

Interim Report

at 30 June 2019



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COMPANY OFFICERS

Board of Directors ⁽¹⁾

| | |
|-------------------------|---|
| Chairperson | Renato Boero ⁽²⁾ |
| Deputy Chairperson | Moris Ferretti ⁽³⁾ |
| Chief Executive Officer | Massimiliano Bianco ⁽⁴⁾ |
| Directors | Sonia Maria Margherita Cantoni ⁽⁵⁾ Enrica Maria Ghia ⁽⁶⁾ Pietro Paolo Giampellegrini ⁽⁷⁾ Alessandro Giglio ⁽⁸⁾ Francesca Grasselli ⁽⁹⁾ Maurizio Irrera ⁽¹⁰⁾ Cristiano Lavaggi ⁽¹¹⁾ Ginevra Virginia Lombardi ⁽¹²⁾ Giacomo Malmesi ⁽¹³⁾ Gianluca Micconi Tiziana Merlino Licia Soncini ⁽¹⁴⁾ |

Board of Statutory Auditors ⁽¹⁵⁾

| | |
|--------------------|-------------------------------------|
| Chairperson | Michele Rutigliano |
| Regular Auditors | Cristina Chiantia Simone Caprari |
| Alternate Auditors | Donatella Busso Marco Rossi |

Financial Reporting Manager

Massimo Levrino

Independent Auditors

PricewaterhouseCoopers S.p.A. ⁽¹⁶⁾

⁽¹⁾ Appointed by the Shareholders' Meeting of 22 May 2019 for the three years 2019-2020-2021.

⁽²⁾ Appointed Chairperson by the Shareholders' Meeting of 22 May 2019.

⁽³⁾ Appointed Deputy Chairperson at the meeting of the Board of Directors of 22 May 2019.

⁽⁴⁾ Appointed Chief Executive Officer at the meeting of the Board of Directors of 22 May 2019.

⁽⁵⁾ Member of the Control, Risk and Sustainability Committee appointed on 22 May 2019.

⁽⁶⁾ Member of the Control, Risk and Sustainability Committee appointed on 22 May 2019.

⁽⁷⁾ Member of the Remuneration and Appointments Committee, appointed on 22 May 2019. Mr Giampellegrini was also appointed Chairperson of the Remuneration and Appointments Committee during the Board of Directors meeting held on 30 May 2019.

⁽⁸⁾ Member of the Transactions with Related Parties Committee, appointed on 22 May 2019.

⁽⁹⁾ Member of the Transactions with Related Parties Committee from 22 May to 30 May 2019 and member of the Remuneration and Appointments Committee from 30 May 2019.

⁽¹⁰⁾ Member of the Remuneration and Appointments Committee, appointed on 22 May 2019.

⁽¹¹⁾ Member of the Remuneration and Appointments Committee from 22 May to 30 May 2019 and member of the Control, Risk and Sustainability Committee from 30 May 2019.

⁽¹²⁾ Member of the Transactions with Related Parties Committee, appointed on 30 May 2019.

⁽¹³⁾ Member of the Control, Risk and Sustainability Committee appointed on 22 May 2019 and member of the Transactions with Related Parties Committee, appointed on 30 May 2019. Mr Malmesi was also appointed Chairperson of the Control, Risk and Sustainability Committee during the Board of Directors meeting held on 30 May 2019.

⁽¹⁴⁾ Member of the Transactions with Related Parties Committee, appointed on 22 May 2019. Ms Soncini was also appointed Chairperson of the Transactions with Related Parties Committee during the full Committee meeting held on 29 May 2019.

⁽¹⁵⁾ Appointed by the Shareholders' Meeting of 19 April 2018 for the three years 2018-2019-2020.

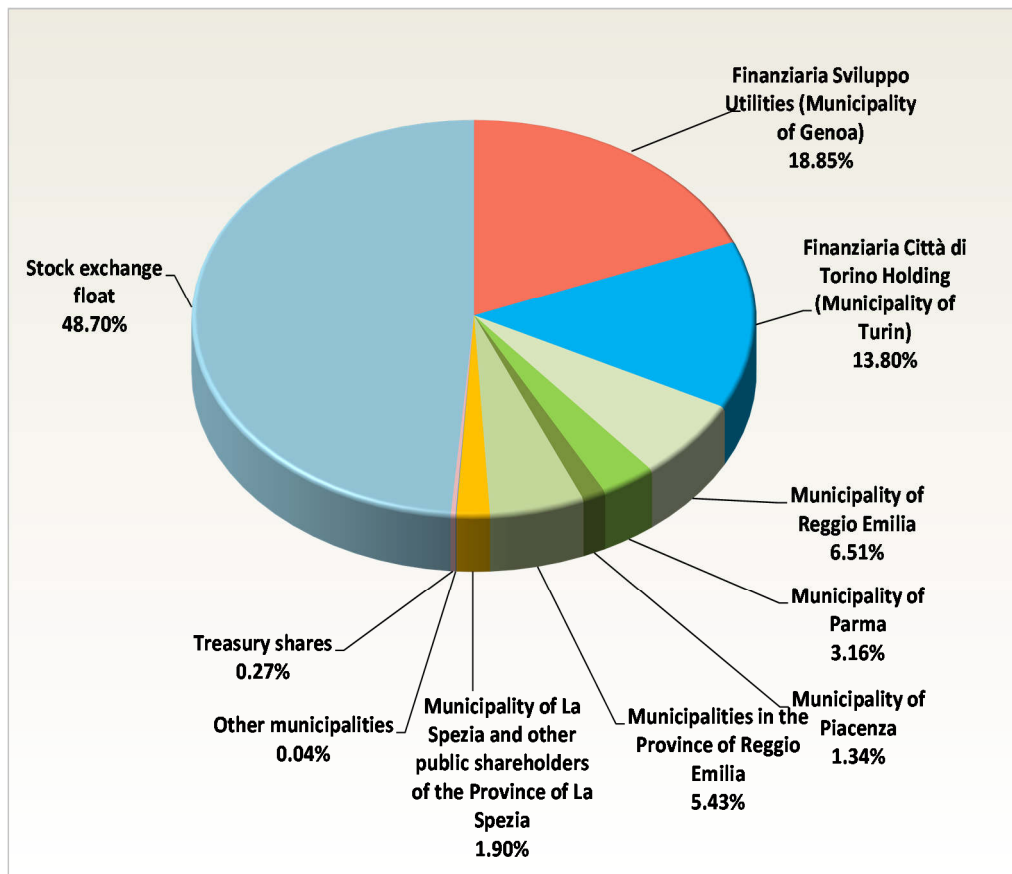
⁽¹⁶⁾ Appointed by the Shareholders' Meeting of 14 May 2012 for the nine years 2012-2020.

SHAREHOLDING STRUCTURE

The Company's Share Capital amounts to 1,300,931,377 euro, fully paid up, and is made up of ordinary shares with a par value of 1 euro each.

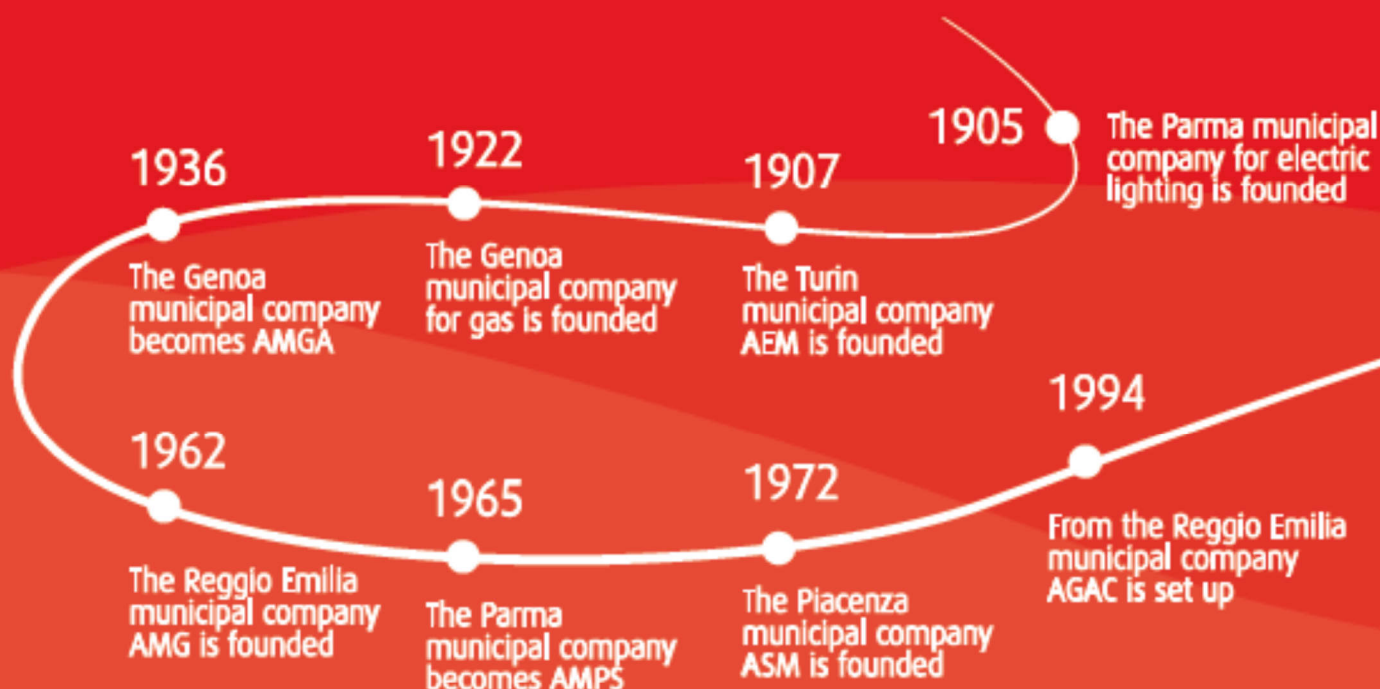
We can note that, in accordance with the purchase programme resolved by the Shareholders' Meeting of 5 April 2019, starting from 14 May Iren S.p.A. purchased 3,567,507 treasury shares, equal to 0.27% of the Share Capital. For more information on the subject please see what is presented in the chapter "Significant events of the period".

At 30 June 2019, based on available information, the Iren shareholding structure was as follows:



