last 30 months.

### **Edison signs the agreement for the State concession in the Port of Oristano**

On December 17, 2019, Edison signed a concession for the occupation of state property in the Port of Oristano - Santa Giusta with the Sardinian Sea Port System Authority. The agreement is a prerequisite to the construction of a quay for ships serving the Liquefied Natural Gas ("LNG") depot that the energy company is planning in the area. The concession shall run for 50 years from January 1, 2020.

Edison plans to build a 10,000 cubic meter LNG storage facility for the refuelling of land and marine vehicles, with the aim of making available a fuel that is consistent with the European Directive alternative fuel initiative (“DAFI”), the methanisation objectives of the Region of Sardinia and the regulations of International Maritime Organization (“IMO”).

### Edison becomes the sole shareholder of EDF EN Services Italia

On December 20, 2019, Edison signed a contract for the acquisition of 70% of the share capital of EDF EN Services Italia S.r.l. from EDF Renouvelables Services SAS, a company in which Edison S.p.A. already owned the remaining 30%, making Edison the sole shareholder of EDF EN Services Italia S.r.l..

EDF EN Services Italia S.r.l. carries out the general management of renewable assets, concentrating on expertise relating to *Operation & Maintenance* services and *Asset Management* services for plants that generate electricity from renewable sources. Specifically, EDF EN Services Italia S.r.l. provides its services to a portfolio of facilities of 774.5 MW divided between 47 wind farms with an installed capacity of 769.5 MW (including 695.5 MW of E2i Energie Speciali s.r.l., E2i, a company whose economic results, due to its governance and existing contracts, are consolidated in Edison, and 74 MW of Bonorva Wind Energy s.r.l., a subsidiary of EDF EN Italia S.p.A. - 100% Edison) and 3 photovoltaic plants of E2i with an installed capacity of 5 MW. The renewable energy sector is one of the pillars of Edison's strategy, based on growth in both the wind and photovoltaic sectors. The acquisition of EDF Services represents an opportunity to in-source the *Operation & Maintenance* (O&M) services, currently not present in Edison's business portfolio, so completing the range of skills in the different business segments relating to the generation of electricity from renewable sources, leading to synergies and operating efficiencies.

### Edison E&P closing of transaction with Energean in 2020

Edison announced, on July 4, 2019, the signing of the agreement with Energean Oil & Gas Plc for the sale of 100% of Edison Exploration & Production Spa (Edison E&P) and its investments in the hydrocarbons exploration and production business (oil and gas natural sector). The Board of Directors approved the transaction on July 3, 2019. The execution of the sale is subject to certain government authorizations.

The transaction price was determined on the basis of an Enterprise Value of USD 750 million and an additional consideration of USD 100 million is foreseen contingent on the commissioning of Cassiopea development gas project in Italy. In addition, Edison will be entitled to royalties associated with further potential developments in Egypt. The transaction also includes the transfer of future decommissioning obligations to the buyer.

In December 2019, Edison received the refusal of the Algerian Ministry of Energy on the transfer of the assets located in Algeria and was invited to discuss the sale of these assets with Sonatrach (Algerian state company); Edison has therefore started negotiations in this regard. Edison and Energean, which declared their intention to implement the transaction in any case, excluding the Algerian assets, confirmed their object of closing the transaction as soon as possible in 2020.

### Significant events occurring after December 31, 2019

The spread of coronavirus, which began in January in the Chinese province of Hubei, quickly had an impact on the global energy markets. In fact, China accounts for 10% of the total demand for oil, consequently the slowdown in industrial activities has put pressure on Brent prices. The fears related to the repercussions on the world economy have fueled the demand for safe haven currencies by supporting the dollar against the euro, which is also penalized by expectations of limited growth in the eurozone due to the weakness of the manufacturing sector.

As for the European gas market, already affected by an excess of supply, lower Asian demand could push shippers to review cargo routes, redirecting LNG to Europe, in a context that also foresees increases of LNG production capacity in the United States and Australia.

Information about events occurring after the end of the reporting year subject of this Report is provided in the section of the Consolidated financial statements entitled “Significant events occurring after December 31, 2019”.

## EXTERNAL CONTEXT

### Economic Framework

2019 was a year of global economic slowdown, although signs of stabilisation in the global economic cycle increased towards the end of the year.

The resumption of talks between the US and China, in the latter part of the year, and the non-application of tariffs on US imports of motor vehicles and parts thereof have given some breathing space to world trade, which, however, remains at relatively low growth rates. In fact, the references for world trade have changed, with more and more space left to bilateral discussions and the World Trade Organization ("WTO") playing a more and more marginal role, also due to the lack of new judges within the WTO (replacing those due to step down from office in December), which in fact further strips away the role of this institution, striking another blow to trade multilateralism. In this context, in mid-October the United States raised tariffs on certain European products in response to what the US considers to be state aid to the European aviation industry and therefore unfair competition. And they threaten new tariff interventions on typical European exports if taxation on the US communication giants is increased in Europe. Finally, even a possible US-China agreement would not offer protection from the use of the tariff instrument by the US to address issues of a political/economic nature (such as those related to the crisis in Hong Kong) and not only trade issues. For all these reasons, the recovery in global trade over the next few years may only be modest.

The US economy is slowing down and is growing at a rate of around 2.4%. Gross Domestic Product ("GDP") growth was mainly driven by household consumption, while fixed investments remained substantially stable. Foreign trade is not improving and the trade balance remains exceedingly negative, despite the protectionist trade policy implemented by the Trump Administration: the stabilisation of import flows following the increase in duties has been neutralised by the difficulties in growing exports due to the weakness of global trade. The industry is suffering a little, both in terms of consumer goods and industrial products, while employment is holding up well: despite the difficulties of the industry, overall employment continues to grow, with the exception of manufacturing and construction.

As for the Emerging Markets, the slowdown in China and India continues. The former recorded the lowest growth rate since 1992 (6%), also due to the trade war with the US and investments that remain permanently weak; at the moment the main source of risk remains the very high level of debt reached by the economic system and its rapid growth. In India, too, the weak economic cycle persists, which is mainly affected by the heavy slowdown in investment and the contraction of foreign trade, both on the export and import side, confirming the weak moment of international and domestic demand. In Brazil, GDP growth is proceeding cautiously, thanks mainly to household consumption, while investments have decelerated; however, the expansive monetary policy and the improvement in the climate of confidence do not seem sufficient to consolidate the recovery, which is weighed down by the uncertainty of the municipal elections next year and the growing risk of contagion of the social tensions that are developing in other Latin American countries. As regards Russia, the pace of growth intensified during the year, thanks to the strong trend in public spending, private consumption and exports; however, the weakness of the labour market and wage trends remain; moreover, the fall in inflation below the target level set by the central bank leaves room for further expansionary monetary policy manoeuvres to support growth.

The UK economy is decelerating slightly, but there is no risk of recession, also because of the termination agreement reached with the EU on "Brexit"; this agreement, before the effective exit from the EU, provides for a transition period to a free trade area that will last approximately one year.

The growth of the economic and monetary union ("EMU") is slowing down, with growth in 2019 at a rate of around 1.1% (compared to 1.9% in 2018) thanks to the positive contribution of domestic demand, while the foreign component is negative. The manufacturing sector is shrinking, unlike the services sector, which is still growing. Among the main Member States, Germany, together with Italy, is the economy that suffered the most during 2019, while Spain and



France held up more, although both grew at a lower rate than in 2018. In Germany, growth was sustained mainly by household consumption and public spending, while investments remained stable overall with, in particular, a positive trend for the construction sector and a setback for investment in capital goods; the contraction of the manufacturing sector also continued during the year, while the services sector remained stable. In France, the greatest contribution to the economy is made by domestic demand, sustained by private and public consumption and, above all, by investment, whose across-the-board growth has affected construction, capital goods and means of transport; the weakness of the manufacturing sector is also consolidated in France, while the growth of the service sector continues to be sustained. In Spain, too, domestic demand made a very strong contribution to GDP growth, both in terms of private consumption and investment, while the contribution of the foreign component was highly negative following an increase in imports and a simultaneous reduction in exports; Spain is the only one of the main European countries to have achieved an improvement in the manufacturing sector, together with that of services, driven by the strong performance of retail trade, transport and tourism.

Finally, with regard to Italy, the pace of the economy remains slow.

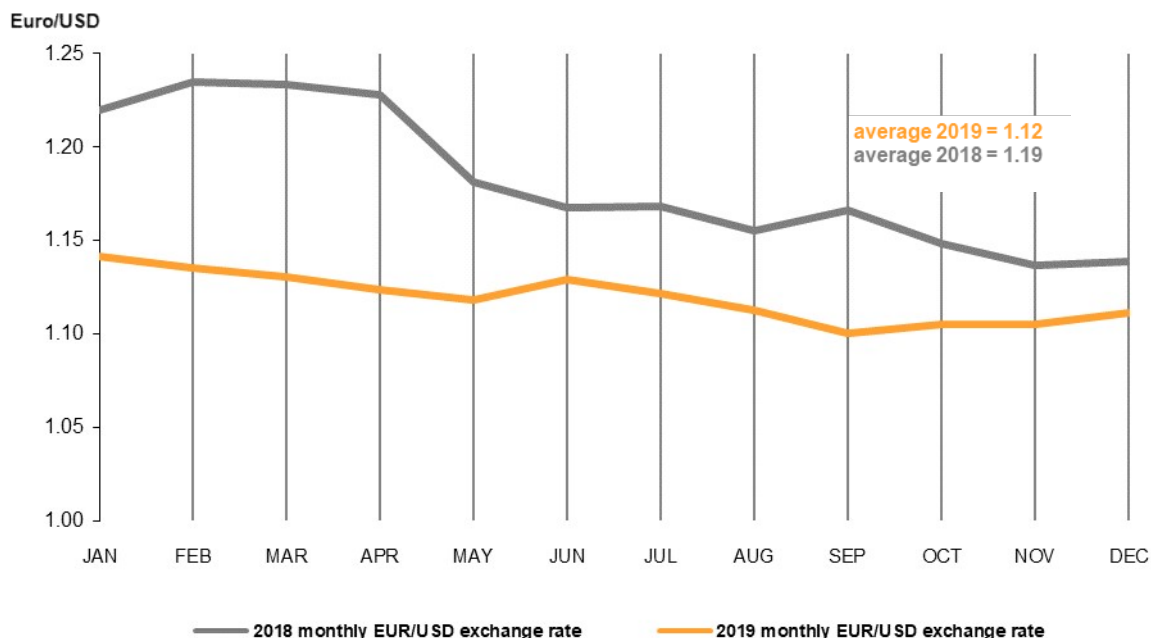
Manufacturing activity and sales on international markets confirm the overall picture of stagnation that emerged during the year, with exports not particularly stellar, mainly due to the drop in intra-EU sales. The outlook for the end of the year is negative, with foreign orders in November at their lowest level for more than six years. In this scenario, only the activity related to the construction sector has maintained relatively constant growth rates.

The indications coming from the climate of business and consumer confidence are of a weak closure of 2019 and start to 2020, as shown by the deceleration of consumption of families, more inclined to save, and the fall in industrial investment and stocks, an image of the fears that have blocked the production plans of companies. All this is mainly due to the more negative opinion of our country's economic situation, also augmented by the component of political uncertainty that remains even with the installation of the new coalition government in August 2019.

The EUR/USD exchange rate in 2019, stood at an average value of 1.12, down by 5.2% over 2018. An analysis of monthly trends reveals a progressive weakening of the single currency against the dollar, in a context of global economic slowdown as a result of trade tensions between the United States and China.

In this context, the European Central Bank ("ECB") strengthened its monetary policy to support the economy during the year, with a depreciation effect on the euro. In particular, at its September meeting it announced a broad package of stimulus measures, including a cut from -0.4% to -0.5% of the deposit rate and a resumption of "*quantitative easing*" for an undefined period, which was only suspended at the end of 2018. The Frankfurt institute also announced that rates will remain at or below current levels until inflation converges to a target close to but below 2%. From November 1, Christine Lagarde took over as head of the ECB from Mario Draghi and at her first meeting in December reaffirmed the need for an accommodating policy to ensure favourable financing conditions.

The Federal Reserve System ("FED") also had to deal with the effects of trade disputes, by changing its monetary policy in order to protect the US economy. Consequently, instead of raising interest rates as projected at the end of 2018, the FED decided to cut rates three times, between July and October, from a range of 2.25-2.5% to 1.5-1.75%. This change in monetary policy in a more accommodative sense led to an upward trend in the exchange rate only in June and in the last three months of the year. In December, the US central bank expressed its intention to keep rates stable for an extended period of time, disappointing expectations of possible future increases and weakening the dollar.



As regards the oil markets, the average price of Brent recorded a decrease of 10.3%, moving from 71.5 USD/barrel in 2018 to 64.1 USD/barrel in 2019.

Developments in the trade dispute between the United States and China were the main factor driving price developments during the year. In the first four months of 2019 a bullish *trend* was observed, favoured by a truce in commercial tensions, by new cuts in production decided by OPEC and its Allies, as well as by critical issues in the geopolitical contexts of Venezuela and the Middle East. Since May, oil prices have been falling, influenced by the breakdown in trade negotiations between the United States and China, which has led to an escalation of the trade war with both Countries, which have imposed new duties on traded goods. These tensions have led to a weakening of the growth of the global economy, and as a result demand for oil products has been characterised by a limited increase, marking the lowest growth rate since the financial crisis of 2008. In the last quarter of the year, prices began to rise again, although it was only in December that they were higher than in 2018, supported by the resumption of negotiations between the United States and China, after the two parties had reached a preliminary understanding on the trade agreement in October, which was then finalised at the end of the year.