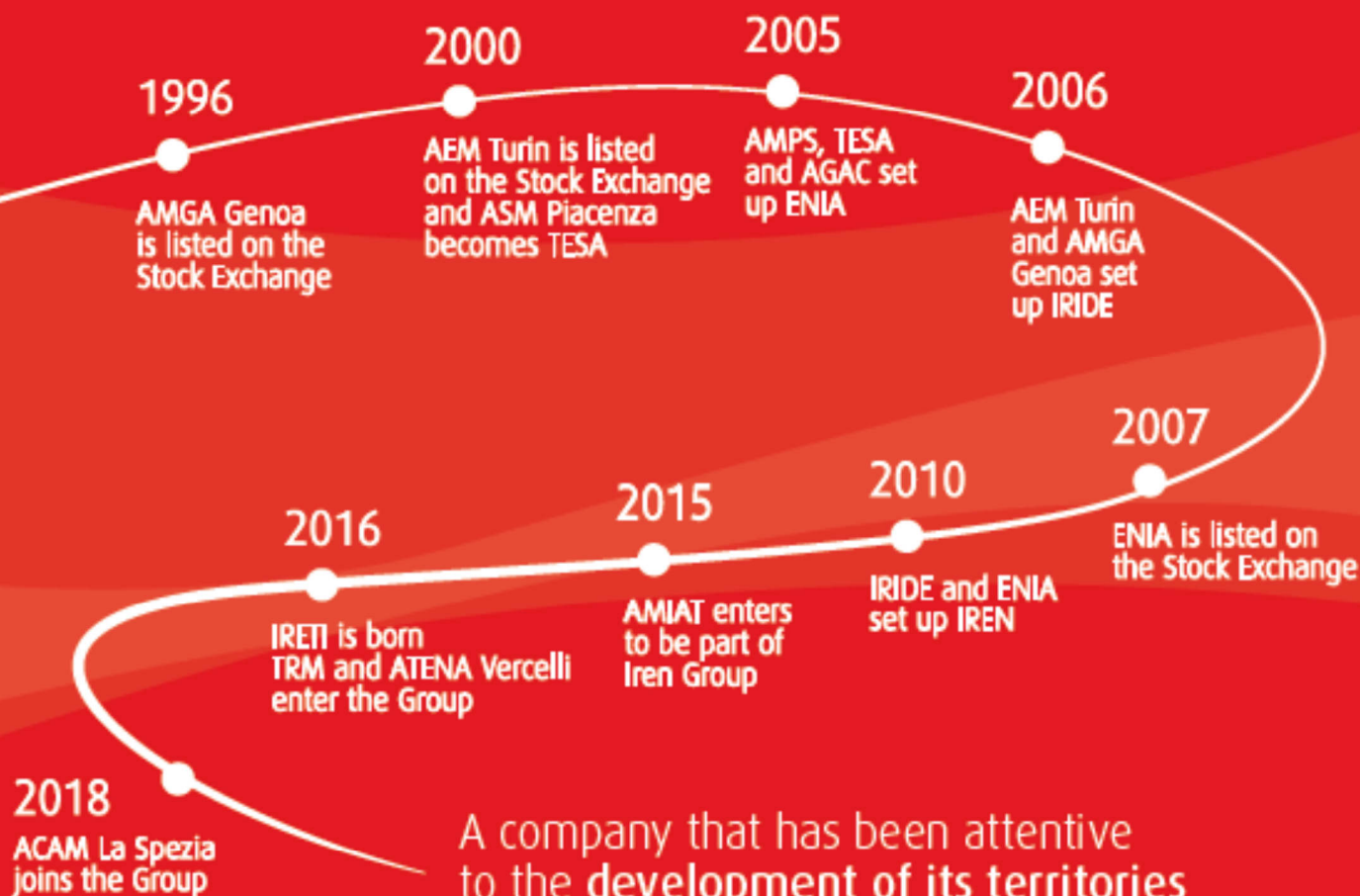
At 30 June 2019 there are no private shareholders that hold a stake of more than 3% of the share capital.

A century of **history**



Mission

Offering our customers and our territories the best integrated management of energy, water and environmental resources with innovative and sustainable solutions to create value over time. For everyone, every day.



A company that has been attentive to the **development of its territories** and its **customers' needs** for more than **110 years**.

Vision

Improving people's quality of life. Making companies more competitive. Looking at territorial growth with a focus on change. Merging development and sustainability into one unique value. We are the multi-utility company that wants to realise this future through innovative choices.

For everyone, every day.

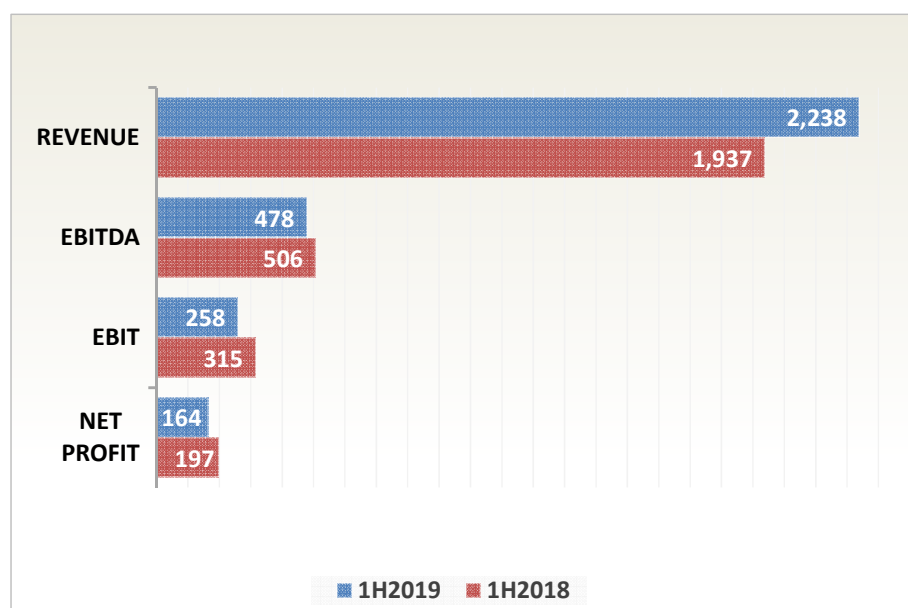
KEY FIGURES OF THE IREN GROUP: HIGHLIGHTS - FIRST HALF 2019

Economic data

| | millions of euro | | |
|--------------------------------|------------------|------------------------------|-----------|
| | First half 2019 | First half 2018 Restated (*) | Changes % |
| Revenue | 2,238 | 1,937 | 15.5 |
| EBITDA | 478 | 506 | (5.5) |
| EBIT | 258 | 315 | (18.1) |
| Net profit | 164 | 197 | (16.8) |
| <hr/> | | | |
| EBITDA Margin (EBITDA/Revenue) | 21.4% | 26.1% | |

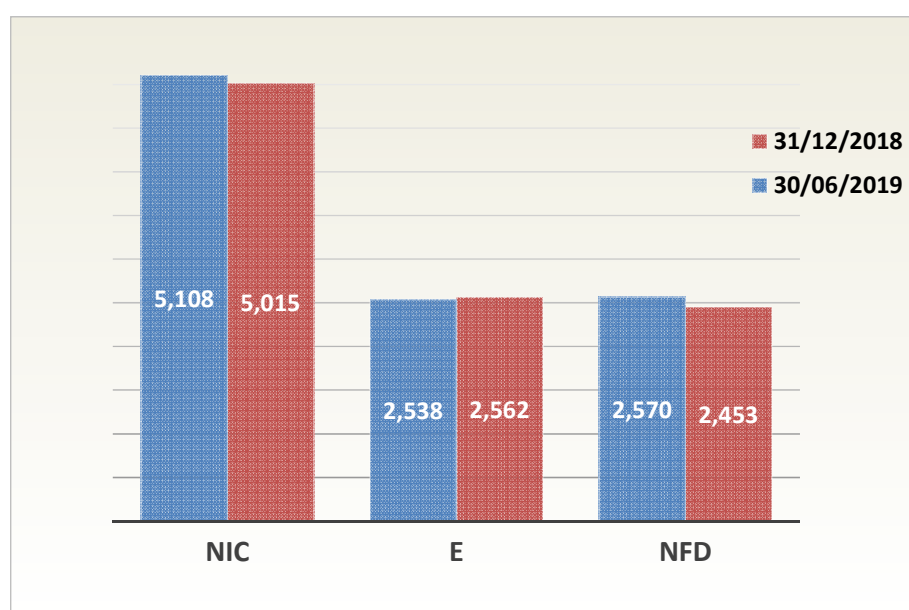
(*) As provided for in IFRS 3, the economic balances of the first half of 2018 were restated to take into account, at the acquisition date, the effects deriving from the completion, at the end of financial year 2018, of the allocation of the purchase price at the definitive fair value of the acquired assets and liabilities (Purchase Price Allocation) of the ACAM group companies and of Re.Cos..

For further information, please see the paragraph entitled "Restatement of amounts at 30 June 2018" in the section "Content and structure of the condensed consolidated interim report".



Financial position data

| | millions of euro | | |
|---|------------------|------------|-----------|
| | 30.06.2019 | 31.12.2018 | Changes % |
| Net Invested Capital (NIC) | 5,108 | 5,015 | 1.9 |
| Equity (E) | 2,538 | 2,562 | (0.9) |
| Net Financial Debt (NFD) | 2,570 | 2,453 | 4.8 |
| Debt/Equity (Net Financial Debt/Equity) | 1.01 | 0.96 | |

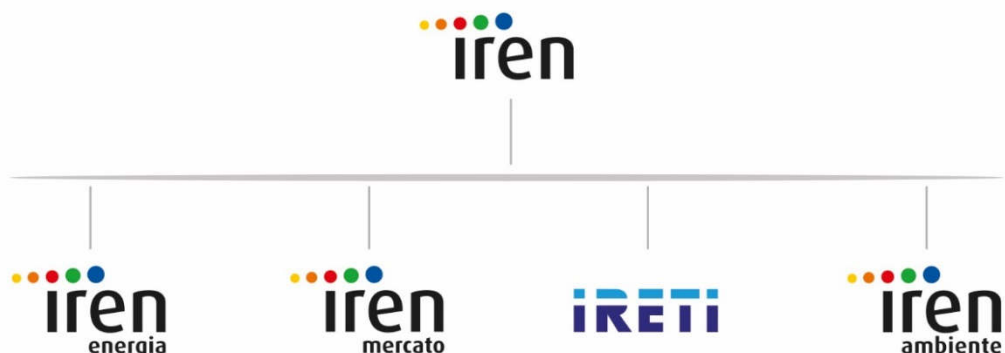


Technical and commercial figures

| | First half 2019 | First half 2018 | Changes % |
|---|-----------------|-----------------|-----------|
| Electricity produced (GWh) | 5,362 | 4,426 | 21.1 |
| Thermal energy produced (GWht) | 1,749 | 1,680 | 4.1 |
| Electricity distributed (GWh) | 1,828 | 1,861 | (1.8) |
| Gas introduced into the network (mln m ³) | 769 | 789 | (2.5) |
| Water sold (mln m ³) | 90 | 90 | - |
| Electricity sold (GWh) | 9,559 | 7,145 | 33.8 |
| Gas sold (mln m ³)* | 1,542 | 1,434 | 7.5 |
| District heating volume (mln m ³) | 94 | 87 | 7.6 |
| Waste handled (tonnes) | 1,328,246 | 1,122,051 | 18.4 |

* of which, 909 mln m³ for internal use in the first half of 2019 (734 mln m³ in the first half of 2018, +23.9%)

THE CORPORATE STRUCTURE OF THE IREN GROUP



The presentation includes the Companies directly and entirely controlled by Iren S.p.A. In addition, Iren S.p.A. has a direct equity interest in the associate Plurigas S.p.A. – this company was placed in voluntary liquidation by the Shareholders' Meeting of 27 March 2013.

The Group is structured according to a model which provides for an industrial holding company, with registered office in Reggio Emilia, and four companies responsible for the single business lines operating in the main operating bases of Genoa, Parma, Piacenza, Reggio Emilia, Turin, Vercelli and La Spezia.

The Holding is responsible for the strategic, development, coordination and control activities, while the four Business Units (BUs) have been entrusted with the coordination and guidance of the companies operating in their respective sectors:

- Networks, which operates in the field of the integrated water cycle, and in the gas distribution and electricity distribution sectors;
- Waste Management, which performs the activities of waste collection and disposal;
- Energy, operating in the sectors of electricity production, district heating and energy efficiency;
- Market, active in the sale of electricity, gas and heat.

The Group has an important customer portfolio and a significant number of plants supporting operating activities; some indicators of the group's size are reported below:

Gas Distribution: through its network of 8,028 kilometres Iren serves more than 742,000 customers.

Electricity Distribution: with 7,692 kilometres of high, medium and low voltage underground and overhead networks, the Group distributes electricity to almost 721,000 customers in Turin, Parma and Vercelli.

Integrated water cycle: with 23,360 kilometres of pipeline networks, 11,162 of sewerage networks and 1,323 treatment plants, Iren provides services to just less than 2,830,000 residents.

Waste management cycle: with 154 equipped ecological stations, 3 waste-to-energy plants, 2 active landfill sites, 27 treatment, selection, storage and composting plants, the Group serves 165 municipalities for a total of approximately 2,320,000 residents and almost 2,300,000 tonnes managed in 2018.

Production of electricity and heat: the Group has a considerable number of electricity production plants, mainly hydroelectric and cogeneration plants, with production of thermal energy distributed through an urban district heating network, with total installed capacity of approximately 2,852 MW of electricity.

District heating: through around 993 kilometres of dual-pipe underground networks the Iren Group supplies heating for an overall volume of 93.7 million m³, equivalent to a population served of over 868,000 residents.

Sales of gas, electricity and heat energy: during 2018 the Group sold more than 2.6 billion m³ of gas, just less than 16,000 GWh of electricity and approximately 2,900 GWh_t of heat for the district heating networks.

On 1 April 2018, the ACAM group, operating in the management of the integrated water and environmental hygiene service in the province of La Spezia, became part of the Iren group.

In particular, ACAM Acque S.p.A. is the group company that carries on its business, as leading operator, in the sector of management of the Integrated Water Service (IWS), overseeing all stages of the water cycle, from water catchment to the subsequent stages of purification and distribution to users, collection and transport of civil and industrial waste water and purification. The company operates in 26 municipalities in the province of La Spezia, serving approximately 207,000 residents through approximately 1,900 kilometres of water network and 858 kilometres of sewer network.

The company ACAM Ambiente S.p.A. is the main manager of the integrated waste cycle in the province of La Spezia and provides urban hygiene services to a catchment area of approximately 205,000 residents (door-to-door collection, road collection and sweeping and urban cleaning) and waste processing through the management of 9 collection centres. Through the company ReCos S.p.A., it manages waste reclamation and processing plants with collection and composting centres and the activity of sending separated materials for recycling.

In addition, on 8 January 2019 IRETI and the Municipality of Busseto (province of Parma) signed a contract for the transfer of all the shares of Busseto Servizi S.r.l., which manages the natural gas distribution service in the said Municipality, with more than 3,000 redelivery points present on a total of 90 km of gas network. Finally, on 30 January 2019 the Group, through Iren Ambiente, completed the acquisition of the entire equity interest in the company San Germano S.r.l. and in its subsidiary CMT S.p.A., held by the Derichebourg Group. The transaction is part of a process of development of Iren through the Waste Management Business Unit, facilitating achievement of industrial growth objectives thanks to the acquisition of greater competitive abilities in the collection activity and to the development of recycling activities, both expanding the presence in the core territories (Piedmont and Emilia Romagna) and extending the business into new geographical areas considered of prospective interest (Sardinia).

NETWORKS BU

The lead company IRETI and the business unit's subsidiaries handle the integrated water cycle, electricity distribution, natural gas distribution and other minor activities.

Integrated Water Services

IRETI, directly and through the operating subsidiaries Iren Acqua, Iren Acqua Tigullio, ASM Vercelli and ACAM Acque, as mentioned above, operates in the field of water supply, sewerage and waste water treatment in the provinces of Genoa, Savona, Piacenza, Parma, Reggio Emilia, Vercelli, La Spezia, and several municipalities in the regions of Piedmont, Valle d'Aosta, Lombardy and Veneto.

Overall, in the *Ambiti Territoriali Ottimali* – ATOs [literally “optimal territorial areas”] managed, the service is provided in 265 municipalities serving over 2.8 million residents.

During the first 6 months of 2019 the Networks BU distributed approximately 90 million m³ of water, through a distribution network of 23,360 km. As regards waste water, the company manages a total sewerage network spanning 11,162 kilometres.

Gas distribution

IRETI distributes natural gas in 75 municipalities of the Provinces of Reggio Emilia, Parma and Piacenza, in the Municipality of Genoa and in 19 other municipalities nearby. Through ASM Vercelli it distributes gas in the City of Vercelli and in 11 other municipalities of the province. The distribution network, made up of 8,028 kilometres of high, medium and low-pressure pipes, serves a catchment area of approximately 742,000 customers.

During the first 6 months of 2019, IRETI introduced 769 million m³ of gas into the network.

Electricity distribution

IRETI provides the electricity distribution service in the cities of Turin, Parma and, through ASM Vercelli, in the city of Vercelli with 7,692 kilometres of network in medium and low voltage. Electricity distributed in the first 6 months of 2019 amounted to 1,828 GWh.

WASTE MANAGEMENT BU

The Waste Management Business Unit carries out waste collection and disposal activities mainly through geographically distributed companies: Iren Ambiente, operating in the Emilia area, AMIAT, TRM, ASM Vercelli, operating in the Piedmont area, ACAM Ambiente and ReCos operating in the Liguria area.

The Waste Management BU carries out all the activities of the urban waste management chain (collection, selection, recovery and disposal) with particular attention to sustainable development and to environmental protection confirmed by growing levels of separated waste collection; it also manages an important customer portfolio to which it provides all the services for special waste disposal.

The Waste Management BU's plants consist mainly of 3 waste-to-energy plants (TRM, in Turin, with more than 130,000 tonnes disposed of in the first quarter of 2019, PAI, in Parma, with approximately 41,000 tonnes and Tecnoborgo, in Piacenza, with approximately 29,000 tonnes).

As mentioned above in February 2019 the San Germano Group also became part of the Waste Management BU. In particular the parent company San Germano is based in Pianezza (Turin) and operates in waste collection and transport (250 kton/year) in 145 municipalities for approximately one million inhabitants served in the regions Piedmont, Sardinia, Lombardy and Emilia Romagna, with an annual turnover of approximately 65 million euro. The company has 20 operating sites and a workforce of more than 800 employees. CMT, its subsidiary, operates in the treatment of separately-collected waste and paper, cardboard and plastic recycling, with turnover of approximately 11 million euro, at 6 sites in Piedmont and Sardinia, among which Pianezza and La Loggia, for an authorised capacity of approximately 100 kton/year.

ENERGY BU

Production of electricity and heat

The Energy BU has total installed capacity of 2,852 MW (in electricity). Specifically, it has 28 electricity production plants directly available to it: 20 hydroelectric plants (of which 3 mini-hydro plants contributed with acquisition of the company Maira), 6 thermoelectric cogeneration plants and 1 conventional thermoelectric plant, to which must be added 1 cogeneration plant managed on the basis of a business unit rental contract. The Energy BU also has 194 photovoltaic production plants with installed capacity of 20 MW.

All primary energy sources used – hydroelectric and co-generative – are eco-friendly. In particular, the hydroelectric production system plays an important role in environmental protection, as it uses a renewable and clean resource, without the emission of pollutants, and reduces the need to make use of other forms of production that have a greater environmental impact.

On the thermoelectric side, 40% of total heat production capacity is generated by Group-owned cogeneration plants, while the remainder comes from conventional heat generators. Iren Energia also oversees the Group's electricity and thermal energy planning and dispatching activities, as well as operations on the power exchange.

In September 2018, Iren Energia acquired 66.23% of Maira S.p.A., a company operating in the construction and management of hydroelectric plants in Piedmont, owner of 3 mini-hydro plants located in Val Maira (province of Cuneo), of a photovoltaic plant (11 kWp) and of a woodchip boiler (400 kWt).

District heating

Iren Energia has the largest district heating network in the country with 993 kilometres of dual pipes. The extension of the dual-pipe network amounts to 632 km in the territory of Turin, 10 in the Municipality of Genoa, 220 in the Municipality of Reggio Emilia, 103 in the Municipality of Parma and 28 in the Municipality of Piacenza. The total volume heated at 30 June 2019 amounted, in the catchment area historically served by the company, to 88.5 million m³. To this volume must be added the 5.3 million m³ in the catchment area managed on the basis of the annual rental of the SEI Energia business unit, operating in the municipalities of Grugliasco, Rivoli and Collegno, making the total 93.8 million m³.

Energy efficiency services

Iren Energia, through its subsidiary Iren Rinnovabili, handles the development and management of public street lighting, traffic light and similar services and, in particular, operates in the energy efficiency sector, performing activities for the design, creation and management of actions to reduce consumption and save energy. In addition, it operates in the business of supplying energy services and global services destined for residential buildings, private and public structures and industrial and commercial complexes, and in the

study, design, construction, installation, management, maintenance and conduction of the related heating, conditioning, water, sanitary, refrigeration, electrical and solar panel systems.

MARKET BU

Through Iren Mercato and Salerno Energia Vendite, the Group sells electricity, gas and heat, through district heating networks, supplies fuel for the Group, and provides customer management services to the Group's investee companies. On 6 September 2018 Iren Mercato and the company Spienergy finalised the transaction for the acquisition, by Iren Mercato, of the entire equity interest held by Spienergy in Spezia Energia Trading based in La Spezia. The company operates in the sale of gas and electricity on the final market, mainly small and medium-sized enterprises, both through its own commercial network and through a portfolio of third-party commercial partners that operate reselling the commodity acquired wholesale.

Iren Mercato operates, in the context of the free market, all over the country, with a higher concentration of customers served in Central and Northern Italy, and handles the sale of the energy provided by the Group's various sources on the market, represented by final customers and wholesalers. The main Group energy sources available for its activities are the thermoelectric and hydroelectric plants of Iren Energia. Iren Mercato also acts as "higher protection" service operator for retail customers in the electricity market in the Province of Turin and the Parma area; historically it operated in the direct sale of natural gas in the territories of Genoa and Turin, and in Emilia. Lastly, it handles heat sales to district heating customers in the Municipality of Turin and the provincial capitals of Reggio Emilia, Parma, Piacenza and Genoa and sales development in new district heating areas.

During 2018, the new downstream business line became fully operational. It was launched during 2017 and sells retail customers innovative products in the areas of home automation, energy saving and domestic plant maintenance. Again in 2018 "IrenGO at zero emissions" was also launched; this is an innovative offer for electric mobility aimed at private and business customers and public bodies with the objective of reducing the environmental impact of mobility. The Group has already tested the potentials and benefits of e-mobility through the internal launch of a series of initiatives, such as the installation of recharging infrastructures and the gradual introduction of electric vehicles, adopting and applying the electric mode. All the IrenGO internal and external electric mobility initiatives have 100% green energy supply coming from the Group's hydroelectric plants.

Sale of Natural Gas

Total volumes of natural gas procured during the first half of 2019 were approximately 1,542 million cubic metres, of which 633 million were sold to final customers outside the Group and 909 million were used within the Iren Group both for electricity and thermal energy production and for the provision of heating services. At 30 June 2019, gas customers managed by the Market Business Unit amounted to more than 916,000, mainly spread throughout the traditional Genoa, Turin and Emilia Romagna catchment areas and surrounding development areas, and customers of the catchment areas of Vercelli brought in by Atena Trading and the area in Campania brought in by Salerno Energia Vendite. In particular, Salerno Energia Vendite is present in almost all the provinces in Campania as well as in a number of municipalities of the Basilicata, Calabria, Tuscany and Lazio regions. The catchment area expanded further with the acquisition of Spezia Energia Trading which operates mainly in the La Spezia area.

Sale of electricity

The volumes sold in the first 6 months of 2019 by the Market BU amounted to 4,756 GWh. Retail electricity customers managed at 30 June 2019 were approximately 884,000, distributed mainly in the areas traditionally served, corresponding to Turin and Parma, and in the other areas covered commercially by Iren Mercato and by Atena Trading and, from the fourth quarter of 2018, also by Spezia Energy Trading.

Sale of heat through the district heating network

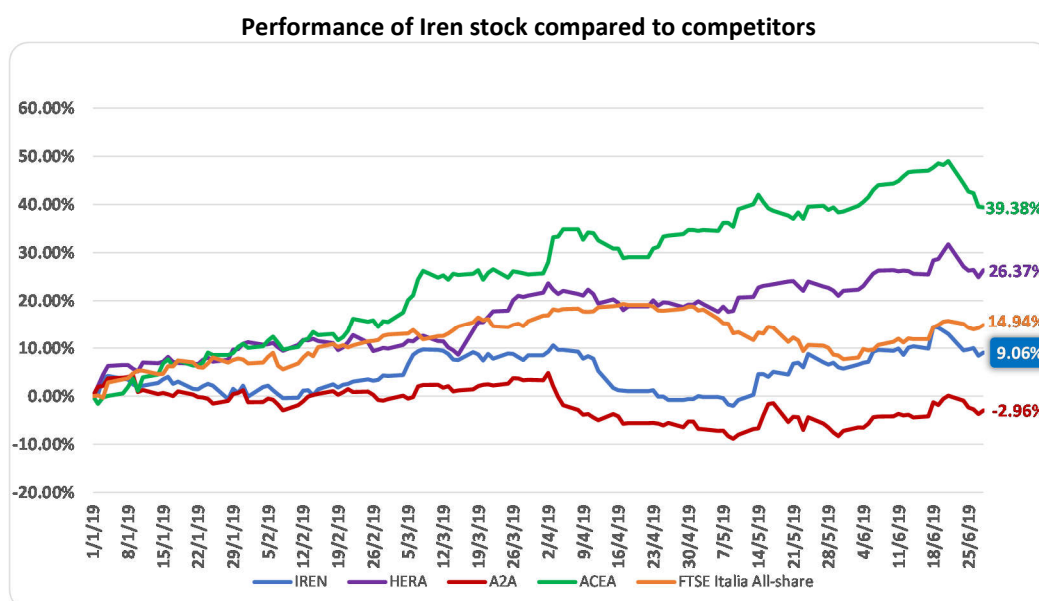
Iren Mercato manages the sale of heat, purchased from Iren Energia, to customers receiving district heating in the municipalities of Turin, Nichelino, Genoa, Reggio Emilia, Piacenza and Parma.