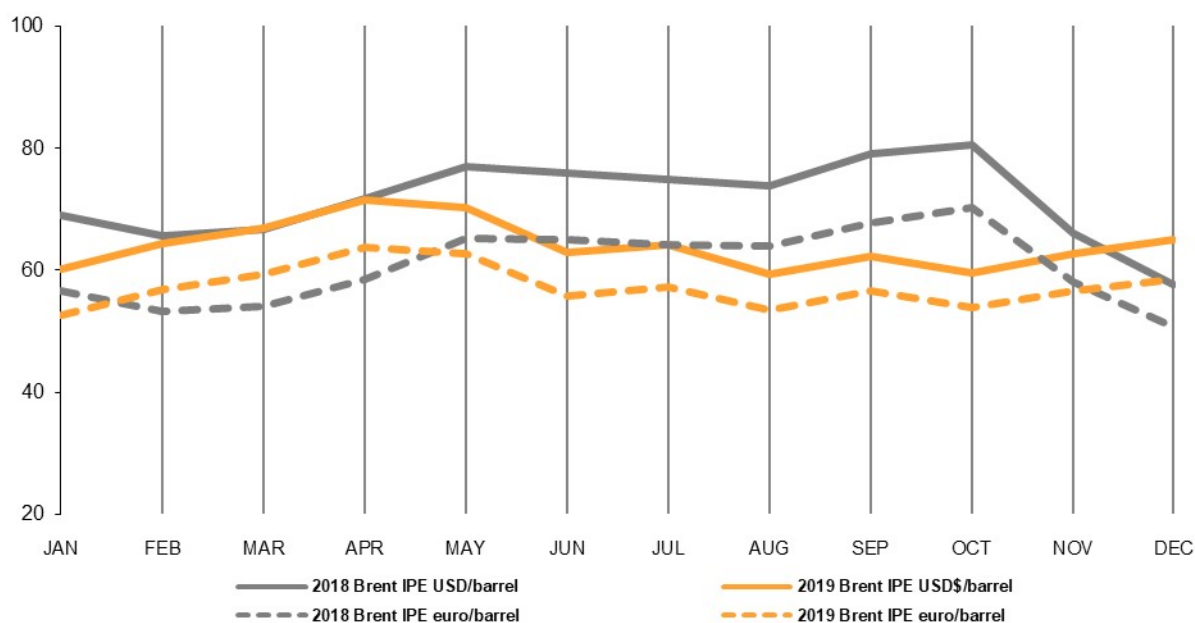
In the face of the limited increase in demand, global supply was abundant, mainly as a result of the continued growth in US production, which averaged 12.3 million barrels per day in 2019 and reached a new record level of 12.9 million barrels per day in December. In this context, OPEC and its allies, led by Russia, have decided to continue with the supply reductions and in December they strengthened their commitment, agreeing to increase the size of the cuts in the first quarter of 2020. During the year, several OPEC members, including Iran and Saudi Arabia, were affected by geopolitical tensions: in particular, in September, an attack on some Saudi infrastructure temporarily made much of the country's production capacity unavailable. However, the upward pressure on prices was contained as concerns about the weakness of the global macroeconomic framework prevailed. These dynamics have reinforced the importance of the volatility that characterizes the price of crude oil.

Crude oil prices in Euro followed the annual trend of US prices, signalling lower growth as a result of the weakening of the Euro with respect to the 2018 levels. At 57.2 EUR/barrel the average price for 2019 was 5.6%, lower than the average for the previous year.

The table and the chart below show the average annual values and the monthly trend, during this and the previous year:

	2019 full year	2018 full year	% change
Oil price in USD/barrel(1)	64.1	71.5	(10.3%)
USD/EUR exchange rate	1.12	1.18	(5.2%)
Oil price in EUR/barrel	57.2	60.6	(5.6%)

(1) Brent IPE



In 2019 distilled products recorded a similar performance as oil, which determined lower annual averages than 2018. As regards diesel, the average price in 2019 was 592.4 USD/metric ton, 7.1% lower than the average in 2018, while low sulphur and high sulphur fuel oils recorded annual average prices of 389.3 USD/metric ton and 330.4 USD/metric ton respectively, decreases of 2.4% and 16.2% compared to the previous year. The limited reduction in BTZ oil and the higher decrease in ATZ oil were caused by the implications of the new international regulations on the quality of fuels used by ships. The IMO, the International Maritime Organisation, has stipulated that from January 1, 2020, shipping companies will have to reduce their emissions of sulphur oxides by 85%, resulting in greater use of fuels with a low sulphur content (maximum permitted limit: 0.5%).

The coal market, with reference to prices on the Atlantic market, recorded a decreasing *trend*, with 61.0 USD/ton recorded in 2019, down by 33.6% over the previous year. Increased competitiveness of natural gas and increased

production from sources renewable energy sources have led to low demand for coal in Europe for electricity generation, pushing prices down in a context of abundant supply on the global market.

Gas prices on the main European hubs stood at lower levels than 2018, with decreased annual values of around 38% on average. During the year prices recorded negative economic changes in the first three quarters (-23.4%, -27.2% and -22.8% respectively), while an economic increase of 20.6% was recorded in the fourth quarter. The price of gas on the TTF, Title Transfer Facility, the main European reference hub, stood at an average of 14.3 euro cent/standard cubic meter, against an average of 24.1 euro cent/standard cubic meter in 2018, marking a decrease of 40.6%.

The market prices of CO<sub>2</sub> emissions rights recorded significant growth over 2018, with an average value of 24.8 EUR/ton, up by 56.1%. The change was more marked in the first quarter, characterised by a trend deviation of 125.6%, driven by the start of the *Market Stability Reserve* ("MSR") and the suspension of UK auctions. Developments on "Brexit" and the summer heatwave provided price support in the following months. Subsequently, prices were impacted by the weakness of the energy sector, only to rise again in December in the wake of the British Parliament's approval of the agreement on the UK's exit from the European Union and the increases recorded on the Brent market. To support prices during the year, note should also be taken of the emergence of the willingness of some European Countries to support more ambitious targets in the reduction of greenhouse gas emissions.

In 2019 the Energy efficiency certificates ("EEC") market recorded an average price of 260.1 euro/EEC, down by 12.9% compared with the previous year, when the average price was 298.6 euro/EEC. During the entire year, prices were stable at around 260 euros/EEC, with the market adapting to the price signal provided by the measures introduced by the corrective decree DM (ministerial decree) May 10, 2018. A situation of scarcity of available certificates persists with respect to the objectives defined by the regulations, as confirmed by the significant quantity of virtual Energy efficiency certificates, i.e. not deriving from the implementation of energy efficiency projects, requested by distributors from the *Energy Services Operator* ("GSE") in order to comply with the obligations for the year of obligation 2018.

## The Italian Energy Market

### Demand for Electric Power in Italy and Market Environment

(TWh)	2019 full year	2018 full year	% Change
Net production:	283.8	279.8	1.4%
- <i>Thermoelectric</i>	186.8	184.3	1.4%
- <i>Hydroelectric</i>	47.0	49.9	(5.8%)
- <i>Photovoltaic</i>	24.3	22.3	9.0%
- <i>Wind power</i>	20.1	17.6	14.2%
- <i>Geothermal</i>	5.7	5.8	(1.7%)
Net imports	38.2	43.9	(13.0%)
Pumping consumption	(2.4)	(2.3)	(4.3%)
<b>Total demand</b>	<b>319.6</b>	<b>321.4</b>	<b>(0.6%)</b>

Source: processing of actual 2018 and preliminary 2019 Terna data, gross of grid losses.

In 2019, gross total demand for electric power totalled 319.6 TWh, down by 1.8 TWh (-0.6%) compared with the 2018. In seasonally adjusted and calendar and temperature-adjusted terms, the value does not vary substantially.

In 2019, net production rose by 4.0 TWh (+1.4%), whose productive *mix* was characterised by an increase in the thermoelectric contribution of 2.5 TWh (+1.4%). The recovery in thermoelectric production was made possible mainly by a reduction of 5.7 TWh (-13.0%) in net imports compared with 2018 and a reduction of 2.9 TWh (-5.8%) in hydroelectric production, due to a reduction in the availability of water resources compared with the previous year.

As regards the other renewable sources, the photovoltaic sector recorded a rise of 2.0 TWh (+9.0%) in production, and wind power also increased, up by 2.5 TWh (+14.2%) compared to 2018.

Greater use of hydroelectric pumping, (up 0.1 TWh) was recorded compared to the previous year.

On the whole, national production, net of pumping, met 88.1% of demand, up compared to the previous year, when the figure was 86.4%.

Insofar as the price scenario at December 31, 2019 is concerned, the time-weighted average (TWA) for the Single National Price (abbreviated as PUN in Italian) settled at 52.3 euro/MWh, down by 14.7% compared with the previous year (61.3 euro/MWh).

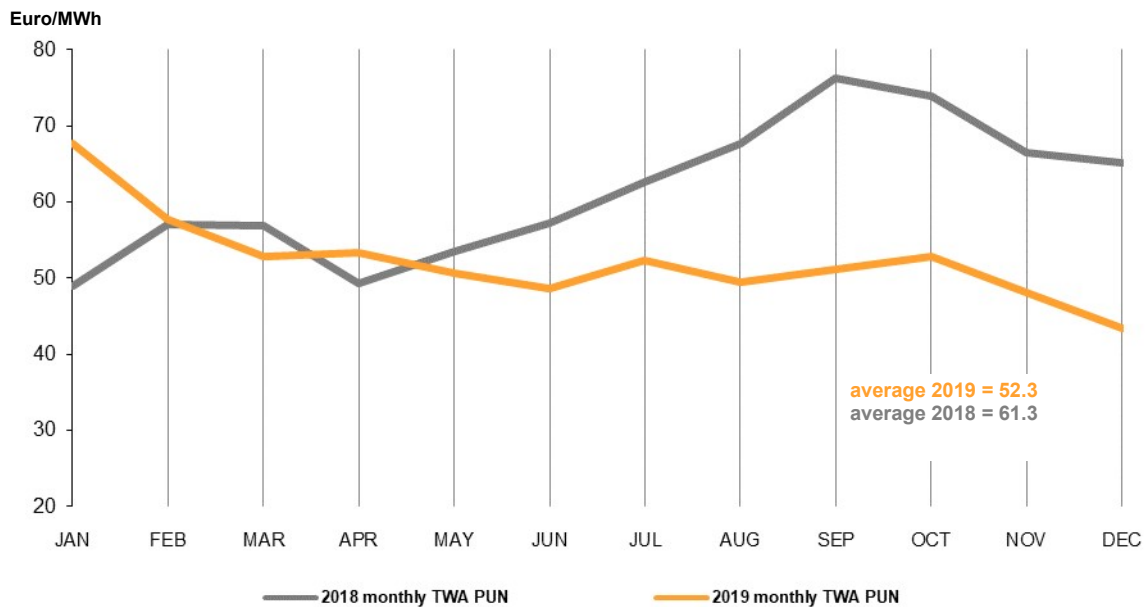
This drop in price compared to 2018 is incorporated in a context of lower demand for electricity and lower costs for the main fuels used for thermoelectric generation (gas, coal); the latter factor more than offset the increase in CO2 prices.

An analysis of the monthly trend in the PUN in 2019, shows that it was lower than that of 2018, with the exception of January, February and April. At the beginning of the year, colder temperatures and lower imports, caused by some limitations on interconnection capacity at the northern border, brought upward price pressure on the day-ahead market (+38.1% compared to the same month in 2018). Starting in February, PUN prices fell as a result of a contraction in demand, impacted by above-average seasonal temperatures and a weakening in economic environment, as well as lower gas prices. In the last quarter of the year, prices again exhibited a downward trend due to a recovery in hydroelectric generation and mild temperatures.

In 2019, the F1, F2 and F3 hourly time periods and, similarly, the peak and off peak intervals experienced virtually identical decreases of about 14.6% compared with the previous year.

As regards zonal prices, quite homogeneous drops were registered in 2019, with slightly less marked changes in the Sicily zone (-9.7%) compared to the decreases of around 14.7% in the other zones.

The chart that follows shows the monthly trend compared with the previous year:



The prices in foreign Countries also showed across-the-board decreases. France closed 2019 at 39.4 euro/MWh, a decrease of 21.4% compared with the previous year. The absence of particular critical issues regarding the nuclear power plants for most of the year, emerging only in the last quarter due to an earthquake in the south of the Country, has had a downward impact on prices. The differential with the PUN widened by 16% to 12.9 euro/MWh, influenced in the first part of the year also by the reduction in interconnection capacity at Italy's northern border.

Germany closed the year at 37.7 euro/MWh (-15.3% compared to 2018). Despite the significant generation of renewable energy, predominantly wind power, which determined negative prices in a few days of the year, in periods of low renewable energy sources ("FER"), the German thermoelectric plants, primarily coal and lignite-powered, impacted by the notable rise in CO2 prices, were able to influence the prices. The closure of coal and lignite plants further contained the downward trend. The Italy-Germany spread reduced by 13.0% compared with 2018, sitting at 14.7 euro/MWh.

## Demand for Natural Gas in Italy and Market Environment

(Billions of cubic meters)	2019 full year	2018 full year	% Change
Services and residential customers	28.2	28.8	(1.9%)
Industrial users	17.5	17.8	(1.9%)
Thermoelectric power plants	25.8	23.3	10.4%
System usage and leaks	2.2	2.1	4.4%
<b>Total demand</b>	<b>73.7</b>	<b>72.1</b>	<b>2.2%</b>

Source: 2018 pre-actual data and 2019 preliminary data from Snam Rete Gas and the Ministry of Economic Development and Edison estimates.

Demand for natural gas stood at 73.7 billion cubic metres in 2019, up by 1.6 billion cubic metres (+2.2%) compared to 2018.

This trend is due mainly to an increase in the thermoelectric operations, which reported an increase of 2.5 billion cubic meters in volumes withdrawn (+10.4%) compared with the previous year, due primarily to short-term effects such as the reduction in net imports and hydroelectric production for less hydraulicity than previous year.

The civil sector recorded a slight decrease in volumes of 0.6 billion cubic metres (-1.9%), mainly due to the climate factor, involving, in the first quarter, higher average temperatures compared to 2018 (-1 billion cubic metres), unlike in the second quarter, when temperatures were on average lower than in the previous year (+0.8 billion cubic metres). In the last two quarters there were no significant deviations from 2018.

The industrial sector recorded slightly lower volumes than 2018, with a variation of -0.3 billion cubic metres (-1.9%).

In 2019, sources of supply registered:

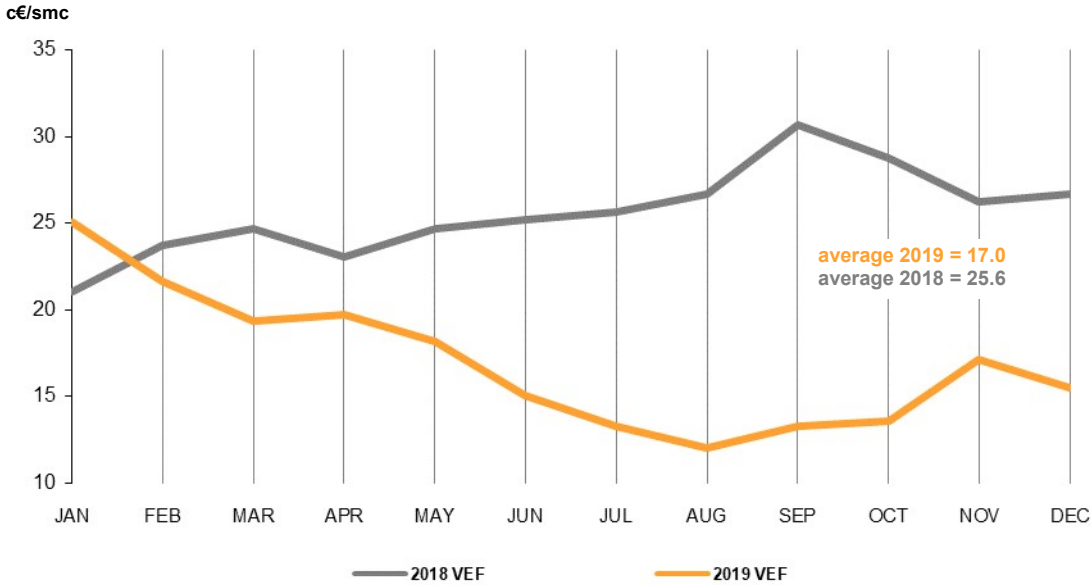
- lower domestic production (0.6 billion cubic metres; -11.7% compared to the figure in 2018);
- higher gas imports (3.2 billion cubic meters; +4.7% compared with 2018);
- about 0.8 billion cubic meters in volumes added to the stored gas inventory.

Since the beginning of the year, the increase in global production by the main exporting countries (including the USA) and the weakening of prices on the Asian market, combined with the strengthening of the use of capacity allocation mechanisms by auction, have favoured LNG arrivals, supporting supply.

The abundance of LGN flows that has affected the European and ational market, is a phenomenon that has grown strongly in recent years; this has contributed to strong pressure on market prices with a significant reduction in price levels, as can be seen from the chart below. During 2019, the price of spot gas in Italy, in concert with the movements recorded from other European *hubs*, marked a 33.6% contraction compared to last year, settling at € 17.0 cent /standard cubic meter.

During the last quarter, the seasonal drop in temperatures led to an increase in prices, particularly in November, however limited by the high availability of supply.

The VEF-TTF (virtual trading point - title transfer facility) *spread* rose by 84.5% in 2019 compared to the previous year, averaging 2.6 euro cent/standard cubic meter. This significant increase is attributable to cyclical elements, like the higher level of stockpiling in the Netherlands and the mild winter, unlike in 2018, when an exceptional cold spell in Northern Europe caused the differential to reverse in March.





## Legislative and Regulatory Framework

The main legislative and regulatory measures enacted in 2019 that concern the Group's various businesses are reviewed below, except for their impact on the Group, which, when material, is the subject of a specific disclosure in the sections of this Report where results and risks are reviewed.

### Electric Power Operations

#### The Environment

**Climate Decree-Law** "Urgent measures for observance of the obligations set forth by Directive 2008/50/EC on air quality and extension of term pursuant to article 48, paragraphs 11 and 13, of Decree-Law October 17, 2016, no. 189, converted, with amendments, Law no. 229 of December 15, 2016" – Decree-Law no. 111 of October 14, 2019, converted to law by conversion Law no. 141 of December 12, 2019, published in Official Gazette of December 13, 2019. The main measures introduced by the provision are:

- establishment at the Ministry for Environment, Land and Sea Protection ("MATTM") of a permanent inter-ministerial round-table group on the climate emergency composed of the Ministries of Agricultural Policies, the Ministry of Economic Development ("MSE") and the Ministry of Infrastructure and Transport ("MIT"), in order to monitor, and adapt to the results, the actions of the National Strategic Programme for combating climate change and improving air quality;
- From January 1, 2021, it renamed the Interministerial Committee for Economic Planning ("CIPE") to the Interministerial Committee for Economic Planning and Sustainable Development ("CIPESS"), in order to ensure the coordination of public policies geared towards achieving sustainable development objectives.

**Sistri:** Law no. 12 of February 11, 2019 converting Decree-Law no. 135/2018 on "Urgent provisions on support and simplification for businesses and the Public Administration", confirming the abolition of Sistri and containing provisions on waste traceability, introduces into the regulatory framework a first step of the new traceability system, establishing the national electronic register for the traceability of waste, managed directly by the Ministry of the Environment. Edison came into line with the new regulations on waste traceability as of January 1, 2019.

**Renewable energy sources Decree ("FER1"):** Decree of July 4, 2019 of the Ministry of Economic Development "Incentives for electricity produced by onshore wind, solar photovoltaic, hydroelectric and gas-fired plants remaining from purification processes" was published in OJ No. 186 of August 9, 2019, which, pursuant to Article 1, is consistent with the European 2020 and 2030 objectives, aims to support the production of electricity from plants fuelled by renewable sources through the definition of incentives and access modalities that promote effectiveness, efficiency and sustainability, both environmental and incentive charges, to an extent appropriate to the pursuit of national objectives and in a manner consistent with the Guidelines on State aid for energy and the environment set out in the Communication from the European Commission (2014/C 200/01).

The Decree makes provision for the assignment of incentives through competitive procedures based on auctions and registers.

For the purposes of the auction procedures, the tenders are organised into three groups: *group A* -wind farms and photovoltaic plants; *group B* - hydroelectric plants and residual gas plants of the purification processes and *group C* - plants subject to total or partial refurbishment and falling within the types referred to in group A, point i. and group B, points i. and ii.

For the purposes of registration, calls for proposals are organised into four groups:

- *Group A:* wind farms; photovoltaic plants;
- *Group A-2:* photovoltaic systems whose photovoltaic modules are installed in place of roofs of buildings and rural buildings on which the complete removal of eternit or asbestos is carried out. The surface of the modules cannot be larger than the surface of the removed cover;

- *Group B*: hydroelectric plants; residual gas plants from purification processes;
- *Group C*: plants subject to total or partial refurbishment and falling within the types referred to in Group A, letter i) and Group B.

## Wholesale Market

**Capacity mechanism (Capacity Market):** On June 28, 2019, the Ministry of Economic Development signed the Decree on the *Capacity Market* on which the Authority had provided its favourable opinion. The amendment of the capacity market regulations, endorsed by the European Commission, aims to anticipate the implementation of new European rules for decarbonisation adopted as part of the “*Clean Energy Package for all Europeans*”. On November 6 and 28 last year, the first parent auctions of the *Capacity Market* for the delivery years 2022 and 2023 were held: 40.9 GW capacity was allocated for 2022, of which 36.5 GW domestic capacity and 4.4 GW foreign capacity (all domestically offered capacity was allocated). Of the 36.5 GW of allocated national capacity, 34.8 GW is existing capacity, 1.4 GW is new authorised capacity and 0.4 GW is new unauthorised capacity. For 2023, 43.4 GW was allocated, of which 39 GW domestic capacity and 4.4 GW foreign capacity (all domestically offered capacity was allocated). Of the 39 GW of allocated national capacity, 35 GW is existing capacity, 0.5 GW is new authorised capacity and 3.5 GW is new unauthorised capacity. Edison was awarded 3,769 MW for 2022, including 920 MW of new capacity, which will benefit from 15-year contracts. Edison was awarded 3,319 MW for 2023, including 490 MW of new capacity (corresponding to the new Presenzano power plant), which is also the beneficiary of a 15-year contract.

For both delivery years, the allocated capacity enhancement premiums are equal in all national areas to the premium caps for existing capacity (33 k€/MW/year) and new capacity (75 k€/MW/year), while the weighted premium for foreign allocated capacity was 4.4 k€/MW/year in both auctions. The total cost of the auctions therefore amounts to 1.3 billion euros for 2022 and 1.5 billion euros for 2023, plus 133 million euros corresponding to the cost of the new capacity already allocated with the 2022 auction.

For the delivery years after 2023, the *Capacity Market* framework will have to be revised in order to comply with the provisions of the new EU Regulation no. 2019/943 on the functioning of the electricity market and will have to undergo a new process of verification of compatibility with the State Aid Guidelines. In addition, the current rules governing the Italian *Capacity Market* have been challenged by some operators and the Regional Administrative Court is due to rule on the merits of the appeals on February 26.

## Electricity dispatching reform and pilot projects.

On July 23, 2019 ARERA launched a consultation document on the reform of the dispatching services market. The Authority's action is aimed, as a matter of priority, at extending participation in the Dispatching Services Market, which today is reserved for large programmable plants, smaller or non-programmable plants (e.g. from renewable sources), consumption and storage. All this from the perspective of technological neutrality, the promotion of greater competition on Dispatching Services Markets and, ultimately, potential cost efficiencies for end consumers. Following the consultation, a number of ARERA actions will follow, including the publication of a possible second document for consultation and the consequent resolution of the Consolidated Act, reasonably by summer 2020. Subsequently, the updating phase of the related chapters of the grid code will begin through dedicated consultations by Terna and subsequent approvals by the Authority. The new regulatory framework for electricity dispatching could reasonably start to be implemented in the second half of 2021 or early 2022.

Pending the implementation of the new dispatching discipline, Terna has submitted for consultation (in progress) the documentation relating to a new pilot project for the provision of the ultra-fast frequency regulation service (Fast Reserve). This project is part of the pilot projects referred to in ARERA Resolution 300/2017/R/eel.

The subject of the proposal is the launch of a pilot project for the provision of the “Fast Reserve” service, aimed at improving the dynamic response of the first instants during frequency transients. This service is distinct from the primary

regulation service but closely coordinated with it to ensure dynamic frequency stability. Terna believes that this service will be useful in the coming years in order to cope with the expected decrease in inertia due to the exit of coal-fired plants from the market and the progressive spread of non-programmable renewable sources ("FRNP") plants according to the objectives indicated in the Integrated national Energy and Climate Plan ("PNIEC"). Electrochemical accumulations are particularly suitable for the provision of this service. Terna also announced that it will launch a pilot project in the coming months aimed at testing new ways of providing the secondary frequency regulation service by limited energy devices, non-programmable renewable sources and aggregates of devices (e.g. UVAM). This project will also be open to devices included in the Fast Reserve Unit.

**Implementation of Regulation (EU) 2015/1222 (CACM Regulation):** the process of implementing the European *Capacity Allocation and Congestion Management* ("CACM") Regulation continues. In particular, by means of resolution 238/2019/R/eel, the Regulatory Authority for Energy, Networks and the Environment (the "Authority") approved the methodology for coordinating *redispatching and countertrading* activities for the Italy North Capacity Calculation Region (Italy, France, Austria and Slovenia), along with the Region's regulators. Edison supports the process of integrating the European electricity markets and looks favourably on the implementation of the above-mentioned methodologies, which contribute towards reinforcing transparency on calculation methods for cross-border capacity made available to the market by Transmission System Operators ("TSOs") and coordinated *redispatching and countertrading* actions required to manage significant cross-border congestion.

## Hydrocarbons Operations

### Rates and Market

**Distribution Tariffs:** by means of Resolution 98/2019/R/gas of March 19, 2019, the Authority published the definitive 2018 specific reference tariff components for the distribution and metering services. With regard to the provisional tariffs, determined by Resolution 177/2018/R/gas of March 29, 2018, the definitive 2018 tariffs showed insignificant changes. Subsequently, by Resolution 128/2019/R/gas of April 9, 2019, the Authority approved the provisional reference tariffs for 2019 for the gas distribution and metering services. Also in this case, there were no significant changes compared to the definitive tariffs for 2018.

At the end of the year (Resolution 571/2019/R/gas), the mandatory tariffs for 2020 were also published and at the same time the bimonthly equalisation amounts for 2020 were approved.

**Storage Tariffs:** by Resolution No. 297/19/R/gas of July 9, 2019, the Authority definitively approved the reference revenues for 2019 proposed by Edison Stocaggio Spa and, pursuant to Resolution No. 66/2016/R/gas, approved the adjustment of the costs recognised in previous years to Edison Stocaggio for an amount of about 14 million euros, determined based on the re-proportioning coefficient submitted by the Company; lastly, the Authority provided that Edison Stocaggio, if authorised to operate the San Potito and Cotignola fields at excess pressure by December 31, 2019, may submit a specific request to revise the re-proportioning coefficient, with a view to revising the above-mentioned adjustment.