INFORMATION ON THE IREN STOCK IN THE FIRST HALF OF 2019

Iren stock performance on the Stock Exchange

During the first half of 2019, the FTSE Italia All-Share (the main Borsa Italiana index) showed an increase of 14.94%, despite a second quarter characterised by an unfavourable international economic situation, with particular reference to the commercial tensions between China and the USA, and by the difficult Italian economic situation offset, at the level of investors' expectations, by the announcements regarding a further extension of the expansive monetary policies on the part of the major central banks.

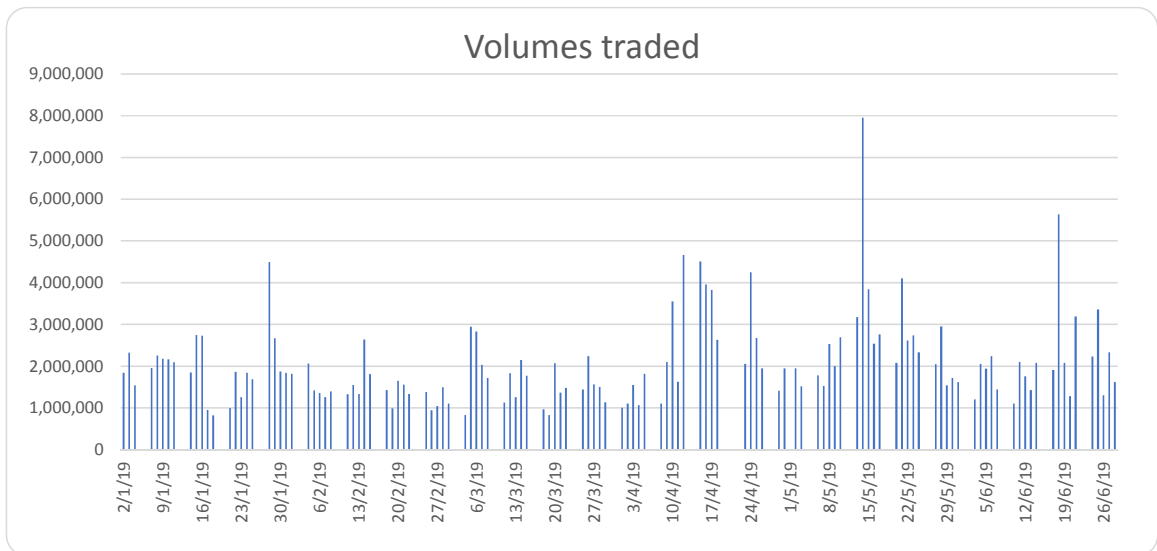
In this context, observing the trend of listed multiutilities, we can note that the market appreciated more companies that present, in the set of activities managed, a greater proportion of regulated activities, ones which are therefore less exposed to the volatility of the energy scenarios.



At 28 June 2019, the last trading day in the first half of the year, the price of Iren stock stood at 2.286 euro per share, up by 9.06%, with average trading volumes during the period of approximately 2.057 million units per day.

The average price in the first half of the year was 2.20 euro per share. The maximum of the period was recorded on 18 June 2019, at 2.40 euro per share; the minimum of the period, 2.054 euro per share, was instead recorded on 9 May.

The two charts below show the price performance and volumes traded in Iren stock in the first half of 2019.



Stock coverage

During the period the Iren Group was followed by eight brokers: Banca IMI, Banca Akros, Equita, Fidentiis, Intermonte, KeplerCheuvreux, Main First and Mediobanca.



The top half of the page features a background of overlapping, wavy bands in various shades of yellow, ranging from a bright, saturated yellow to a lighter, almost white yellow. The waves flow from the top left towards the bottom right, creating a sense of movement and depth.

Directors' Report

at 30 June 2019

MARKET CONTEXT

THE MACROECONOMIC SCENARIO

The global economy is going through a period of weakness, as is shown by the World Bank's growth estimates: in 2019 global economic growth is expected to slow by 0.4 percent, going from the +3% of 2018 to the +2.6% of 2019. These estimates have been revised downwards with respect to the last forecast published in January. The growth forecasts of the global economy are without a doubt affected by the protectionist policy of the Trump government, which toughened in the last two months of the period.

The European economy and, consequently, the Italian one are affected in particular by this trend. In the Eurozone, economic growth went down from 2.4% in 2017 to 1.8% in 2018 and, according to the World Bank, in 2019, it will come out at 1.2%. In the Old Continent the weakening of international trade and the slowdown on the side of industrial production are taking their toll.

In this context, the slowdown of German economic growth (for 2019 forecast at 0.5% compared to 1.4% in 2018), linked in particular to the motor industry, is reflected in the other main European economies, above all in Italy and France, given that Germany is among the main importers of goods from these countries.

The Italian economy is substantially in a stagnant stage, as shown by the growth of Gross Domestic Product which, in the first quarter of 2019, recorded on a quarterly basis +0.1%, boosted by the trade balance, consumption and investments in construction despite the reduction in inventories and in investments in machinery, equipment and means of transport.

On an annual basis, instead, GDP recorded a contraction of 0.1 percent. The ISTAT forecast for 2019 is 0.3%, while the Bank of Italy forecasts growth of 0.1%. These expected growth rates also reflect the difficulty in implementing expansive economic policies, given the budget constraints imposed by the European Commission and the high public debt. In this regard, in the last few weeks further cuts have been made to public spending to avoid the launch of the infringement procedure for excessive deficit. As of today the economic policy lines and the measures to be implement in the next budget law have not yet been defined.

Household spending

On the employment front, instead, positive signs are arriving: in fact in the first quarter the unemployment rate fell by 0.2% on a quarterly basis, accompanied by an increase in the number of people employed (+0.4%). Within this figure there was, at the same time, an increase in permanent self-employed contracts and a reduction in temporary contracts.

In this same period, again on a quarterly basis, available household income increased. After the -0.2% of the last quarter of 2018, it recorded an increase of 0.9 percent. In the same way the purchasing power of households grew by 0.9%, as the level of prices remained substantially unchanged.

Consumption instead increased by 0.2%, a more limited increase compared to that of available income; in fact, propensity to save grew by 0.7% on a quarterly basis coming out at 8.4%.

In the first five months of the year, compared to the period January-May 2018 (and, therefore, on an annual basis), employment increased by 0.5%, while unemployment recorded a drop of 0.7 percent, even with a reduction in the workforce of 0.2%. The increase in employment regarded to a greater extent women.

In May, the employment rate came out therefore at 59%, the highest figure since records began, while unemployment fell to 9.9% recording the its lowest figure since 2012. There were improvements also as regards youth employment, with the unemployment rate in the 15-24 years band down to 30.5%.

Investments

In the first quarter of 2019 investments recorded +0.6% on a quarterly basis (an increase similar to that recorded in the previous quarter), boosted by the construction sector. After the initial increase, recorded in particular in January and February, industrial production began to decline again at the end of the period in question.

The figure for the first half of the year recorded in any case an annual increase of 1.9% compared to the first half of 2018, recording also a record for the investment rate at 22.3%, the highest since 2011.

Exports

As regards the period in question, at the level of foreign trade what emerges from the ISTAT data is a percentage increase in interaction with non-EU markets with respect to the community market. In the period January-April 2019 (latest figure available) the total trade balance (surplus), including the energy component, went up to 11 billion euro from 10.5 billion euro in the same period of 2018.

THE OIL MARKET

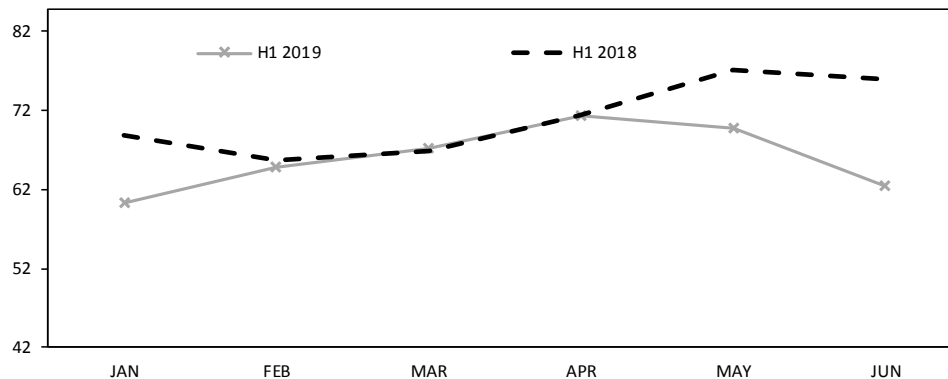
The first half of 2019 ended with an average spot price of Brent oil at a level of \$65.63/bbl, down by 7% compared to the first half of 2018, when it came out at \$70.66/bbl. At the monthly level, from the comparison between the two years it emerges that the largest gap was recorded during June which ended in 2019 at a price of \$62.10/bbl (-17.8% compared to June last year). The recovery of Brent, which reached an annual peak in April at a price of \$71.07/bbl, faded in the rest of the second quarter, with average prices in May and June respectively of \$69.34/bbl and \$62.10/bbl.

At the beginning of 2019, the excess supply that had led to a decline in international oil prices at the end of 2018 was reabsorbed following:

- the reduction of Iranian output (-0.3 compared to 2018) due to the gradual entry into force of the US sanctions inflicted on the country;
- the Venezuelan economic and political crisis which led to a reduction in the extraction and sale of crude oil;
- the contraction of the production of Saudi Arabia of approximately 1 MMbbl/d compared to the last quarter of 2018.

In the first quarter, the OPEC (now OPEC Plus, a permanent body with 24 members) reduced extraction by approximately 1.6 MMbbl/d on a quarterly basis, pursuing a policy of driving prices upwards, by lowering production levels. Counterbalancing this bullish policy is the United States which, thanks to shale oil, is increasing the supply of crude oil: the USA has become the leading oil producer in the world with its 12 MMbbl/d (+10% over the average of 2018).

BRENT PRICE TRENDS
(\$/bbl)



Source: REF-E processing of Reuters data

THE ELECTRICITY MARKET

Supply and demand

In the first half of 2019, the net production of electricity in Italy was 138.8 TWh, up by 2.3% compared with the same period in 2018. The demand for electricity, 155.1 TWh, was met for 88.7% from domestic production.

At the national level, thermoelectric production was 89.7 TWh, up by 4.3% compared to 2018, and represented 64.6% of Italian net production; production from hydroelectric sources was 23.1 TWh (-10.3% on an annual basis), 16.6% of the national figure, while geothermal, wind and photovoltaic sources produced 26 TWh (+8.7% compared to 2018), 18.7% of total supply.

Consumption in the first half of 2019 was 0.7% lower than that of the previous year. This drop was due exclusively to contractions in the Northern (-1.3%) and Central (-0.7%) zones, attenuated by an increase in demand in the South (+0.3%) and the Islands (+1%).