Lastly, Resolution No. 535/2019/R/gas of December 19, 2019 determined the business revenues of Edison Stocaggio for 2020, amounting to about 62 million euros.

**Gas Transport Tariffs:** on March 28, 2019, consistent with the timelines set forth in EU Regulation 460/2017 (TAR Code), the Authority approved Resolution 114/2019/R/gas defining the tariff criteria for the fifth regulatory period 2020-2023 (5PRT), definitively closing the lengthy consultation process. By means of resolution 201/2019/R/gas of May 28, 2019, the regulator published the new tariff fees for 2020, the first year of the 5PRT.

**Capacity Transfer Reform:** the reform of the transfer process at exit points of the transport network which fuel the distribution networks (city gate) continues. By means of [Resolution 147/2019/R/gas](#) of April 16, 2019, the Authority defines the general principles for the reorganisation already outlined in previous consultations with a view to simplifying capacity transfer processes at city gates and the corresponding capacity at the overhead exit points of the national grid, starting from October 1, 2020, with potential negative effects on operators.

Additional interventions are expected to complete the regulatory context: the Authority will supplement the provisions within a single integrated text in view of the expiry on October 1, 2020.

**Settlement gas:** the process of implementing the gas *settlement* reform launched by the AEEG with Resolution No. 72/2018/R/gas, by which it introduced substantial changes to the previous regulations, effective January 1, 2020, is continuing. Subsequently, with Resolution No. 148/2019/R/gas, ARERA approved a new *"Integrated text of the provisions governing the regulation of the physical and economic items of the natural gas balancing service (TISG)"*, replacing Resolution No. 72/2018/R/gas, in implementation of the new regulations governing interim financial statements and the management of the commercial relations chain within the Integrated Information System ("IIS"). Lastly, by means of Resolution 155/2019/R/gas, the Authority introduced the functional provisions to allow the process of updating the correspondence between the Balancing User, Distribution User and the Redelivery Point of the distribution network within the SII. The new regulations have also been incorporated into the Snam Rete Gas network code and into the technical specifications of the Single Buyer, operator of the SII. Overall, the implementation of the gas settlement reform is significant for Edison because it requires a major upgrade of its internal information systems to accommodate the new data that will become available in the SII and a revision of internal procedures, across the Business Units, aimed at acquiring capacity and creating new supply chains for the various supply points.

Another issue that is still open for the industry, and for Edison as well, is that of the so-called "past period", i.e. the introduction by Resolutions 670/2017/R/gas and 782/2017/R/gas, retroactively, of provisions for the redetermination of the physical and economic adjustment items, starting from the year 2013 and until the entry into force of the new reform (starting from the gas balance sheet for January 2020). This issue is monitored by Edison by virtue of the nature of the amounts already settled and to be settled in the next balancing/setting sessions.

**Methods of regulation of the payments following the redetermination of the coefficient k:** by means of consultation document 516/2018/R/gas, the Authority had formulated in 2018 its guidelines regarding the possible methods of settlement of the payments as a result of the revision of coefficient k, issued by resolution 737/2017/R/gas, aimed at determining the price of the raw material gas of the protection regime in the two-year period October 1, 2010 - September 30, 2012.

Thereafter, on January 30, 2019, the Authority approved resolution 32/2019/r/gas, in which it defined the methods of recovery for sellers of the amounts due to them as a result of the upward revision of coefficient k. In particular, resolution 32/2019 upheld the preferences expressed by Edison in response to the consultation document and established that the sellers that, in the 2010-2012 thermal two-year period, had served customers subject to the gas protection regime, may be able to obtain payment of the amounts due by presenting the appropriate request and documentary evidence to the Cassa per i Servizi Energetici e Ambientali, at which the necessary account will be set up, financed through the UG2 component by all end consumers with consumption of up to 200,000 Scm/year. The amounts will be paid in three sessions, over a period of 3 years.

Edison may benefit from the mechanism by presenting a request for the different Group companies active in the sale of gas under the protected system in the two-year period concerned.

## Infrastructures

**Premiums and penalties for recoveries of safety of the natural gas distribution service:** by means of Resolution 75/2019/R/gas of March 5, 2019, the Authority completed the process of determining the premiums and penalties for

safety recoveries for 2015. For Infrastrutture Distribuzione Gas Spa, a company of the Edison Group that provides distribution services, the Resolution established, for 2015, total premiums of 250,000 euros, of which 200,000 euros already received as an advance payment in 2018, and the remainder received by the Cassa per i Servizi Energetici e Ambientali (CSEA) in April 2019.

**Gas storage auctions for the 2019-2020 thermal year:** as a result of Ministerial Decree of February 15, 2019, which regulates storage capacity for thermal year 2019-2020, the Authority published Resolution 67/2019/R/gas, setting out provisions for the organisation of the procedures for the conferral of said capacity (auctions), also defining the criteria to be applied in calculating the reserve price, defined by means of Resolution 121/2018/R/gas (which provide for the exclusion from the reserve price of fees to cover the cost of transport capacity at the interconnection points with storage). The formula applied to calculate the reserve price, as usual, was delivered by the Authority in confidential form only to storage businesses.

By means of Resolution 67/2019/R/gas, the Authority also carried out a reorganisation and harmonisation of the provisions in force concerning access to the storage service and, to this end, ordered the publication of the Integrated Regulation Text on Guarantees of Free Access to the Natural Gas Storage Service ("RAST").

Finally, the Resolution provided that the storage service tariff fees are updated and differentiated according to the calendar year in which the part of the thermal year of storage falls, considering the reference revenues of the calendar year and the capacities of the thermal year of storage and, when available, the reference revenues definitively approved by the Authority pursuant to art. 15 of the Regulation of the tariffs for the natural gas storage service ("RTSG"). This new method for updating and differentiating the tariff fees entails, with respect to what was established previously, an increase in effective annual revenues of Edison Stoccaggio of roughly 0.4 million euros.

**Long-term regasification auctions:** by means of Resolution 234/2019/R/gas, the Authority updated the criteria for determining the reserve prices of regasification capacity allocation procedures so as to facilitate long-term transfers - which took place in July 2019 - and reduce the costs linked to the guarantee factor, to cover the revenues of regulated terminals. The reserve price is not published.

## Energy Services

**District heating and district cooling:** activities continued in 2019, for the definition of the regulatory framework in the district heating and district cooling sector (hereinafter remote heating) by the Authority. These activities focused on the following themes:

- Completion of the provisions on the exercise of the right of withdrawal in the tele-heating service (Resolution 278/2019/R/TLR). With this measure, the Authority intends to ensure the protection of the investments made by the operators and intervenes on the procedures for the exercise of the right of withdrawal by providing a level of protection, differentiated according to the type of use of the thermal energy supplied and the nature of the user (residential domestic and non-domestic) and, consequently, his contractual strength and technical-economic skills.
- The regulation of the transparency obligations of operators (Resolution 313/2019/R/TLR) which includes the minimum contents of supply contracts and billing documents, the methods of publication of prices applied by operators and other information relating to service quality and environmental performance. Provision is also made for the launch of a price monitoring system.
- The regulation of the technical quality of the tele-heating service with which it defines the safety of the service, with particular reference to the cartography, the emergency service, the search for water dispersions and the quality of the heat transfer fluid; the continuity of the service, with reference to both interruptions and anomalies in the heat supply and the efficiency of the heat distribution, with reference to heat losses due to both water dispersion and heat loss.

Where necessary, Edison will need to make an adjustment into line with these provisions.

Lastly, by means of resolution 122/2019/R/TLR, the Authority accepted the applications for the exclusion from the group of district heating and district cooling networks subject to the Authority's regulation presented by the company Comat Energia S.r.l. Currently, the Edison Group operates five tele-heating networks that are subject to regulation by the Authority.

## Issues Affecting Multiple Business Segments

**Energy Efficiency Certificates (EEC):** by means of Resolution No. 209/2019/R/efr of May 28, 2019, the Authority marginally amended some of the rules governing the determination of the tariff contribution (defined earlier in Resolution No. 487/2018/R/efr) for obligated parties (gas and electric power distributors), effective as of June 1, 2019 without affecting the tariff contribution for the 2018 year of obligation (June 1, 2018 - May 31, 2019). The above-mentioned resolution established that the tariff contribution is calculated by weighting the prices of EEC trading taking place through bilateral agreements only for the quantities traded bilaterally at prices below 250 euro/EEC. This amendment, requiring the weighting of bilateral trading prices for lower quantities than what was established previously, should have entailed (if the prices of the relevant bilateral agreements are lower than the market average) an increase in the unit tariff contribution for the 2019 year of obligation and for the subsequent years, with a positive effect for obligated entities like Infrastrutture Distribuzione Gas, an Edison Group company.

Subsequently, by means of determination 04/2019 of July 10, 2019, the Authority established the value of the tariff contribution for the year 2018, equal to 248.89 euro/EEC, to be paid to distribution companies that fulfil the obligations related to the acquisition of Energy Efficiency Certificates (EEC). The impact this has on distribution companies is negative as the value set by the Authority is below the average prices incurred for the purchase of Energy Efficiency Certificates in the reference period.

In November, the Lombardy Regional Administrative Court upheld the appeals filed by Acea and Italgas, resulting in the cancellation of part of the Ministerial Decree of May 10, 2018 (the Ministerial Decree with which the MISE, also redefining the tariff contribution scheme relating to the EECs, would have acted within the Authority's area of competence) and, in full, the resulting ARERA resolutions 487/2018/R/efr and 209/2019/R/efr. In execution of the Lombardy Regional Administrative Court's ruling, the Authority, by means of resolution 529/2019/R/efr of December 10, 2019, initiated a procedure to reform the tariff contribution. As a result of the procedure, a measure will be issued which will also be aimed at updating, if necessary, the value of the tariff contribution recognised for the year of obligation 2018 and to verify the possible need to make adjustments to the obligated parties.

For the extraordinary appeal filed by Infrastrutture Distribuzione Gas, the Council of State (on behalf of the President of the Republic) has not yet ruled.

**Law no. 12 of February 11, 2019, converting Decree-Law no. 135 of December 14, 2018:** Law no. 12 of February 11, 2019, converting Decree-Law no. 135 of December 14, 2018 containing "Urgent provisions for support and simplification for companies and the public administration" was published in the Official Journal on February 12, 2019. Specifically, the standard contains provisions for the preparation of a Plan for the Sustainable Energy Transition of Eligible Areas, with the aim of identifying suitable areas for the issuance of permits for the prospecting, exploration and production of liquid and gaseous hydrocarbons (Article 11-ter) and provisions concerning concessions for large water derivations for hydroelectric use (Article 11-quater).

For a more detailed description, reference should be made to the information already provided in the 2018 Report on Operations.



**“Unblock Work Sites” Decree-Law:** Decree-Law no. 32 of April 18, 2019, containing urgent provisions to relaunch the public contracts sector, accelerate infrastructural interventions, and for urban renewal and reconstruction following seismic events, was converted into law by Law no. 55 of June 14, 2019, published in the Official Journal of June 17, 2019. The regulatory provisions include amendments to the Public Contracts Code and experimental suspension of the effectiveness of public procurement and circular economy provisions (Article 1) and the introduction of urban regeneration measures (Article 5).

**“Growth” Decree-Law:** Decree-Law no. 34 of April 30, 2019, containing urgent measures for economic growth and to resolve specific crisis situations, was converted into law by Law no. 58 of June 28, 2019, published in the Official Journal of June 29, 2019. Some of the regulatory provisions include: tax benefits (“super-amortisation”) for investments in tangible operating assets starting from April 1, 2019 (article 1); simplifications in the regulation on tax benefits for energy efficiency initiatives and to reduce seismic risk (article 10); grants to municipalities for energy efficiency and sustainable local development initiatives (article 30); and the definition of a plan for the development of large-scale investments in Special Economic Areas (article 34), with subsequent positive impacts on the Group and, in particular, on the business areas relating to energy efficiency.

**Emissions - allowances assigned free of charge 2021-2025:** Resolution no. 70/2019 of the Ministry of the Environment’s ETS Committee adopts Directive 2018/410/EU, to support a more effective reduction of emissions in terms of costs and promote investments in favour of low carbon emissions. The resolution establishes that Ministry of the Environment needs to send the European Commission a list of plants by September 30, 2019 which as of January 1, 2021 and for 5 years fall within the scope of application of the ETS directive. This term regards plants that have been authorised to emit greenhouse gases by June 30, 2019.

**European Law 2018** - Law no. 37 of May 3, 2019 *“Provisions to meet obligations deriving from Italy’s membership in the EU - European Law 2018”* was published in Official Journal no. 109 of May 11, 2019, amending and supplementing various provisions of Italian law, including in the energy sector. In particular, article 21 repealed the provisions extending the incentive period for biomass, biogas and bioliquid plants that had been set forth in the 2016 Stability Law and which instead recognised to certain plants an additional new incentive over and above that set forth in the regulations to support renewables. These regulations will presumably be revised with the future FER2 Decree where geothermal energy should also be included among the renewable energy sources that will be eligible for incentives. The FER2 Decree should be approved by spring 2020.

**Decree-Law Milleproroghe** “Urgent provisions regarding the extension of the legislative terms, of organisation of public administrations, as well as of technological innovation” - Decree-Law No. 162 of December 30, 2019, published in the Official Gazette of December 31, 2019 and sent to Parliament for the start of the process of conversion into law. The measure contains, among other provisions, the extension of the protected electricity and gas market to January 1, 2022.

**2020 Budget Law** “Forecast State Budget for the financial year 2020 and multi-year Budget for the three-year period 2020-2022” - Law no. 160 of December 27, 2019, published in the Official Journal of December 30, 2019, entered into force on January 1, 2020. The provision contains, inter alia, the following measures:

- Alignment of the deadlines for concessions for large hydroelectric derivations in Trentino-Alto Adige with those of regions with ordinary status;
- Review of exemptions from royalty payments, applied only to production concessions with an annual production of less than or equal to 10 million standard cubic meter of gas on land and 30 million standard cubic meter at sea;
- Revision of excise duties on fuel gas for cogeneration plants with a slight increase in taxation;

- Introduction of invoicing provisions: 40 days' notice in cases of suspension of supply, and possible application of penalties in cases of proven unlawful conduct of the operator, in addition to the reimbursement of sums.
- Extension to December 31, 2020 of the tax deduction for building energy redevelopment initiatives and building restructuring. Moreover, it introduces limits to the application of the "invoice discount" pursuant to art. 10 of the Growth Decree-Law and does not allow the assignment of the credit resulting from tax deductions pursuant to art. 16-bis letter h of Presidential Decree 917/1986;
- Introduction of a 90% deduction for renovation work on building facades.

**Fiscal Decree-Law 2019** "Urgent tax provisions and for needs which cannot be deferred" - Decree-Law No. 124 of October 26, 2019, converted into law by conversion law No. 157 of December 19, 2019, published in the Official Gazette of December 24, 2019. The provision contains, inter alia, the following measures:

- Establishment of the own municipal tax on marine platforms (IMPi) as of tax year 2020. The tax applies to marine platforms, defined as surface-level structures intended for the production of hydrocarbons and located within the limits of the territorial sea, and is calculated on the basis of book values at a fixed rate of 10.6 per thousand.
- With effect from January 1, 2021, automatic access to the social bonus for the supply of electricity, gas and water services to all entitled parties is provided. No direct impacts are expected for the company.
- Exclusion of operations on marine platforms from those treated as export supplies, which are not included in the taxable amount for VAT purposes.



## FINANCIAL RESULTS AS AT DECEMBER 31, 2019

## Sales Revenues and EBITDA of the Group and by Business Segment

(in millions of euros)	Chapter (*)	full year 2019	full year 2018 (**)	Change	% change
<b>Electric Power Operations</b>					
Sales revenues	2	4,159	3,768	391	10.4%
EBITDA	2	423	328	95	29.0%
<b>Hydrocarbons Operations</b>					
Sales revenues	2	4,862	5,657	(795)	(14.1)%
EBITDA	2	272	203	69	34.0%
<b>Corporate Activities<sup>(1)</sup></b>					
Sales revenues	2	56	69	(13)	(18.8)%
EBITDA	2	(108)	(105)	(3)	(2.9)%
<b>Eliminations</b>					
Sales revenues	2	(909)	(766)	(143)	(18.6)%
<b>Edison Group</b>					
Sales revenues		<b>8,168</b>	<b>8,728</b>	<b>(560)</b>	<b>(6.4)%</b>
EBITDA		<b>587</b>	<b>426</b>	<b>161</b>	<b>37.8%</b>
as a % of sales revenues		<b>7.2%</b>	<b>4.9%</b>	-	-

(1) Includes those operations of Edison Spa, the Group's Parent Company, that engage in central and transversal activities, i.e., activities that are not directly tied with a specific business and certain holding companies and real estate companies.

(\*) See the Notes to the Consolidated financial statements.

(\*\*) The 2018 figures have been restated in accordance with IFRS 5.

Revenues at December 31, 2019 decreased compared with the previous year to 8,168 million euros, due mainly to the performance of Hydrocarbons Operation.

Group sales revenues total 587 million euros, up 37.8 % on the previous year, with a positive contribution from both the Electric Power Operation and the Hydrocarbons Operation.

See the sections of this Report that follow for a more detailed analysis of the performance of the individual business segments.

## Electric Power Operations

## Sources

(GWh) <sup>(1)</sup>	2019 full year	2018 full year	% change
<b>Edison's production:</b>	<b>20,628</b>	<b>18,798</b>	<b>9.7%</b>
- Thermoelectric power plants	15,876	14,763	7.5%
- Hydroelectric power plants	3,189	3,080	3.6%
- Wind power and other renewables	1,563	955	63.7%
<b>Other purchases (wholesalers, IPEX, etc.) <sup>(2)</sup></b>	<b>21,175</b>	<b>24,020</b>	<b>(11.8%)</b>
<b>Total sources</b>	<b>41,804</b>	<b>42,818</b>	<b>(2.4%)</b>

(1) 1 GWh is equal to 1 million kWh, referred to physical volumes.

(2) Before line losses.

## Uses

(GWh) <sup>(1)</sup>	2019 full year	2018 full year	% change
Customers <sup>(2)</sup>	14,897	13,694	8.8%
Other sales (wholesalers, IPEX, etc.)	26,907	29,124	(7.6%)
<b>Total uses</b>	<b>41,804</b>	<b>42,818</b>	<b>(2.4%)</b>

(1) 1 GWh is equal to 1 million kWh.

(2) Before line losses.

The Group operates in accordance with a business model that calls for the separation of power generation activities (thermoelectric and renewables), sales to the end-user market (*business and retail*) and buying and selling activities, aimed at implementing adequate segregation and risk hedging policies for the above-mentioned portfolios, and at maximising their profitability through their optimisation.

In relation to said model, Edison production in Italy came to 20,628 GWh, an increase of 9.7% compared to the previous year. The positive trend is due mainly to the performance of wind farms and other renewables, which increased by 63.7%, thanks to the entry into production of new wind farms, the acquisition of EDF EN Italia in July 2019, and the growth in thermoelectric production. As regards hydroelectric production, 2019 recorded a slight increase (+3.6%).

Sales to customers were up 8.8% mainly thanks to the higher volumes sold to the business segment.

Other purchases and sales are down on the values of the same period of the previous year by 11.8% and 7.6% respectively; it should be note that, however, these items include not only purchases and sales on the wholesale market but also purchases and sales on IPEX, albeit characterised by smaller unitary margins connected with the balancing of portfolios.

## Income Statement Data

(in millions of euros)	full year 2019	full year 2018	% change
Sales revenues	4,159	3,768	10.4%
EBITDA	423	328	29.0%

Sales revenues for 2019 came in at 4,159 million euros, up 10.4% compared to the previous year, mainly thanks to a more favourable sales mix, focused on end customers.

EBITDA totalled 423 million euros (328 million euros in 2018), marking an increase of 29%.

Thermoelectric generation, whose incidence was around a third on the EBITDA of the electric power operations, shows a slightly improved result compared to previous year thanks a greater margin, in particular on the MGP market, partially offset by some extraordinary income recorded in 2018. The renewable energy sector, which accounted for about half of the EBITDA of the electric power operation, recorded a positive trend, mainly thanks to a better performance of the hydroelectric sector, to the contribution of EDF EN Italia, consolidated starting from the month of July, equal to 29 million euros and the commissioning of some new wind farms.

## Energy Services

The economic data of the Electric Power Operations include the results of the *Energy & Environmental Services Market Division*.

Thanks to the Division, Edison plays an active role in the regions and in their business ecosystems, in researching and implementing practical and effective solutions in response to the burning issues of contemporary transformation: climate change, social development and new *business* paradigms.

Edison, in particular, contributes its personnel and its expertise, to create innovative and digital solutions for the efficient use of resources according to circular economy and urban regeneration paradigms.

Edison has an extensive offering in the energy and environmental services market which includes, by way of an example: energy and environmental advisory services, laboratory analysis, creation and management of systems for automatic production from renewable or high efficiency sources, integrated industrial waste management, energy redevelopment and efficient building management, urban district heating, digital platforms for the analysis, management and intelligence of solutions.

The solutions proposed are targeted at developing investment projects and efficient management of energy resources and environmental services for large industrial companies, small and medium enterprises, condominiums, commercial services sector, regions and the Public Administration.

The division's Energy & Environmental Services Market Division showed, for 2019, a 13.6% increase in sales revenues compared to last year, reaching 507 million euros (447 million euros in 2018), mainly due to the contribution of Zephyro, acquired in July last year. Gross operating is in line with last year, recording 84 million euros (84 million euros in 2018): the perimeter effect of Zephyro was offset by provisions for funds during the year and contingent assets recorded in 2018.

## Hydrocarbons Operations

### Sources of Natural Gas

(millions of cubic meters)	2019 full year	2018 full year	% change
Production <sup>(1)</sup>	9	11	(22.1%)
Production from discontinued operations	338	343	(1.5%)
Imports (Pipeline + LNG)	14,652	14,566	0.6%
Other purchases	4,980	5,811	(14.3%)
Change in stored gas inventory <sup>(2)</sup>	(4)	(17)	75.8%
<b>Total sources</b>	<b>19,974</b>	<b>20,714</b>	<b>(3.6%)</b>
<b>Production outside Italy from discontinued operations <sup>(3)</sup></b>	<b>1,785</b>	<b>1,909</b>	<b>(6.5%)</b>

(1) Net of self-consumption and at standard calorific power.

(2) Includes pipeline leaks. A negative change reflects additions to the stored gas inventory.

(3) Counting volumes withheld as production tax.

### Uses of Natural Gas

(millions of cubic meters)	2019 full year	2018 full year	% change
Residential use	2,627	2,804	(6.3%)
Industrial use	4,919	4,518	8.9%
Thermoelectric fuel use	6,626	6,501	1.9%
Other sales	5,803	6,890	(15.8%)
<b>Total uses</b>	<b>19,974</b>	<b>20,714</b>	<b>(3.6%)</b>
<b>Sales of production outside Italy from discontinued operations <sup>(1)</sup></b>	<b>1,785</b>	<b>1,909</b>	<b>(6.5%)</b>

(1) Counting volumes withheld as production tax.

Gas imports in 2019 were up slightly compared with the previous year (+0.6%). The reduction in purchases on the Italian market was only marginally offset by the increase recorded on the foreign market, resulting in a reduction in total other purchases of 14.3%.

The trend of changes in stock shows that, compared to last year, there were lower additions, particularly in storage in Italy.

Sales to residential customers decreased by 6.3%, attributable primarily to the performance of sales to non-industrial wholesalers.

Sales to industrial use increased by 8.9%.

Sales to thermoelectric users showed a positive trend compared with 2018, due mainly to thermo-captive segment, while sales to thermo-captive customers decreased slightly.

Other sales decreased by 15.8% due to the drop in Wholesale sales.

### Income Statement Data

(in millions of euros)	full year 2019	full year 2018 (*)	% change
Sales revenues	4,862	5,657	(14.1)%
EBITDA	272	203	34.0%

(\*) The 2018 figures have been restated in accordance with IFRS 5

Sales revenues for 2019 came in at 4,862 million euros, down by 14.1% compared to the previous year mainly because of a decreasing price scenario and volumes reduction.

EBITDA came to 272 million euros (including the regulated activities sector), up 69 million compared to 2018. The change reflects the use of new flexibilities on some contracts to import natural gas through pipelines and an unfavourable weather event that occurred in the first months of 2018, which squeezed down the margins in the previous year.

It should be remembered that the activities related to the E&P Business are not included in these values as they are treated as Discontinued Operations pursuant to IFRS5.

## Discontinued Operations

### Production

Gas production from discontinued operations totalled 2,123 million cubic meters in 2019, 5.7% less than the previous year (2,252 million cubic meters), due to a reduction in production both in Italy and abroad, with the exception of United Kingdom and Algeria.

Production of crude oil attributable to the discontinued operations decreased by about 9.2%, both in Italy and abroad.

### Income Statement Data

The E&P business is treated as a Discontinued Operations pursuant to IFRS 5, a description of which is provided in the section 1.4 of the Condensed Consolidated Financial Statements.

EBITDA (252 million euros) in 2019 is down 31% (367 million euros in 2018) due to lower sales revenues related to lower volumes and to a worsening price scenario.

### Investments

During 2019 *Edison Exploration & Production* invested 46 million euros in exploration, mainly in Egypt, and 120 million euros in development, mainly abroad and in particular in Norway.

## Corporate Activities

### Income Statement Data

(in millions of euros)	full year 2019	full year 2018	% change
Sales revenues	56	69	(18.8)%
EBITDA	(108)	(105)	(2.9%)

Corporate Activities include those operations of Edison Spa, the Group's Parent Company, that engage in central and transversal activities, i.e., activities that are not directly tied to a specific business, and certain *holding companies* and real estate companies.

Sales revenues for 2019 were down 18.8% compared to 2018, while EBITDA fell by 3 million euros, partially linked to a slight headcount increase.

## Other Components of the Group's Income Statement

(in million euros)	2019 full year	2018 full year (*)	% change
<b>EBITDA</b>	<b>587</b>	<b>426</b>	37,8%
Net change in fair value of derivatives (commodities and foreign exchange)	3	(7)	<i>n.m.</i>
Depreciation, amortisation and write-downs	(374)	(270)	(38.5%)
Other income (expense), non-Energy activities	(40)	(23)	(73.9%)
<b>EBIT</b>	<b>176</b>	<b>126</b>	39.7%
Net financial income (expense)	(42)	(8)	<i>n.m.</i>
Income (expense) from equity investments	6	4	50,0%
Income taxes	(42)	(29)	(44.8%)
<b>Profit (Loss) from continuing operations</b>	<b>98</b>	<b>93</b>	5.4%
<b>Profit (Loss) from discontinued operations</b>	<b>(562)</b>	<b>(26)</b>	<i>n.m.</i>
<b>Profit (Loss) for the year attributable to the owners of the parent</b>	<b>(479)</b>	<b>54</b>	<i>n.m.</i>

(\*) The figures for 2018 have been restated pursuant to IFRS 5 standard.