Demand and supply of accumulated electricity (GWh and changes in trends)

| | up to 30.06.2019 | up to 30.06.2018 | Change % |
|------------------------------|---------------------|---------------------|---------------|
| Demand | 155,118 | 156,215 | -0.7% |
| <i>Northern Italy</i> | 76,073 | 77,043 | -1.3% |
| <i>Central Italy</i> | 44,640 | 44,972 | -0.7% |
| <i>Southern Italy</i> | 20,890 | 20,821 | 0.3% |
| <i>Islands</i> | 13,515 | 13,379 | 1.0% |
| Net production | 138,822 | 135,717 | 2.3% |
| <i>Hydroelectric</i> | 23,078 | 25,730 | -10.3% |
| <i>Thermoelectric</i> | 89,739 | 86,058 | 4.3% |
| <i>Geothermoelectric</i> | 2,846 | 2,859 | -0.5% |
| <i>Wind and photovoltaic</i> | 23,159 | 21,070 | 9.9% |
| Pumping consumption | -1,306 | -1,340 | -2.5% |
| Foreign balance | 17,602 | 21,838 | -19.4% |

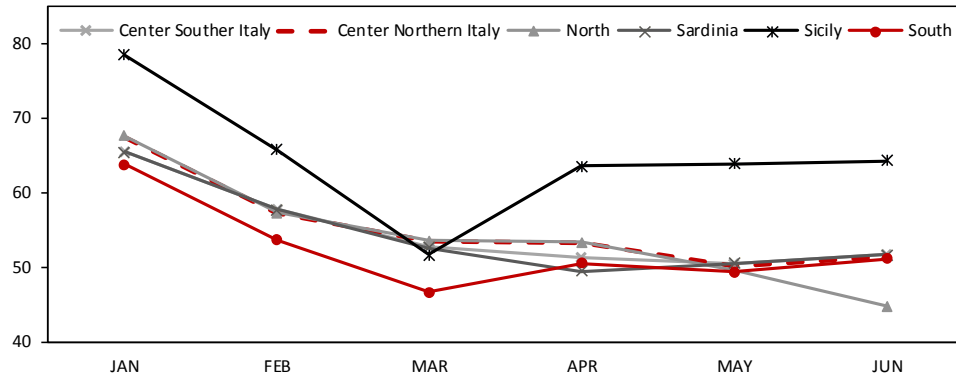
Source: Terna

Day-Ahead Market (DAM) prices

In the first half of the year, the PUN [*Prezzo Unico Nazionale*, SNP - Single National Price] increased by 2% compared to the same period of 2018 coming out at an average figure of 55.13 euro/MWh and recording a particularly significant increase in January (+38%).

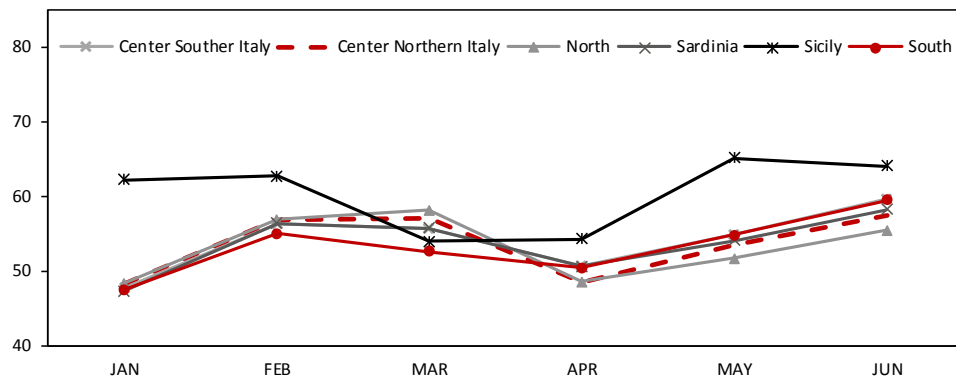
In the first half of 2019 the zonal prices recorded on average an increase of 2% on an annual basis with non-uniform changes between the different zones: with the exception of the South which recorded a drop of 1%, all zones recorded an increase, with the Centre-North recording +4%, Centre-South +1%, Sardinia and the North +2% and Sicily +7%. In the first six months of the year, the zonal prices were less aligned compared to the same period of 2018. Sicily recorded the highest monthly average price in all months except March. In the second quarter, the price in Sicily maintained a greater distance from the other zonal prices compared to the same period of 2018. In this period the prices of the different zones remained more or less constant, because they were accompanied by a decrease in gas prices and, therefore, of the variable thermoelectric generation costs, despite the gradual seasonal increase in demand for electricity.

ITALIAN ZONAL PRICE TRENDS 2019 H1
(€/MWh)



Source: REF-E processing of GME data

ITALIAN ZONAL PRICE TRENDS 2018 H1
(€/MWh)

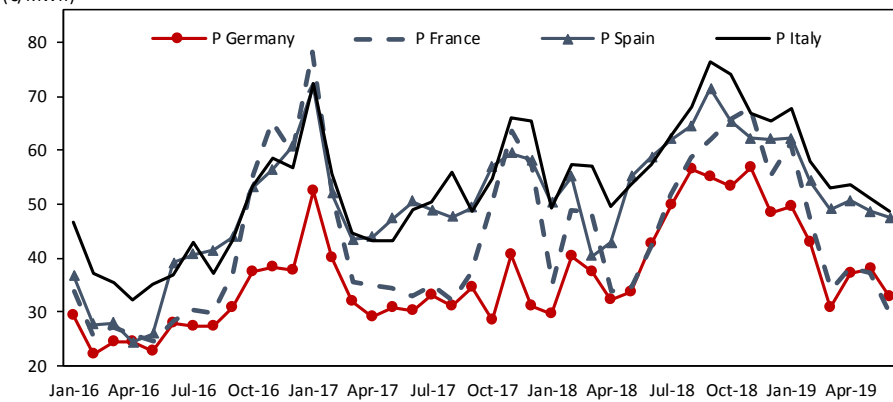


Source: REF-E processing of GME data

Trends in the main European power exchanges

In the first six months of 2019, the European power exchanges expressed an average price of 43.73 euro/MWh, up compared to the previous year (+3.8%) with a negative spread with respect to the SNP of 11.40 euro/MWh (more or less in line with the 11.71 euro/MWh recorded in the same period of 2018). This increase was mainly due to the sharp increase recorded in January; in the second quarter there was in fact a sharp drop in prices which, on average, decreased by 4.4% on an annual basis and 16.6% on a quarterly basis.

EUROPEAN POWER PRICE TRENDS
(€/MWh)



Source: REF-E processing of European Exchange data

Futures of Baseload SNP on the EEX

The table below shows the comparison between the average futures prices of the products available for the first half of 2019 referred to the Single National Price. During the first half of the year, the prices of futures products related to the last two quarters of the year gradually decreased, with the exception of April when, owing to the increase in spot prices, the futures prices increased before coming back down again. The two products recorded overall a reduction of 2.75 euro/MWh and 4.76 euro/MWh. The same trend was followed by the *calendar-20* recording a gradual reduction during the period with a substantial rise in April such as to offset the negative changes recorded in all the other months; in fact, the average price in June was 60.90 euro/MWh.

| April-19 Futures | | May-19 Futures | | June-19 Futures | |
|------------------|-------|----------------|-------|-----------------|-------|
| Monthly | €/MWh | Monthly | €/MWh | Monthly | €/MWh |
| May-19 | 53.3 | Jun-19 | 51.7 | Jul-19 | 48.9 |
| Jun-19 | 53.7 | Jul-19 | 51.8 | Aug-19 | 54.6 |
| Jul-19 | 57.0 | Aug-19 | 58.7 | Sep-19 | 51.5 |
| Quarterly | | Quarterly | | Quarterly | |
| Q3 19 | 61.5 | Q3 19 | 58.3 | Q3 19 | 55.1 |
| Q4 19 | 65.8 | Q4 19 | 64.9 | Q4 19 | 62.0 |
| Q1 20 | 67.0 | Q1 20 | 66.3 | Q1 20 | 63.8 |
| Yearly | | Yearly | | Yearly | |
| Y1 20 | 62.1 | Y1 20 | 61.5 | Y1 20 | 60.9 |

Source: Reuters on EEX data

THE NATURAL GAS MARKET

Supply and demand

Uses and sources of natural gas in the period January-June 2019 and comparison with previous years

| GAS WITHDRAWN (bln m³)* | 2019 | 2018 | 2017 | % change 2019 vs. 2018 | % change 2018 vs. 2017 |
|--|-------------|-------------|-------------|---|---|
| Industrial use | 7.3 | 7.4 | 7.2 | -0.9% | 2.0% |
| Thermoelectric use | 12.4 | 10.6 | 12.3 | 16.5% | -13.8% |
| Distribution plants | 19.2 | 19.4 | 18.5 | -0.8% | 4.9% |
| Third party network and system consumption / line pack | 1.3 | 1.1 | 1.1 | 9.8% | -0.2% |
| Total withdrawn | 40.2 | 38.5 | 39.2 | 4.3% | -1.6% |

*Cumulative amounts at 30 June 2019

Source: REF-E processing of SRG data

| GAS INPUT (bln m³)* | 2019 | 2018 | 2017 | % change 2019 vs. 2018 | % change 2018 vs. 2017 |
|--|--------------|--------------|--------------|---|---|
| Imports | 37.4 | 35.2 | 35.5 | 6.1% | -0.6% |
| Domestic production | 2.4 | 2.6 | 2.6 | -9.8% | 1.3% |
| Storage | 0.4 | 0.7 | 1.1 | -38.3% | -39.9% |
| Total input (including storage) | 40.2 | 38.5 | 39.2 | 4.3% | -1.6% |
| Maximum capacity | 71.6 | 67.4 | 65.8 | | |
| Load Factor | 52.2% | 52.3% | 53.9% | | |

*Cumulative amounts at 30 June 2019

The figure for storage indicates the net change

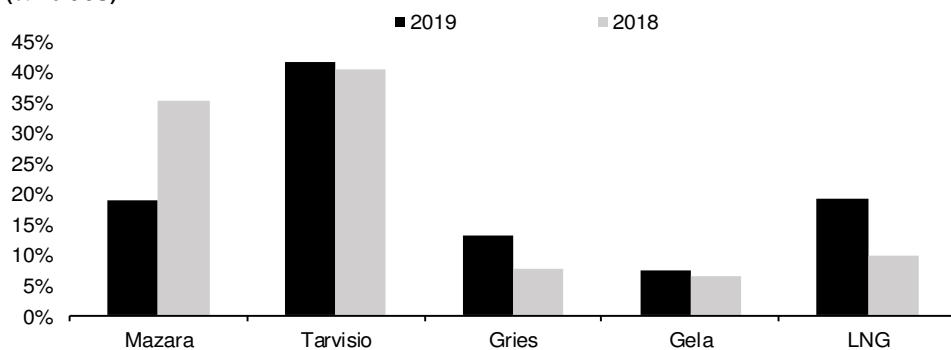
Source: REF-E processing of SRG data

The increase in demand for thermoelectric use (1.8 billion/m³) compared to the first half of 2018 is attributable to the falling price of natural gas with respect to coal, which made electricity generation using gas much more competitive. The drop in industrial consumption (-0.1 billion/m³) and in residential consumption (-0.2 billion/m³) were due respectively to economic contingencies, which led to a smaller contraction in industrial production compared to the first half of 2018, and to milder temperatures.

As regards supply, imports from abroad increased compared to the same period of last year (+6.1%): the sharp reduction in flows of Algerian gas entering at Mazara del Vallo (-39%) was more than offset by the higher flows arriving at the points of Gela (+59%), Passo Gries (+31%) and Tarvisio (+0.7%), besides the level records of introduction of LNG into the network (+85%).

In the first half of 2019 the downward trend of domestic production continued (-9.8%), while compared to the first half of 2018 there was a lower contribution of gas introduced into the network from storage systems, the balance of which (outputs +/- inputs -) decreased by approximately 0.3 billion/m³. This last result is attributable to a less intense use of the infrastructures compared to the same period of last year, when between February and March it had been necessary to make great use of the supply capacity of storages following the occurrence of a number of severe weather contingencies.

**Imports by port of entry over the total
(% Values)**



**Cumulative amounts at 30 June 2019
Source: REF-E processing of SRG data*

The first half of 2019 was thus characterised by a mix of imports led by Russian gas arriving at Tarvisio (more than 42% of the total), followed by gas imports through Passo Gries and Liquid Natural Gas (respectively 16% and 19%). The greater significance of LNG in the mix compared to the past derives from the abundance of liquefied gas supply recorded on the European market during the winter, thanks to greater attractiveness in terms of price in the European markets compared to the Asian ones.