EBIT of 176 million euros are after depreciation, amortisation and write-downs totalling 374 million euros, a positive net change in the fair value of hedging of commodities and foreign exchange transactions amounting to 3 million euros (negative by 7 million euros in 2018) and other expense related to non-energy activities of 40 million euros.

The net result from *Continuing Operations* was a gain of 98 million euros (93 million euros in 2018), after net financial expense of 42 million euros, net income from equity investments of 6 million euros and income taxes of 42 million euros.

## Net Financial Debt and Cash Flows

The table below provides a breakdown of the changes that occurred in net financial debt:

(in millions of euros)	2019 Full	2018 Full
<b>A. NET FINANCIAL (DEBT) AT BEGINNING OF PERIOD</b>	<b>(416)</b>	<b>(116)</b>
IFRS 16 first adoption	(165)	-
<b>B. NET FINANCIAL (DEBT) AT JANUARY 1</b>	<b>(581)</b>	<b>(116)</b>
EBITDA	587	426
Elimination of non-cash items included in EBITDA	156	(37)
Net financial expense paid	(19)	1
Net income taxes paid (-)	(39)	(30)
Dividends collected	6	11
Other items from operating activities	(24)	(25)
<b>C. CASH FLOW FROM OPERATING ACTIVITIES</b>	<b>667</b>	<b>346</b>
Change in the operating working capital	251	7
Change in non-operating working capital	50	(25)
Net investments (-)	(876)	(702)
<b>D. CASH FLOW AFTER NET INVESTMENTS AND CHANGES IN WORKING CAPITAL</b>	<b>92</b>	<b>(374)</b>
Dividends paid (-)	(50)	(47)
Other items	(34)	3
Cash increase/decrease of net indebtedness (Discontinued operations)	57	118
<b>E. NET CASH FLOW FOR THE PERIOD</b>	<b>65</b>	<b>(300)</b>
<b>F. NET FINANCIAL (DEBT) AT END OF PERIOD</b>	<b>(516)</b>	<b>(416)</b>

The main cash flows for the period derive from EBITDA, as commented above, the positive change in working capital, thanks to the optimization measures implemented and net investments which include:

- the acquisition of EDF EN Italia Spa and EDF EN Service Italia S.r.l. for a total of 530 million euros;
- capital expenditures (288 million euros), mainly for the construction of new greenfield wind farms and complete reconstruction (39 million euros), the construction of Marghera Levante (44 million euros) and Presenzano (34 million euros) gas-fired combined-cycle thermoelectric power plants and environmental energy services (89 million euros);
- other acquisitions (-53 million euros) and disposals (+9 million euros);
- investments in financial fixed assets (17 million euros), in particular related to capital increases in IGI Poseidon SA and Depositi Italiani GNL Spa.

## Outlook and Expected Results in 2020

Edison estimates its EBITDA will be in a range between 560 million and 620 million euros in 2020.



## Edison Spa

## Financial Highlights

(in millions of euros)	2019 full year	2018 full year (*)	% Change
Sales revenues	6,194	6,916	(10.4%)
EBITDA (**)	258	130	98.5%
as a % of sales revenues	4.2%	1.9%	-
EBIT	100	(10)	n.s.
as a % of sales revenues	1.6%	(0.1%)	-
Profit (Loss) from Continuing Operations	90	82	9.8%
Profit (Loss) from Discontinued Operations	(501)	(27)	-
Net profit (loss)	(411)	55	n.s.
Capital expenditures	132	44	n.s.
Net invested capital	4,358	5,036	(13.5%)
Net Financial Debt (available funds)	(417)	(206)	n.s.
Shareholders' equity	4,775	5,242	(8.8%)
Number of employees	1,342	1,293	3.8%

(\*) In accordance with IFRS 5 standard "Discontinued operations", 2018 P&L and investment data concerning E&P have been restated in "discontinued operations".

(\*\*) The value of 2018 does not include the effects deriving from the application of the accounting standard IFRS16, applied starting from 1 January 2019.

Pursuant to Consob communication no. DEM/6064293 of July 28, 2006 the schedule below provide a reconciliation of the net result for the year and of the shareholders' equity of Edison Spa with Group interest in net profit and the shareholders' equity attributable to the shareholders of the Parent company at December 31, 2019:

### Reconciliation of the net result and the shareholders' equity of Edison Spa to the group interest in net result and the shareholders' equity attributable to Parent company shareholders

(in millions of euros)	12.31.2019		12.31.2018 (*)	
	Net result	Shareholders' equity	Net result	Shareholders' equity
<b>Net result and Shareholders' equity of Edison Spa</b>	<b>(411)</b>	<b>4,775</b>	<b>55</b>	<b>5,242</b>
- Results and carrying values of the consolidated companies, excluding minority interests	(20)	1,940	30	2,747
- Elimination of the carrying values of the consolidated investments in associates and in companies valued by the equity method		(1,394)		(2,092)
- Dividends of Edison Spa	(43)		(90)	
- Elimination of Parent company investments' adjustments	36		45	
- Investments in companies valued by the equity method	6	93	4	71
- Difference in profit (loss) from Discontinued Operations	(61)	(61)	0	(82)
- Other consolidation adjustments	14	(26)	10	
<b>Group interest in profit (loss) and Shareholders' equity attributable to Parent company shareholders</b>	<b>(479)</b>	<b>5,327</b>	<b>54</b>	<b>5,886</b>

(\*) Applying the accounting standard IFRS 5 the balances at December 31, 2018 were not re-exposed, while economic reconciliation items have been restated in order to be comparable with 2019.

## Risks and uncertainties

### Risk management at the Edison Group

Edison has developed an integrated business risk management model based on the international principles of *Enterprise Risk Management* (ERM), the COSO Frameworks specifically, the main purpose of which is the adoption of a systematic approach in mapping the Company's most significant risks, addressing in advance their potential negative effects and taking appropriate actions to mitigate them.

With this in mind, Edison has adopted a *risk mapping and risk scoring methodology*, that assigns a relevance index to each risk based on an assessment of its overall impact, probability of occurrence and level of control, and a Corporate Risk Model, developed in accordance with best industry and international practices that places within an integrated framework the different types of risks that characterise the business in which the Group operates:

- risks related to the external environment, which have to do with conditions in the market and the competitive environment in which the Group operates and changes in the political, legislative and regulatory context;
- operational risks, which are tied to processes, structures and business management systems, specifically regarding production and distribution activities;
- strategic risks, which are related to the definition and implementation of the Company's strategic guidelines.

The *Enterprise Risk Management* process is closely linked with the medium- and long-term planning process in order to correlate the Group's overall risk profile with the return on investment projected in the plan/budget document. The results produced by ERM are communicated to the Control and Risk Committee and the Board of Directors on predetermined dates and, are used by the Internal Audit Department as a source of information to prepare special risk-based audit plans.

An analysis of the overall results of the process for the year just ended is provided in the "*Risk Factors*" section that follows, while the "Financial Risks" section lists the main factors related to the commodity price, exchange rate, credit, liquidity and interest rate risks, for which specific safeguards have been adopted over the years to manage and minimise their impact on the Group's economic and financial equilibrium. For additional details about these risks see the information provided for IFRS 7 purposes in section 4 of the 2019 Consolidated financial statements entitled "Market Risk Management", paragraph 3.1 "Credit risk management" and paragraph 6.4 "Financial risk management".

In 2018, the Group adopted a tax risk management and reporting system, which is integrated within the Group's overall control system (the Tax Control Framework or TCF). The TCF adopted consists of a Tax Policy and General Rules applicable to all Group companies, as well as matrices, coordinated with the provisions of Law No. 262/2005, to monitor activities with potential tax impacts in the main business processes.

### Risk Factors

#### 1. Risks Related to the External Environment

##### Legislative and Regulatory Risk

A potential source of uncertainty for Edison is the constant evolution occurring in the reference legislative and regulatory framework, which affects market activity, rate plans, required levels of service quality and technical and operational compliance requirements.

In this regard, Edison is engaged in ongoing monitoring and constructive dialogue with national and local public institutions, so as to develop opportunities for discussing and promptly assessing the impact of regulatory changes, with the aim of minimising the resulting economic impact. In this context, as regards the main regulatory developments in progress, the most significant risk elements concern:

- the renewal of large-scale diversion hydroelectric concessions, whose regulation was revised extensively under Law no. 12 of February 11, 2019, published in the Official Journal on February 12, 2019. In fact, art. 11-quater contains provisions regarding large-scale diversion hydroelectric concessions and establishes, inter alia, that the Regions govern by law, to be issued no later than March 31, 2020, the concession assignment methods and procedures, that must be subsequently started within two years of the approval of the aforementioned regional law. For concessions that envisage an expiry term prior to December 31, 2023, including therein those already expired, the new regulation also establishes that the Regions govern, again by means of law, to be issued no later than March 31, 2020, the methods, conditions and quantification of the additional considerations and other expenses, to be paid by the outgoing concessionaire for the continued operation of the concessions beyond the expiry and for the time needed for completion of the assignment procedures. The law also governs the amendments to regional state property fees. With regard to large hydroelectric derivations in Trentino-Alto Adige, Budget Law no. 160/2019 provided for the alignment of the expiry dates of concessions with those of the regions with ordinary statute;
- uncertainty as to the deadline and methods for overcoming the protected electricity and gas market, with particular reference to Decree Law No. 162/2019, the so-called Milleproroghe Decree.

On the other hand, the Ministry of Economic Development decree of June 28, 2019, approved the regulations on the system for remunerating the availability of electricity production capacity (Capacity market), for an initial phase of implementation on which the Authority had provided its favourable opinion, as had the European Commission. The first auctions for the 2022 and 2023 delivery years took place in November.

### Market and Competitive Environment

The energy markets in which the Group operates recorded slight fluctuations in terms of demand in 2019, with competitive pressure remaining high and falling prices. Please refer to the section “The Italian energy market” for more in-depth information.

In the Italian electric power market, demand remains low. Unlike in the previous year, during the course of 2019, increased thermoelectric production offset a significant reduction in hydroelectric generation, influenced by less favourable weather conditions, and a decline in imports. In addition to thermoelectric generation, which accounts for a significant share of the Group's production mix, increased production from other renewable sources, including photovoltaic and wind power, also helped satisfy demand.

With regard to the abovementioned hydroelectric production, the portion produced by large-scale derivation concessions, of which the Group is the concession holder, will remain exposed in future years to the above-mentioned risk of the adverse outcome of tenders for the renewal of concessions that have already expired or are about to expire.

Moreover, technological changes in the electric power sector could make some technologies/services more competitive than those that are part of the Company's business. In order to mitigate this risk, Edison monitors and assesses the development of new technologies on an ongoing basis, which are discussed in greater detail in the “Innovation, Research and Development” section.

In the natural gas market, demand recorded a slight cumulative increase in 2019, when compared to the previous year. At sector level, the most significant increase was registered by consumption linked to thermoelectric generation, impacted by the elements conjunctural outlined above, while the industrial and residential sectors witnessed a slight reduction.

At the supply level, there was an abundance of LNG flows both at European and national level, which led to a strong pressure of the system with a negative impact on the price level in a situation already of high volatility.

In this context of increased market risk profile, an important tool to mitigate the effects of changes in the energy scenario and market conditions is provided by clauses allowing the renegotiation of prices of long-term gas procurement contracts. With regard to these contracts, Edison finalised some renegotiations/renewals during the year, while others are still in progress.

## Country Risk

The Edison Group's presence in the international markets involving both the production and marketing of electric power, exposes the Company to a whole series of risks stemming mainly from political, economic, social, regulatory and financial differences compared with conditions in the country of origin. Currently, the area of greatest importance for the Group is Greece, where Edison, through Elpedison Sa, produces and markets electric power in a joint venture with its Greek partner *partner* Hellenic Petroleum.

- In Greece, the end of the third bail-out by the European institutions, closed with the last loan in August 2018, represents an important objective reached for the country and helps the Government regain public support after years of unpopular austerity measures requested by international creditors, although unknowns still remain concerning the management of long-term debt. In May and July, elections to the European Parliament and legislative elections were held, respectively, which resulted in the New Democracy Party winning. The main objectives of the new government relate to privatisation, the revival of investment, including major infrastructure projects, and the reduction of fiscal and administrative burdens. The economic and financial situation, supported in particular by the recovery in domestic demand, improved for the third consecutive year, albeit at a lower rate than in the previous two years. In October, Standard&Poor's raised the sovereign rating to BB-, with a positive outlook.

In the energy sector, the production capacity remuneration mechanism, approved last year and in which Elpedison Sa participated successfully in auctions for the 2019 period only, ended in April. The definition of a new system is expected in the course of 2020. The start of operations on the short and medium-term energy trading platform, aimed at increasing competition and supporting market coupling with Italy and Bulgaria, previously planned for 2019, is also expected in 2020.

The Company is committed to constant monitoring of the country's political and economic environment, to which the Group is exposed as at December 31, 2019, as indicated below:

(in million euros)	12/31/2019	12/31/2018
Loan receivable from the affiliate	61	63
Guarantees provided	48	29
Equity investments <sup>(1)</sup>	36	17
<b>Total</b>	<b>145</b>	<b>109</b>

(1) 2019: Refer to the equity investment in IGI Poseidon Sa and Elpedison SA; 2018: Refer to the equity investment in IGI Poseidon Sa.

Additionally, with reference to the long-term gas procurement contracts, the Company is exposed to the geo-political context of the countries from which it obtains its supplies and, therefore, constantly monitors the situations therein.

## 2. Operational Risks

### Processes, structures and Business Management Systems

Edison's core businesses include building and operating technologically complex facilities for the production of electric power and hydrocarbons that are interconnected along the entire length of the value chain, managing gas storage centres, developing gas infrastructures, marketing energy efficiency services and solutions and distributing electric power and gas in retail and wholesale markets. These activities, which could entail the involvement of third parties, expose the Group to risks deriving from the potential inefficiency of internal processes and organisational support structures or exogenous events, such as malfunctions or unavailability of equipment and machinery. These risks could potentially have repercussions on the Group's profitability, the efficiency of its business activities and/or its own reputation.