Wholesale gas prices

In the first half of 2019 wholesale natural gas prices recorded reductions on all the main European hubs compared to the same period of last year. This can be explained mainly by the combination of two factors:

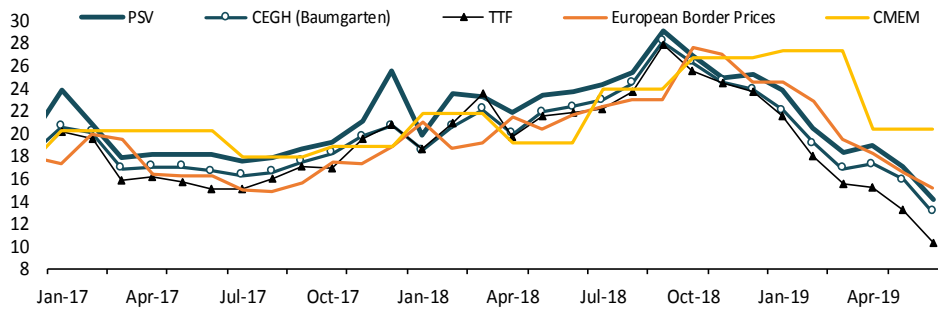
- a high level of supply of LNG on the international markets, owing mainly to lower-than-expected winter demand in Asia;
- a high stock of natural gas in storages owing to reduced winter consumption and supply rules that provide limited flexibility during the peak winter demand.

In particular, the Dutch Title Transfer Facility (TTF) market recorded an average figure for spot prices of 15.70 euro/MWh, up by more than 25% compared to the same period of 2018. The CEGH, the Austrian gas market, recorded an average figure of 17.41 euro/MWh, corresponding to a decrease of approximately 17% compared to the first half of 2018.

The Italian PSV [*Punto di Scambio Virtuale* - Virtual Trading Point] hub continues to remain higher than the northern European ones, with an average figure of 18.82 euro/MWh, although it was down 17% compared to the same period of 2018. In particular, pushing downwards the average gas prices at the hubs were the figures of the transactions carried out between May and June. The spread between PSV and TTF then increased by 1.50 euro/MWh compared to the first half of 2018, going up from 1.62 euro/MWh to 3.12 euro/MWh.

In the first half of 2019 gas prices at the border, still in part oil-linked, rose compared to the first six months of last year: an increase of approximately 4.6% on the prices in Euro, explained in part by the time lag existing in indexed contracts, in part by the downward movements of the Euro recorded during the year.

Wholesale prices in Europe
(€/MWh)



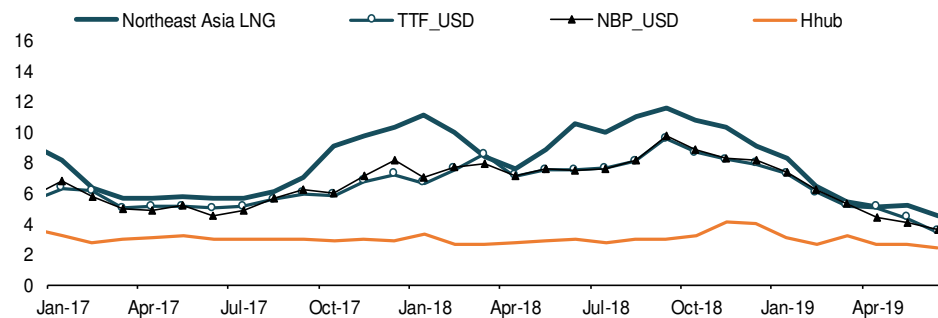
Latest data 30 June 2019

Source: REF-E processing of WGI - ARERA - Alba Soluzioni data

In the Italian market, the average balancing price of the first half of 2019 was 18.86 euro/MWh, down by approximately 17% compared to the same period of 2018. In the same period, on the markets of the MGAS platform functional to the definition of the balancing price, a volume of 2.73 billion/m³ was traded, up compared to the first half of last year, in which a volume of 1.63 billion/m³ was traded. On the IM intra-day market 67% of the volumes functional to the balancing were traded.

The so-called “CMEM component”, meant to reflect the cost of procuring gas in the protected market price, defined by the ARERA on the basis of the TTF forward prices, decreased, falling in the second quarter to 20.35 euro/MWh.

LNG prices
(\$/MBtu)



Latest data 30 June 2019

Source: REF-E processing of WGI data

Looking at the international markets, Asian demand for LNG fell sharply in the first half of the year compared with last year. In addition, the non-materialisation of a level of demand in the first quarter, still higher due to a winter that tended to be mild both in north-east Asia and in Europe, caused a situation of abundance of supply on the market, which translated into a rapid reduction in liquefied gas prices. From the beginning of the winter, the Asian price collapsed from an average of approximately \$11/MMBtu in October to an average of approximately \$4.5/MMBtu in June. The average of LNG prices on oriental markets referred to the first half of 2019 came out at \$5.8/MMBtu, down by more than 39% compared to the result of the first half of 2018. The hub prices in Great Britain were also down, with an average of \$5.1/MMBtu (-\$2.3/MMBtu compared to the first half of 2018), while prices at the main American gas market, the Henry Hub, on average remained unchanged compared to the same period of 2018, coming out on average in the period at \$3/MMBtu.

SIGNIFICANT EVENTS OF THE PERIOD

Acquisition of Busseto Servizi

On 8 January 2019 IRETI and the Municipality of Busseto (province of Parma) signed a contract for the transfer of all the shares of Busseto Servizi S.r.l.. The company manages the natural gas distribution service in the said Municipality, with more than 3,000 redelivery points present on a total of 90 km of network. The operation follows the result of the public tender procedure called by the Municipality on 18 July 2018, awarded to IRETI for approximately 4.1 million euro.

The contractual conditions associated with the acquisition provide for, until the next *ATeM - Ambito Territoriale Minimo* [literally “minimum territorial area”] tender, keeping Busseto Servizi as a separate corporate entity, with the personnel currently employed, conservation of an operational headquarters in the old town centre and the commitment for Iren not to transfer the shares of the company for 2 years.

The operation is of particular significance from the industrial point of view, because the gas distribution infrastructure of Busseto Servizi is situated in one of the main ATeM of reference for the Group, of which IRETI holds, after this acquisition, 77% of the network.

Acquisition of the San Germano group

On 30 January 2019 the Group, through Iren Ambiente, completed the acquisition of the entire equity interest in the company San Germano in its subsidiary CMT, held by the Derichebourg Group. San Germano operates in waste collection and transport (250 kton/year) in 145 municipalities for approximately one million inhabitants served in the regions Piedmont, Sardinia, Lombardy and Emilia Romagna, with an annual turnover of approximately 65 million euro. The company has 20 operating sites and a workforce of approximately 800 employees.

CMT operates in the treatment of separately-collected waste and paper, cardboard and plastic recycling, with turnover of approximately 11 million euro, at 6 sites in Piedmont and Sardinia, for an authorised capacity of approximately 100 kton/year.

The transaction is part of a process of development of Iren through the Waste Management Business Unit, facilitating achievement of industrial growth objectives thanks to the acquisition of greater competitive abilities in the collection activity and to the development of recycling activities, both expanding the presence in the core territories (Piedmont and Emilia Romagna) and extending the business into new geographical areas considered interesting in perspective (Sardinia).

Shareholders' agreement between IREN and First State Investments related to OLT Offshore LNG Toscana S.p.A.

On 22 March 2019 a shareholders' agreement was signed by, on the one hand, Iren Mercato and ASA - Azienda Servizi Ambientali S.p.A. (ASA), a company in which the Group has a 40% stake, and, on the other hand, First State SP S.à r.l. (“First State Investments” – FSI), related to the governance and to the circulation of the equity investments in OLT Offshore LNG Toscana (OLT), the company that has developed and manages the “FSRU Toscana” regasification plant with a capacity of 3.75 billion m³ a year, anchored off the Tuscan coast.

First State Investments, the international division of Colonial First State Global Asset Management, operates in the management of infrastructural investments and holds, among other things, a large portfolio of equity investments in utilities operating in various European countries.

The agreement was signed at the same time as the signing of a sale contract between FSI and Uniper Global Commodities SE (holder, jointly with Iren Mercato, of control over OLT), regarding the sale of all OLT shares owned by the said Uniper, and took effect at the moment of closing of this sale, formalised on 23 May 2019.

Under the terms of the agreements in being between Uniper, Iren and ASA, Iren and ASA are given a right of co-sale regarding all or some of the OLT shares that they currently hold, at the same terms and conditions laid down for the sale of the shares owned by Uniper. This right may be exercised within 6 months after receiving – also on 22 March 2019 – the notice related to the contract for the sale by Uniper to FSI. Following these developments and in the context of the agreements with Uniper and FSI, the Iren Group is assessing all the viable options for making the most of its equity investment in OLT, considered no longer strategic in the context of the Group's portfolio of assets, continuing at the same time to support the development of the company.

Shareholders' Meeting of 5 April 2019- approval of the proposed amendment of the Articles of Association and of the purchase of treasury shares

On 5 April 2019 the Shareholders' Meeting of Iren S.p.A., in Extraordinary session, approved the amendment of articles 5.4; 18.1; 19.2; 19.3; 19.4; 19.6; 25.5; 27.1; 28.1; 28.2; 28.3 of the Articles of Association.

The main changes regarded (i) the cessation of the delegated power given to the Board of Directors for capital increases reserved for Public Bodies; (ii) the increase in the number of directors, which goes up from 13 to 15 and pursues the objective of ensuring representation of both the La Spezia area public shareholders that have become shareholders of Iren S.p.A., and the shareholder FCT following the demerger of FSU; (iii) the qualified majority for some resolutions of the Board of Directors; (iv) the increase in the number of directors taken from the majority list, which goes up from 11 to 13; (v) the increase in the number of regular members of the Board of Statutory Auditors, which goes up from 3 to 5.

The Shareholders' Meeting, on the same date and in Ordinary session, also authorised the Board of Directors to purchase and dispose of Iren S.p.A. treasury shares, also fractions of the same, under the terms of articles 2357 and following of the Italian Civil Code, and of art. 132 of Italian Legislative Decree no. 58 of 24 February 1998.

The Shareholders' Meeting defined, according to what was proposed by the Board of Directors, purposes, terms and conditions for exercising the aforesaid authorisation, and gave the same all the widest powers, to be exercised with the widest discretionality, so that it may proceed to implement the purchase deeds in full observance of the current legislation.

In this regard, the Board of Directors may carry out transactions for the purchase and disposal of treasury shares for a maximum of 65,000,000 of the Company's shares. However, these must not exceed one twentieth of the share capital. The maximum counter-value of the shares purchasable in the context of this programme may not be more than the amount of the distributable profits and distributable reserves resulting from the latest financial statements approved.

The purchase price of each share may not be more than 10% higher or lower than the official stock exchange price of the Iren stock on the day before the purchase transaction is carried out, without affecting the application of the further conditions and terms pursuant to Delegated Regulation (EU) no. 1052 of 8 March 2016.

The treasury share purchase programme is permitted for eighteen months, starting from the shareholders' meeting resolution, that is up to 5 October 2020.

The purpose of this operation is to give the Group a stock of shares available for external growth operations, also replacing the capital increase resolved in 2016 and revoked with approval of the amendments to the articles of association described above.

Treasury share purchase programme

On the same date (5 April 2019), the Board of Directors, acknowledging the related shareholders' meeting resolution, in turn gave a mandate to the Chief Executive Officer to launch the treasury share purchase programme, for a maximum of 26,000,000 shares, so as however not to exceed 2% of the share capital. In addition, the Board authorised the CEO to determine the criteria and conditions related to the deeds of sale, disposal and/or use of the treasury shares, having regard to the methods of implementation actually used, the trend in the prices of the shares in the period prior to the transaction and the best interests of the Company.

The treasury share purchase programme began, in practice, on 14 May 2019. In this context, Iren gave a mandate to Goldman Sachs International to coordinate and implement the first tranche of the purchase programme, taking the trading decisions in relation to the programme with discretionality and in full independence from the Company, for a maximum amount of 20,000,000 euro to be completed within 6 months starting from 14 May itself.

In the period between 14 May and 28 June 2019, the last open-market day of the half-year period, 3,567,507 treasury shares were purchased, representing 0.274% of the share capital.