The policy to manage these risks calls for the adoption of specific security and quality standards, and the implementation of upgrades to comply with international and national laws and the requirements of local entities with regulatory authority

over such issues and of activities to improve the quality of processes in the various areas of business, with special focus on customer services. The management of potential crisis events is governed by specific internal guidelines designed to provide a quick and effective response to potential crisis situations that could cause injuries to people and damage the environment and the Group's facilities and reputation.

Additional information about the management of environmental and occupational safety risks is provided in the section of this Report on Operations as at December 31, 2019 entitled "Health, Safety and the Environment."

### Information Technology

The Group's diverse activities and business processes are supported by complex information systems. Risk issues exist with regard to the adequacy of these systems and the availability, integrity and confidentiality of data and information.

With respect to the first point, in 2019 several important projects continued and/or were completed and new ones were also launched; in particular:

- the "Mercurio" software program was put into operation for the Gas Midstream, Energy Management & Optimisation Division, in order to re-engineer the core application supporting gas logistics processes (short-term and long-term);
- the "*Enterprise Data Platform*", the company platform containing data of different types and coming from very heterogeneous systems, is being developed as part of the "*Digital Transformation*" programme for the Gas & Power Market Division, with the specific objectives of extending the perimeter of data coming from digital channels (new sales / after-sales portals, apps, social networks) and to improve the monitoring of the data itself, controlling the processing process and ensuring an adequate level of security and privacy management, the optimisation of compressor consumption of the Energy & Environmental Services Market Division and the predictive maintenance of the thermoelectric power plants of the Power Asset Division;
- the *Customer Relationship Management* "CRM" is currently being developed for the Energy & Environmental Services Market Division, with the extension of modules already in production to new market areas of the division: in addition, the Smart Audit and Smart Power systems have also been released to production;
- the RACE (*Revision of Corporate EESM Applications*) project, which is being released, is aimed at completely re-engineering the corporate information system of the Energy & Environmental Services Market Division's corporate area, with the adoption of Edison's SAP system appropriately modified to support the division's processes and the introduction of applications for the active billing and *Enterprise Performance Management* system;
- lastly, also relating to the Energy & Environmental Services Division, the infrastructural integration within the Edison world of the new companies acquired is at the completion phase.

With regard to the risk of unavailability caused by a system fault, Edison adopted high reliability hardware and software configurations for those applications that support critical activities. These configurations were regularly tested during normal operations. Lastly, to protect against disasters, a disaster recovery solution is in operation which is tested annually (last successful test performed in June 2019).

The risk relating to the integrity and confidentiality of company data and information and their availability in the event of cyber-attacks that are increasingly more frequent and sophisticated, is mitigated with the adoption of strict security standards and solutions; the service of the Security Operation Centre (SOC), operational since January 1, 2016, which aims to prevent and manage new forms of cyber attacks was optimised through a process of "refinement" of analyses to improve their effectiveness. Finally, the *Rex Wannacry* project is being developed to increase the resilience of the company's information system to new generation attacks (at the end of 2019, the tool for a timely and automatic inventory of all devices connected to the network was released. In 2020 the development of the "*asset & vulnerability management*" service is planned, aimed at taking the necessary actions on possible security problems in response to actual attacks). In addition, the *Segregation of Duty* project on the SAP ISU billing system was completed.

### 3. Strategic Risks

The development of the core businesses of the Edison Group must be supported with investments, acquisitions and selected divestments, implemented as part of a strategy to streamline the overall portfolio and constantly responding to the competitive environment: the Group's ability to strengthen its core businesses in the markets where it operates is dependent on the effective deployment of these initiatives.

More specifically, insofar as direct investments are concerned, they typically entail a risk related to potential overruns in operational and investment costs, as well as possible delays in the start of commercial service, due in part to uncertainties in the permit issuing process, with a resulting impact on the profitability of these initiatives.

As for the strategy of growth through acquisitions, its success depends on the availability in the market of opportunities that could help the growth of the Group's core businesses at an acceptable cost and on the Company's ability to identify those opportunities on a timely basis and effectively integrate the acquired assets into the Group's activities.

In order to mitigate these risks, the Company adopted a series of internal processes to monitor the research and assessment phases of investment initiatives. In addition to the use of appropriate written procedures, these processes require the use of due diligence activities, binding contracts, multilevel internal authorisation processes, project risk assessment activities and project management and project control activities.

## Financial Risks

### Commodity Price Risk

The Edison Group is exposed to the risk of fluctuations in the prices of all of the energy commodities that it handles, which affect the Group both directly and indirectly through indexing mechanisms contained in pricing formulas. Moreover, because some of the above-mentioned commodity prices are quoted in a foreign currency, the Group is also exposed to the resulting foreign exchange rate risk.

The activities required to manage and control these risks are governed by the *Energy Risk Policies*, which require the adoption of specific risk limits, in terms of economic capital and the use of financial derivatives that are commonly used in the market for the purpose of containing the risk exposure within preset limits.

### Foreign Exchange Risk

The activities carried out by the Group in currencies different from the euro and its strategies of expansion in the international markets expose the Company to fluctuations in foreign exchange rates. The guidelines concerning the governance and strategies to mitigate the foreign exchange risk generated by business activities are set forth in specific policies, which describe the foreign exchange risk management objectives depending on the different nature of the risk in question.

The Company adopts a centralised type of management model, through which the Parent Company is able to constantly safeguard the Group's economic and financial equilibrium by constantly monitoring exposures and implementing appropriate hedging and foreign exchange procurement strategies designed for risk mitigation purposes.

### Credit Risk

With regard to the risk of potential losses caused by the failure of any of the counterparties the Company interacts with to honour the commitments they have undertaken, the Group has implemented for some time procedures and tools to evaluate and select counterparties based on their credit rating, constantly monitor its exposure the various counterparties and implement appropriate mitigating actions, primarily aimed at recovering or transferring receivables.

### Interest Rate Risk

Because it is exposed to fluctuations in interest rates primarily with regard to the measurement of debt service costs, the Edison Group assesses on a regular basis its exposure to the risk of changes in interest rates, which it manages mainly by defining the characteristics of the facilities during the negotiation phase.

### Liquidity Risk

The liquidity risk has to do with the possibility that the Company may not have access to sufficient financial resources to meet its financial and commercial obligations in accordance with agreed terms and maturities.

The policy to manage this risk, integrated at the EDF Group level, is designed to ensure that the Edison Group has access to sufficient credit facilities to meet short-term financial maturities, while at the same time consolidating its funding sources.

## Provisions for risks and charges

In addition to the risk management and mitigation activities described above, when faced with present obligations deriving from past events, which can be of a legal or contractual nature or result from statements or conduct of the Company such as to engender in third parties a valid expectation that the Company is responsible or assumes responsibility for fulfilling an obligation, the Edison Group recognized over the years adequate accruals to special provisions for risks and charges listed among the liabilities in the financial statements (see also the accompanying Notes to the consolidated financial statements). More specifically, the companies of the Group are parties to judicial proceedings and some tax disputes, a description of which is provided in the chapter 8 “Non-energy operations” of the 2018 consolidated financial statements.



## OTHER RESULTS FROM OPERATIONS

### Innovation, Research and Development

The Research, Development & Technical Innovation (RD&TI) Department has continued on its path of organisational and structural change, rendered necessary by the rapid changes in the energy sector, so as to continue to ensure the study and development of solutions to support the other departments and business units.

The main milestones in 2019 were the closing of the Trofarello centre and the inauguration, in September, of Officine Edison in Milan, located inside the PoliHub, the Innovation and Start-up Incubator of the Milan Polytechnic. In this space, the rooms of the D.A.F.N.E. (Digital Arena for the Next Edison) project are also located.

The Officine Edison Torino, the multifunctional space within the Energy Centre, the facility of excellence for innovation created by the Turin Polytechnic, is being expanded. In particular, a new laboratory is being built and will be operational in early 2020.

### Health, Safety and the Environment

The main results achieved in 2019 and projects under development are reported below:

#### Safety Performance Trend

The Group consolidated the practice of presenting, based on a comprehensive and integrated approach, the effects of prevention programmes to promote a culture of occupational health and safety, combining the data for Edison's personnel and for employees of suppliers, assigning to the management throughout the organisation improvement objectives compared with the average results for the previous three years.

The reference indicators at national level are the frequency index<sup>1</sup> and the gravity index<sup>2</sup>. It should be noted that the data for 2019 includes data relating to companies acquired during the past year, which were not included in the 2018 report; companies with more significant risk profiles than in the past scenario (e.g.: service activities in the public administration).

Therefore, on the basis of this approach, the year 2019 closed with a combined injury incidence rate for activities in Italy and abroad that came in at 1.8, a slight improvement over 2018 (1.5 without the companies acquired). More specifically, the injury incidence rate was 2.0 for company employees, exactly the same as 2018 (1.2 without the companies acquired), while that for employees of contractor companies stood at 1.4, an improvement compared to 2.0 in 2018 (also 2.0 without the acquired companies). The total seriousness rate at the end of 2019 was 0.05, slightly lower than the figure in 2018 (0.06) without the acquired companies, confirming the limited severity of our accidents.

It should be noted that, for the purposes of comparison also within the group to which it belongs, the Company also uses the Lost Time Index Rate (LTIR) indicator relating only to accidents occurring for causes directly related to work activities (work related). In this sense, 2019 closed with an overall LTIR of 1.3, an improvement compared to 1.7 in 2018. More specifically, the LTIR for Company employees closed at 1.3, below the 1.5 recorded in 2018, while that of employees of contractor companies stood at 1.4, a marked improvement compared to 2.0 in 2018.

#### Activities Concerning Health, Safety and the Environment

The main activities and processes carried out in 2019 are reviewed below.

- The requirements of the applicable regulations concerning health, safety and the environment were satisfied and verified also with special audits to test legislative compliance, specifically with regard to updating risk assessments and holding periodic safety meetings, during which the implementation progress of training programme and the macro results of the employee health monitoring were presented. In addition, the timing and qualitative requirements

<sup>1</sup> Calculated as the ratio between the number of injuries and the number of hours worked, multiplied by one million.

<sup>2</sup> Calculated as the ratio between days of work lost due to injuries and the number of hours worked, multiplied by one thousand.



of the deadlines of national environmental laws, which fall for the most part in the first half of the year, were complied with.

- All of the required inspections and/or renewal visits for the management systems certified in accordance with the UNI EN 14001 environmental standard, the BS OHSAS 18001 health and safety standard (and associated process of transfer to standard UNI EN ISO 45001, which should be completed by March 2021), the UNI EN ISO 9001 quality standard, the UNI EN ISO 50001 energy standard and the UNI CEI 11352 energy services (ESCo) standard were completed. In addition, where voluntarily applicable, the scheduled audits were conducted to maintain EMAS environmental registrations.
- All audits conducted in relation to the aforementioned schemes were successful, confirming the quality, environment and safety certificates in place, guaranteeing the validity of our management and control systems and compliance with legal worker health and safety requirements, such as risk assessment, health surveillance, training, business coordination and compliance with environmental protection laws implemented by the corporate organisations.
- An overall company-wide review of the environmental and safety systems was carried out in March 2019, also in accordance with the Organisational Model and the relevant protocols pursuant to Legislative Decree No. 231; on that occasion, the progress status of the targets set as part of the 2018-2020 road map were monitored and the internal audit plan and cross-functional training activities for the health, safety, environment and quality professional family were shared.
- The activities of the HSE Select Committee continued, established with a view to improving the integration and effectiveness of the company's organisational model in line with the individual management systems. The Committee consists of HSE representatives from every Division, whose main task is to identify, coordinate and monitor the initiatives that impact all operating entities, also in consideration of the Group objectives and policies, through monthly meetings.
- There were no incidents in 2019 with an impact on environmental matrices (soil, subsoil, surface water and biodiversity).
- With regard to the situation that emerged in 2018 during ISPRA's visit to the Vega platform, in relation to which information came to light which showed that authorisation limits had been exceeded on three occasions, and for which action was immediately taken to return within these limits, it should be noted that, in 2019, the Integrated Environmental Authorisation was re-examined by the relevant Authorities, which accepted a new monitoring and control plan, which was verified during a visit by ISPRA in June. The final report sent in December did not reveal any discrepancies, confirming compliance with the authorised limits.
- All situations of potential emergency identified in the Edison sites were subject to work simulations or tests, in certain cases also with the participation of third parties present in the area or the authorities responsible for controlling their effectiveness.
- The process of collecting and analysing the environmental and health and safety data needed to draft and issue the Group sustainability report and Edison's non-financial statement for 2019 was carried out and completed in accordance with the time-scales and methods required by the reference standards.