Acceptance of the recommendations of the Corporate Governance Code of Listed Companies (July 2018 edition) and approval of the Guidelines for Shareholders on the qualitative and quantitative composition of the Board of Directors

Again on 5 April 2019, the Board of Directors also resolved to accept the recommendations of the Corporate Governance Code of Listed Companies in the July 2018 edition, together with the update of the document

in which evidence is provided of the governance solutions adopted by the Company with reference to the provisions of the said Code.

Implementing what is recommended by Application Criterion 1.C.1. lett. (h) of the Code, taking into account the mandate expiring with approval of the annual financial statements at 31 December 2018, the Board also approved the guidelines for Shareholders on the qualitative and quantitative composition of the administrative body to be appointed for the three years 2019-2021.

Sustainability Report 2018

On 12 April 2019 the Board of Directors of Iren approved, at the same time as the Financial Statements, the Sustainability Report 2018, which assumes also the value of Consolidated Non-Financial Declaration (NFD). The Report describes the Group's economic, environmental and social performance for 2018, and represents an instrument for monitoring the objectives of the Business Plan, which places sustainability as a strategic pillar for development and for participated discussions with local communities and all stakeholders.

Shareholders' Meeting of 22 May 2019

On 22 May 2019 the Ordinary Shareholders' Meeting approved the Company's Financial Statements in relation to financial year 2018 and the Directors' Report and resolved to distribute a dividend of 0.084 euro per share, confirming what had been proposed by the Board of Directors. The dividend of 0.084 euro per each ordinary share (with the specification that treasury shares will not benefit from it) was paid starting from 26 June 2019 (ex-dividend date 24 June 2019 and record date 25 June 2019).

With approval of the financial statements at 31 December 2018 the term of office of the Board of Directors expired. The Meeting therefore proceeded to appoint the new Board of Directors which will remain in office for financial years 2019/2020/2021 (expiry: date of approval of the financial statements of financial year 2021).

As provided for in the Company' Articles of Association, thirteen members of the new Board of Director were appointed from the list presented by Finanziaria Sviluppo Utilities S.r.l., Finanziaria Città di Torino Holding S.p.A., Municipality of Reggio Emilia (on its own behalf and as agent of the Emilian public shareholders), Municipality of La Spezia (on its own behalf and as agent of the La Spezia area public shareholders) and voted by the majority, to which must be added 2 directors appointed from the list presented by Amundi Asset Management SGR S.p.A., voted by the minority.

The Meeting, in addition, appointed Mr Renato Boero to the position of Chairperson of the Board of Directors for financial years 2019/2020/2021.

The Shareholders' Meeting also:

- conferred an appointment on the auditing firm KPMG for the nine years 2021-2029 as provided for in the current legislation;
- approved the first section of the remuneration report;
- determined the annual fee to be paid to the single members of the Board of Directors and the total maximum amount, including the remuneration of those vested with particular duties;
- approved the proposal for a supplement to the fees for the independent auditing appointment for financial years 2018 - 2020.

Attribution of responsibilities and powers to members of the Board of Directors, ascertainment of the requisites of independence and appointment of the members of Sub-Committees for the three years 2019-2021

The new Board of Directors, meeting after the Shareholders' Meeting of 22 May 2019, after acknowledging the appointment of Renato Boero as Chairperson of the Board of Directors, proceeded with the appointment of the Deputy Chairperson, in the person of Moris Ferretti, and of the Chief Executive Officer, in the person of Massimiliano Bianco, as well as the attribution of the responsibilities and powers, as provided for in the Articles of Association.

The Board of Directors also proceeded to verify the existence of the requisites of independence provided for in the current legislation with regard to its members, after obtaining the opinion of the Board of Statutory Auditors. Finally, taking into account the results of these checks, the Board of Directors proceeded to define the composition of the sub-committees, then adjusted at the next meeting on 30 May: Control, Risk and Sustainability Committee, Remuneration and Appointments Committee, Transactions with Related Parties Committee.

Revolving Credit Facilities (RCFs) linked to sustainability indices

At the end of June 2019 Iren S.p.A. signed with two leading banks the same number of credit lines of the Sustainability-linked revolving credit facility (RCF) type, in the committed form, for a total amount of 150 million euro and with a duration of 3 years. The operation is aimed at consolidating the liquidity profile in support of the current rating level, and at the same time reconfirms the Group's intention to widen its portfolio of sustainable funding instruments, which already includes two Green Bond issues.

The kind of credit facility entered into involves a bonus/penalty mechanism linked to achieving specific environmental sustainability objectives, for which certain performance indicators have been defined in relation in particular to separate waste collection and to the production of electricity from renewable and assimilated sources.

FINANCIAL POSITION, RESULTS OF OPERATIONS AND CASH FLOWS OF THE IREN GROUP

Income statement

IREN GROUP INCOME STATEMENT

thousands of euro

| | First half 2019 | First half 2018 Restated (*) | Change % |
|--|--------------------|------------------------------------|---------------|
| Revenue | | | |
| Revenue from goods and services | 2,153,312 | 1,771,999 | 21.5 |
| Change in work in progress | (9) | 27 | (**) |
| Other income | 84,954 | 164,930 | (48.5) |
| Total revenue | 2,238,257 | 1,936,956 | 15.6 |
| Operating expenses | | | |
| Raw materials, consumables, supplies and goods | (793,342) | (625,735) | 26.8 |
| Services and use of third-party assets | (723,349) | (598,190) | 20.9 |
| Other operating expenses | (34,831) | (25,344) | 37.4 |
| Capitalised expenses for internal work | 14,255 | 13,804 | 3.3 |
| Personnel expense | (222,930) | (195,644) | 13.9 |
| Total operating expenses | (1,760,197) | (1,431,109) | 23.0 |
| GROSS OPERATING PROFIT (EBITDA) | 478,060 | 505,847 | (5.5) |
| Depreciation, amortisation, provisions and impairment losses | | | |
| Depreciation and amortisation | (191,510) | (169,237) | 13.2 |
| Provisions for impairment of receivables | (16,845) | (16,436) | 2.5 |
| Other provisions and impairment losses | (12,053) | (5,154) | (**) |
| Total depreciation, amortisation, provisions and impairment losses | (220,408) | (190,827) | 15.5 |
| OPERATING PROFIT (EBIT) | 257,652 | 315,020 | (18.2) |
| Financial income and expense | | | |
| Financial income | 17,872 | 19,305 | (7.4) |
| Financial expense | (45,843) | (49,952) | (8.2) |
| Total financial income and expense | (27,971) | (30,647) | (8.7) |
| Share of profit (loss) of associates accounted for using the equity method | 4,752 | 825 | (**) |
| Value adjustments on equity investments | - | (329) | (100.0) |
| Profit (loss) before tax | 234,433 | 284,869 | (17.7) |
| Income tax expense | (70,197) | (88,239) | (20.4) |
| Net profit (loss) from continuing operations | 164,236 | 196,630 | (16.5) |
| Net profit (loss) from discontinued operations | - | - | - |
| Net profit (loss) for the period | 164,236 | 196,630 | (16.5) |
| attributable to: | | | |
| - Profit (loss) for the period attributable to shareholders | 150,638 | 184,650 | (18.4) |
| - Profit (loss) for the period attributable to minorities | 13,598 | 11,980 | 13.5 |

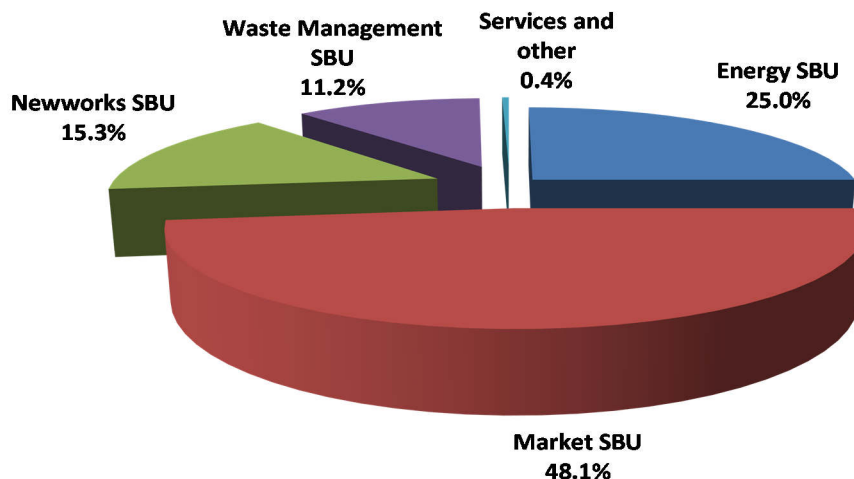
(*) As provided for in IFRS 3, the economic balances of the first half of 2018 were restated to take into account, at the acquisition date, the effects deriving from the completion, at the end of financial year 2018, of the allocation of the purchase price at the definitive fair value of the acquired assets and liabilities (Purchase Price Allocation) of the ACAM group companies and of Re.Cos..

For further information, please see the paragraph entitled "Restatement of amounts at 30 June 2018" in the section "Content and structure of the condensed consolidated interim report".

(**) Change of more than 100%

Revenue

At 30 June 2019, the Group achieved revenue of 2,238 million euro, up by +15.6% compared to the 1,937 euro million of the corresponding period of financial year 2018. The increase in revenue was mainly the combined effect of higher sales of electricity, in particular in the small business segment, also thanks to higher production (+936 GWH) and to the increase in the related price, as well as the expansion of the consolidation scope: in particular the ACAM group companies, starting from 1 April 2018, Maira and Spezia Energy Trading consolidated from October 2018, and San Germano from 1 January 2019.

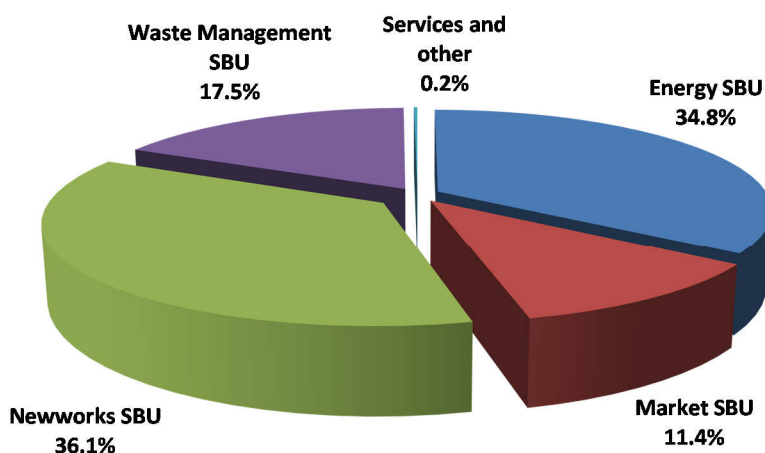


Gross Operating Profit (EBITDA)

The gross operating profit (EBITDA) amounted to 478 million euro, down by -5.5% compared to the 506 euro million of the first half of 2018. The drop in profit is attributable firstly to the extraordinary recognition, in the first half of 2018, of approximately 60 million euro of previous energy efficiency certificates and, in addition, to the expiry from 1 January 2019 of the incentives (former green certificates) related to the hydroelectric plants of Pont Ventoux and Bussento, also recognised in the first half of 2018, for approximately 22 million euro.

Net of the above discontinuity effects the gross operating profit would have shown an improvement of +12.7% with respect to the comparative period. This improvement regarded all the business lines, with the sole exception of the sale of electricity and gas for which falling profits were recorded although with an important recovery in the second quarter.

The profits of the Market SBU were negatively affected by the absence of accounting effects associated with previous one-off adjustment items from 2018 and, regarding gas sales, also unfavourable weather conditions in the first half of the year.



Operating profit (EBIT)

Operating profit totalled 258 million euro, down -18.2% compared to the 315 million euro of the first half of 2018. Higher depreciation and amortisation of approximately 22 million euro was recorded, mainly in relation to the expansion of the consolidation scope and the recognition of rights of use following the application of IFRS 16. Also present are higher provisions and impairment losses of approximately 7 million euro.

Financial income and expense

The economic components of a financial nature showed a balance of net financial expenses of 28 million euro (30.6 million in the first half of 2018).

In particular financial expenses amounted to 45.8 million euro (50 million in the first half of 2018). The decrease is a result of the reduction in the average cost of financial debt, partially offset by the recognition of interest expense, of an accounting nature, related to leases recognised following the adoption of IFRS 16.