In 2019, a number of significant projects were carried out or started, including:

- identification, analysis and sharing of high potential events (HPE) in order to prevent accidents and injuries.
- self-assessment according to the BEST guidelines shared with the Group (Building Excellence in Safety Together) carried out at the Operating Divisions, in order to further increase the quality of health and safety management with the ambition to achieve excellence in this field;
- expansion of training and awareness initiatives, such as the "Safety TUTOR" project at the Power Division's sites (as an in-depth study of previous risk perception training) and consolidation of the initiative at Edison E&P Operations Italia;

- establishment of the Environment, Health and Safety function in the Gas & Power Market Division, which will have the task of ensuring the management of specific issues within the scope of activities and of the offices and physical locations where the Division operates, in particular to the structures operating in the territories, through support and contribution in the initiatives for the definition, modification, implementation of the layout of the offices and places where the Division's personnel operates, and ensuring the preparation of contractual documentation on health, safety and the environment and the management of business documentation by the division personnel dedicated to the management of relations with companies/third parties;
- as part of the digitisation process in the environment, health and safety sector, in 2019 the use of the ESI WEB application (risk assessment in the workplaces) was extended to the companies acquired, the pilot project for the management of the health surveillance process at the Foro Buonaparte headquarters was launched and the application was identified to computerise the assessment of risks from interference with external companies, which will be launched in 2020;
- continuation of activities aimed at protecting biodiversity through a study conducted with the organisation WCMC (World Conservation Monitoring Centre), for the analysis of the sensitivity and vulnerability of the areas around Edison production sites. This study was conducted by analysing the data in the IBAT (Integrated Biodiversity Assessment tool) database, well-known at global level, with which it was possible to identify the areas that, owing to the rarity of the species present, are recognised as areas to be protected. In this sense, objectives and strategies for the period 2020-2022 were identified at the end of the year.

## Human Resources and Industrial Relations

### Human Resources

At December 31, 2019, the workforce amounted to 5,631 employees (including 949 employees of the E&P Division), compared to 5,372 employees at December 31, 2018 (of which 966 of the E&P Division) with overall growth in the year of 259 units (276 excluding the E&P Division) generating an increase in staff of +4.8%, mainly due to increases in the Power Asset Division in the renewable energy sector and the development of orders in the *Energy & Environmental Services Market* (EESM) Division.

As regards perimeter effects, we point out the acquisition of the company EDF EN Italia in July 2019 (+24 employees), the acquisition of the company EDF EN Services Italia s.r.l. on December 20, 2019 (+76 employees) and the sale of the company Compagnia Energetica Bellunese (CEB) from January 2019 (-22 employees).

### Industrial relations

The table below shows the main events of general significance for the Edison Group that occurred in the first half of 2019:

**Renewals of Electricity, Energy and Oil, Gas - Water national collective labour agreement:** During the second half of 2019, the three main contracts applied by the Edison Group in the commodities area were renewed. More specifically:

- *National collective labour agreement for Electricity:* the renewal agreement of October 9 relates to the period from January 1, 2019 to December 31, 2021 and provides for an increase in the minimum tables, the disbursement of a share of the sector's productivity for the years 2020 and 2021 and a slight increase in the contribution - to be paid by the companies - to the supplementary pension fund. The main changes to the regulatory part concerned the definition of a process for the removal of seniority increases and their transformation into a support measure for supplementary pension provision, the introduction of a subjective right to compulsory training of 28 hours in the three-year period.

- *National collective labour agreement for Energy and Oil:* the renewal agreement dated September 19, relates to the period January 1, 2019-December 31, 2021 and provides for an increase in the minimum tables, the payment of an E.D.R. and an increase - to be paid by the companies - in the contribution to the supplementary pension fund as from July 2020.

- *National collective labour agreement for Gas-Water:* the renewal agreement of November 7 relates to the three-year period from January 1, 2019 to December 31, 2021 and provides for an increase in the minimum tables, the disbursement of a share of the sector's productivity for the years 2020 and 2021 and an increase in the contribution to supplementary pensions from June 2020.

In addition, for the three types of contract, an agreement was signed for the definition of the Performance-related bonus for the three-year period 2019/2021. The agreement confirms the structure of the Performance-related bonus previously in place, which was built on the basis of performance indicators for the entire Edison Group and establishes the standardisation of the different achievement rates starting in 2020.

On July 23 and September 20, two agreements were signed for the definition of the 2019 Performance-related bonus for the companies Fenice S.p.A. and Sersys Ambiente S.r.l., respectively, confirming the structure of the Performance-related bonus previously in place.

### Rationalisation of national collective labour agreements and harmonisation of treatment

In order to streamline the number of national collective labour agreements applied within the Group and ensure uniform treatment of employees who operate in homogeneous sectors of activity within the Group, the agreement of November 15 agreed to gradually extend the National Collective Bargaining Agreement for Electric Power to Edison Energia, Attiva, EDF EN Italia and Assistenza Casa. The total number of personnel involved in this operation is approximately 250.

### **Sale of Edison Exploration & Production S.p.A.**

On July 4, a preliminary agreement was signed with Energean Oil & Gas Plc, subject to government authorisations being obtained from all countries involved, for the sale of 100% of the shares in Edison E&P S.p.A. and its subsidiaries.

In order to support the sale project, Edison, Energean and the OO.SS. in the Energy and Oil sector met several times to define a framework of industrial relations for the period after the closing. As a result of the above-mentioned meetings, an Industrial Relations Protocol was signed in which the following were defined: the different areas and levels of union discussions, the confirmation of the recently elected RSUs, the confirmation of the existing bargaining (including the Energy and Oil National Collective Labour Agreement) and the employment protection clauses already contained in the preliminary contract of July 4.

In addition, during the plenary sessions of the Group's European Works Council (EWC/EWC) on November 27, a detailed presentation of the progress made in the sale of Edison E&P S.p.A. was provided.

### **Energy & Environmental Services Market Division: merger by incorporation of Edison Facility Solutions S.p.A. and Westpide S.r.l. into Zephyro S.p.A.**

On November 29, an agreement was signed with which the trade union procedure was concluded pursuant to art. 47 of Law no. 428 of December 29, 1990 relating to the merger by incorporation of Edison Facility Solutions S.p.A. into Zephyro S.p.A. The merger, which involved 123 workers and took effect from January 1, 2020, is aimed at managing more effectively and efficiently, in a single dedicated company, all the activities aimed at providing design, execution, maintenance and plant and energy management services for civil and public, hospital and industrial buildings. At the same time as the merger, Zephyro S.p.A. changed its company name to Edison Facility Solutions S.p.A. and the national collective labour agreement for workers in the Mechanical Engineering and Plant Installation industry will apply to all non-managerial personnel.

## **Organisation and Employee Services**

The main organisational changes that occurred in the reference period are reviewed below:

- during the first half, the organisational macro-structure and the main responsibilities of the Gas & Power Market Division, were partly reconfigured through the introduction of "territorial models" in order to enhance channel synergies and the territorial presence.

Following the acquisition of 100% of Assistenza Casa, a new Retail Services Delivery Department was also created, which was assigned the main responsibility of providing customers with delivery services for insurance products and other VAS (value-added services) sold by the Market Departments.

The integration of the activities and resources previously allocated to Edison Energie within the Gas & Power Market Division was also completed, taking advantage of the management synergies set out in the acquisition business plan and continuing to develop the customer portfolio acquired, also through the gradual expansion of the range of energy commodities, products and services.

- during the year, in various steps between the first and second half of the year, the reorganisation of the main structures of the EESM Division was completed: in particular, a new Department dedicated to the FCA CNHI customer was created, and the Services Delivery & Contract Management Department structure was restructured, focused on services for industry customers.

Through a process of organisational and corporate integration, the structure of the PA Market EESM Department was redefined, which involved, among other things, the merger between Zephyro SPA and Edison Facility Solution SPA.

Similarly, the corporate structure of environmental services activities has been redefined.

Also within the division, the reorganisation of the main support functions (HR, FINANCE; Compliance & Audit, Procurement) was completed.

- during the second half of the year, the Engineering Division's macro-structure and operating model was redefined with the aim of effectively ensuring the study, design and specialist engineering, management and site activities of construction and energy efficiency projects, plants, infrastructures and buildings in the various operating contexts of the company.

With regard to employee services, the Company continued to provide significant support to the "Edison per Te" employee well-being programme, the objective of which is to help employees reconcile their personal needs with their professional obligations with the aim of improving their quality of life. Employees continue to give highly positive ratings to this programme, as shown in the results of the annual My Edf 2019 survey. Through said survey conducted by the company IPSOS, the group of services for employees and pension, healthcare and accident cover proposed to employees also met with an excellent level of satisfaction, sitting at around 85%, higher than the average of other large Italian companies. The use of *flexible benefits* continues, whereby it is possible to convert performance-related bonuses to welfare services and benefits, in accordance with the criteria set forth by law and the trade union agreements signed at the Company. This initiative provides employees with the added possibility of using an additional welfare credit deriving from the conversion of performance-related bonuses to satisfy additional needs in terms of reconciling their personal needs with their professional obligations, as well as to contribute to their own supplementary pension, increasing the net value of their overall salary package without an increase in costs for the company.

## Training and Development

In 2019, Edison implemented a training plan of 211,600 hours (177,500 excluding the contribution of the E&P Division) which involved around 85% of the company population, for a total cost of € 9,636,000 (8,374,000 without E&P) ( includes internal costs or the cost of personnel dedicated to training and costs of the training beneficiaries' hours and external costs of training), of which € 436,000 was the financing procedure through the use of the training account of the interpretative funds.

During 2019, the managerial training offer was reviewed and expanded in line with business strategies and the evolution of the external context. In the January-March period, the new managerial development path "*Leading People, Leading Business*" was delivered, involving thirty managers and in the second half of the year the High Performance Leadership Lab was launched, an experiential leadership development laboratory aimed at twenty-five young people who participated in the potential assessment process (*long term talent assessment*) during the year.

As regards digital training, the platform *Digital Training MyLA – My Learning Area* was enriched with new contents, an environment integrated with the Edison intranet that makes it possible to quickly and easily access all e-learning contents, in particular, on certain matters like HSE, compliance and digital education. In this context, the extension of the digital skills education programme (Energy Gate) at the Energy and Environmental Services Division has begun. The project uses different training formats: e-learning, webinars and mentoring sessions and involved 719 people from the Division.

Edison has always been committed to the education, guidance and training of young people.

Since 2015, Edison has provided Work Experience courses throughout the country. The commitment to give direction to young people is driven by the desire to disseminate the culture of energy and environmental sustainability among the new generations. The main initiatives include the following projects:

- *Deploy Your Talent*: a project promoted by the Sodalitas Foundation that aims to promote the diffusion of studies in technical-scientific disciplines and to overcome the gender stereotypes that characterise them.
- Two "*Tuned On Edison*", paths designed and managed by the young people of the Edison Young Community aimed at fostering knowledge of the Energy professions, through an interactive journey through the Company's Departments. The schools "adopted" were ITIS Molinari and Liceo Natta in Milan,

- *Energia Mi Piace*, promoted by Unindustria Rome, the "Giornata della Tecnologia" and "Un Lavoro con Energia", promoted by Assolombarda.
- A course of Orientation to University and Work for the children of employees. The online e-learning platform is run by an external provider and lasts a total of 60 hours.

Huge attention was also focused on the insertion and training of young personnel, predominantly new graduates or with little professional experience, at whom Edison's graduate programme was aimed, i.e. the Young Community, a three-year development and training programme. The year 2019 saw the implementation of the usual training courses on cross-company skills and the six-monthly course on *Economics* carried out in blended mode on the internal *e-learning platform MYLA* and the *Skill Lab training* on some skills of the management model.

The *EdisonTalks* continued with interviews with the Company's top management and in-depth analysis of certain issues of interest.

Lastly, the new edition of the Edison Energy Camp was held at Edison's headquarters in Rome, with the support of the LUISS Business School. This intensive training course on Energy involved 42 participants, including personnel from Edison's Young Community and university students from various Italian universities (Luiss, Turin Polytechnic, Universities of Bari, Palermo, L'Aquila and Naples). The training week was enriched by the contributions of WEC (*World Energy Council Italia Services*), as well as other business, consulting and institutional entities.

As part of the *company's Onboarding* path, also in 2019, EXPO was held, dedicated to new colleagues joining the Group, the event presenting the trades and activities of each company Division.

Furthermore, the strategic partnership with MIP continues for the design and delivery of a *Corporate Master in Energy Business & Utilities*, dedicated to 31 professionals of the company who have the potential and the interest to develop across-the-board knowledge of the energy sector and analyse the business model in depth. The 2019 edition is the fourth edition that has confirmed the search for an increasingly innovative teaching methodology. The *Corporate Master* also obtained ASFOR (Italian Association for Management Training) accreditation: a certification as an MBA Master's degree from an external institution confirms the quality and drive of all the teaching innovation of the program.

Technical-professional training continues to be at the heart of the Business Divisions' training investments. In particular, the *Energy & Environmental Services Market Division*, continued the project called "*Top Technical Expertise*" with the aim of developing and consolidating the technical training of plant operating personnel and at the same time enhancing the know-how present in the company through a greater involvement of internal teachers. This programme is part of a wider project aimed at achieving the contractual objective of continuous training, which requires each member of personnel to have access to at least 24 hours of non-compulsory training in the 2017-2019 three-year period.

## Sustainability

Edison's sustainable business model is illustrated in the Consolidated Non-Financial Statement pursuant to art. 3 and art. 4 of Legislative Decree No. 254 of 2016, contained in the 2019 Financial Report.

## OTHER INFORMATION

Pursuant to art. 2428 of the Italian Civil Code, the Company provides the following disclosure:

- at December 31, 2019, it did not hold treasury shares or shares of its parent company in the portfolio, neither indirectly through nominees nor other third parties. No transactions involving treasury shares or shares of the parent company were executed during the financial year, neither indirectly through nominees nor other third parties;
- the Group executed transactions with related parties. A description of the most significant transactions is provided in the section 9.4 of the 2019 consolidated financial statements entitled "Intercompany and Related-party Transactions";
- no secondary registered offices have been established.

The Company chose to avail itself of the options provided under art. 70, paragraph 8, and art. 71, paragraph 1-*bis*, of the Issuers' Regulations. Consequently, it is not complying with the requirement to make available to the public an Information Memorandum in connection with significant transactions involving mergers, demergers, capital increases through conveyances of assets in kind, acquisitions and divestments.

## REPORT OF THE INDEPENDENT AUDITORS