Financial income came out at 17.9 million euro, down from the 19.3 million of the comparative period.

Portion of profit (loss) of associates accounted for using the equity method

In the first half of 2019, the result of associates accounted for using the equity method amounted to a positive 4.8 million euro (+4 million compared to the figure for the first half of 2018). This result was mainly due to the investees Aguas de San Pedro, ASTEA and ACOS.

The comparative figure also included the portion of the result, which was then negative, of OLT Offshore LNG Toscana, the stake in which, as it is currently recognised under "Assets held for sale", is no longer measured with the equity method.

Value adjustments on equity investments

The item has no amount in the period analysed. In the first half of 2018 the item came out at -0.3 million euro, and was attributable to the write-back of the equity investment in the associate Acquaenna (+1.4 million euro), made to rectify previous write-downs, and to the restatement at fair value, at the control acquisition date, of the non-controlling interest held in ReCos (-1.7 million euro).

Profit (loss) before tax

As a result of the above trends the consolidated profit before tax came out at 234.4 million euro, down from the 284.9 million euro of the first half of 2018 (-17.7%).

Income tax expense

Income taxes for the period were 70.2 million euro, a decrease of 18 million compared to the comparative period, in relation to the lower pre-tax profit with an effective tax rate estimated today at 30% for financial year 2019 (it was 31% in the first half of 2018).

Net profit (loss) for the period

As a consequence of what is presented above, a net profit of 164.2 million euro was recognised, 16.5% down compared to that of the same period of the previous financial year, which was positively affected by the aforementioned elements of discontinuity. The figure is due to the profit pertaining to shareholders of 150.6 million euro, while profit attributable to minorities was 13.6 million euro.

Statement of Financial Position

RECLASSIFIED STATEMENT OF FINANCIAL POSITION OF THE IREN GROUP

| | thousands of euro | | |
|--|-------------------|------------------|------------|
| | 30.06.2019 | 31.12.2018 | Change % |
| Non-current assets | 5,919,027 | 5,786,294 | 2.3 |
| Other non-current assets (liabilities) | (434,776) | (431,648) | 0.7 |
| Net Working Capital | 69,894 | 132,325 | (47.2) |
| Deferred tax assets (liabilities) | 163,802 | 148,745 | 10.1 |
| Provisions for risks and employee benefits | (610,150) | (621,063) | (1.8) |
| Assets (Liabilities) held for sale | 524 | 524 | - |
| Net invested capital | 5,108,321 | 5,015,177 | 1.9 |
| Equity | 2,538,483 | 2,562,371 | (0.9) |
| Non-current financial assets | (145,154) | (147,867) | (1.8) |
| Non-current financial debt | 3,065,955 | 3,013,303 | 1.7 |
| Non-current net financial debt | 2,920,801 | 2,865,436 | 1.9 |
| Current financial assets | (572,224) | (849,993) | (32.7) |
| Current financial debt | 221,261 | 437,363 | (49.4) |
| Current net financial debt | (350,963) | (412,630) | (14.9) |
| Net financial debt | 2,569,838 | 2,452,806 | 4.8 |
| Own funds and net financial debt | 5,108,321 | 5,015,177 | 1.9 |

The main changes in the statement of financial position for the period are commented on below.

Non-current assets at 30 June 2019 amounted to 5,919 million euro, increasing compared to 31 December 2018, when they were 5,786 million euro. The increase (+133 million euro) was mainly due to the following determinants:

- technical investments in property, plant and equipment and intangible assets (197 million euro), disposals (-4 million euro) and depreciation and amortisation (-192 million euro) in the period;
- the assets at the acquisition date, inclusive of goodwill, following the consolidation of San Germano and CMT, with the related vehicles and plants related to the waste management thread (21 million euro), of Busseto Servizi (4 million euro), the fixed assets of which consist of the gas network located in the related municipality, as well as a business unit related to the management of waste processing plants (9 million euro);
- the first application of IFRS 16 – *Leases*, which entailed the recognition at 1 January 2019 in non-current assets of rented, hired and leased assets for a total of 105 million euro, mostly related to buildings and vehicles functional to the Group's areas of business.

For more information on the segment details of investments in the period, reference should be made to the section "Segment Reporting" below.

While Other non-current assets (liabilities) were substantially in line with the figure for the end of the previous year, the Net Working Capital decreased by 62 million euro (-47.2%), coming out at 70 million euro compared to 132 million at 31 December 2018. The change is the result of lower trade receivables, linked to the seasonal trend of the Group's businesses, the reduction of gas storage and the recognition of the estimate for taxes of the period.

"Provisions for Risks and Employee Benefits" amounted to 610 million euro (621 million euro at 31 December 2018); the decrease was mostly attributable to the obligations related to CO2 emission rights.

Equity amounted to 2,538 million euro, compared to the 2,562 million of 31 December 2018 (-24 million). The change in the period corresponds to the effect of the net profit (+164 million euro), the dividends distributed in the period (-150 million euro), the change in the cash flow hedging reserve linked to derivative

instruments hedging interest rates and commodities in the portfolio (-30 million euro) and the purchases of treasury shares (-8 million euro)

Net financial debt at the end of the period was 2,570 million euro, an increase of 117 million compared to 31 December 2018 (+4.8%). The change reflects the effects of the business combinations that occurred in the period (the acquisitions of the San Germano group and of Busseto Servizi, for a total of 23 million euro) and, following the adoption of IFRS 16, of the recognition of liabilities expressing the discounted future cash flows related to leases held by the Group (for 104 million euro).

For further analytical details please see the statement of cash flows presented below.

STATEMENT OF CASH FLOWS OF THE IREN GROUP

Change in net financial debt

The statement below details the movements in the Group's net financial debt during the first half of 2019.

| | thousands of euro | | |
|---|--------------------|------------------------------------|---------------|
| | First half 2019 | First half 2018 Restated (*) | Change % |
| A. Opening Net financial (debt) | (2,452,806) | (2,371,785) | 3.4 |
| Cash flows from operating activities | | | |
| Profit (loss) for the period | 164,236 | 196,630 | (16.5) |
| Adjustments for non-financial movements | 349,303 | 328,666 | 6.3 |
| Utilisations of employee benefits | (6,911) | (4,666) | 48.1 |
| Utilisations of provisions for risks and other charges | (25,236) | (11,784) | (**) |
| Change in other non-current assets and liabilities | (5,463) | (2,248) | (**) |
| Other changes in capital | (11,493) | (19,106) | (39.8) |
| Taxes paid | - | - | - |
| B. Cash flows from operating activities before changes in NWC | 464,436 | 487,492 | (4.7) |
| C. Cash flows from changes in NWC | (17,306) | (85,110) | (79.7) |
| D. Cash flows from/(used in) operating activities (B+C) | 447,130 | 402,382 | 11.1 |
| Cash flows from/(used in) investing activities | | | |
| Investments in property, plant and equipment and intangible assets | (196,960) | (164,179) | 20.0 |
| Investments in financial assets | (103) | - | - |
| Proceeds from the sale of investments and changes in assets held for sale | 5,760 | 13,930 | (58.7) |
| Changes in consolidation scope | (23,494) | (220,960) | (89.4) |
| Dividends received | 785 | 1,224 | (35.9) |
| E. Total cash flows from /(used in) investing activities | (214,012) | (369,985) | (42.2) |
| F. Free cash flow (D+E) | 233,118 | 32,397 | (**) |
| Cash flows from /(used in) financing activities | | | |
| Capital increase | - | 52,622 | (100.0) |
| Purchases of treasury shares | (7,959) | - | - |
| Dividends paid | (150,122) | (112,973) | 32.9 |
| Interest paid | (22,795) | (28,066) | (18.8) |
| Interest received | 6,803 | 7,325 | (7.1) |
| Change in fair value of hedging derivatives | (55,774) | 5,241 | (**) |
| Change in financial payables for leasing | (104,109) | - | - |
| Other changes | (16,194) | (12,549) | 29.0 |
| G. Total cash flows from /(used in) financing activities | (350,150) | (88,400) | (**) |
| H. Change in net financial (debt) (F+G) | (117,032) | (56,003) | (**) |
| I. Closing Net financial (debt) (A+H) | (2,569,838) | (2,427,788) | 5.9 |

(*) As provided for in IFRS 3, the cash flows of the first half of 2018 were restated to take into account, at the acquisition date, the effects deriving from the completion, at the end of financial year 2018, of the allocation of the purchase price at the definitive fair value of the acquired assets and liabilities (Purchase Price Allocation) of the ACAM group companies and of Re.Cos..

For further information, please see the paragraph entitled "Restatement of amounts at 30 June 2018" in the section "Content and structure of the condensed consolidated interim report".

(**) Change of more than 100%

The increase in financial debt derives from the following determinants:

- an operating cash flow of +447 million euro; higher than what was recorded in the first half of 2018;
- a cash flow from investing activities (-214 million euro) which reflects the technical investments in the period (197 million euro, up compared to the 164 million of the first half of 2018) and the effect of the acquisition of the companies San Germano, CMT and Busseto Servizi (23 million euro, recognised in the item "changes in consolidation scope");

- the components of the cash flow from financing activities (a total of -350 million euro) refer mainly to the aforementioned effect deriving from first application of IFRS 16 (104 million euro), to the negative change in the fair value of derivative cash flow hedging instruments (-56 million euro), associated in particular with the decrease in interest rates and the trend in commodity purchase prices, and to the dividends paid (150 million euro, an amount higher than the 113 million distributed in the previous year).

We can note finally that the statement of cash flows prepared according to the format of a change in cash and cash equivalents is presented at the beginning of the section “Condensed Consolidated Interim Report and Notes at 30 June 2019”.

SEGMENT REPORTING

The Iren Group identifies the following business segments:

- Networks (Electricity Distribution Networks, Gas Distribution Networks, Integrated Water Service)
- Waste Management (Waste collection and disposal)
- Energy (Hydroelectric Production and production from other renewable sources, Combined Heat and Power, District Heating Networks, Thermoelectric Production, Public Street Lighting, Global services, Energy efficiency services)
- Market (Sale of electricity, gas, heat)
- Other services (Laboratories, Telecommunications and other minor services).

For a more uniform presentation of the assets included in Group's operating segments, we can note that the "Smart solutions" business line (energy efficiency, heat management and public lighting) was reallocated from the "Services and other" segment to the "Energy" segment.

These operating segments are disclosed pursuant to IFRS 8. Under this standard, the disclosure about operating segments should be based on the elements which management uses in making operational and strategic decisions.

For a proper interpretation of the income statements relating to individual businesses presented and commented on below, revenue and expense referring to joint activities were fully allocated to the businesses based on actual usage of the services provided or according to technical and economic drivers. Given the fact that the Group mainly operates in one area, the following segment information does not include a breakdown by geographical area.

The financial and economic amounts presented below were restated, for the comparative periods of 2018, in keeping with the segment structure explained above.

In the first half of 2019, in line with the figures for the same period of 2018, non-regulated activities contributed to the formation of gross operating profit (EBITDA) for 27%, regulated activities accounted for 42%, while semi-regulated activities for 31%.

Statement of financial position by business segment at 30 June 2019

| | millions of euro | | | | | | |
|--|------------------|------------------|--------------|------------|----------------|---------------|--------------|
| | Networks | Waste Management | Energy | Market | Other services | Non-allocable | Total |
| Non-current assets | 2,699 | 983 | 1,881 | 169 | 39 | 148 | 5,919 |
| Net Working Capital | (9) | 127 | (25) | (25) | 2 | - | 70 |
| Other non-current assets and liabilities | (605) | (164) | (118) | 6 | (0) | - | (881) |
| Net invested capital (NIC) | 2,085 | 946 | 1,738 | 150 | 41 | 148 | 5,108 |
| Shareholders' equity | | | | | | | 2,538 |
| Net financial position | | | | | | | 2,570 |
| Own funds and net financial debt | | | | | | | 5,108 |

Statement of financial position by business segment at 31 December 2018

millions of euro

| | Networks | Waste Management | Energy | Market | Other services | Non-allocable | Total |
|--|--------------|------------------|--------------|------------|----------------|---------------|--------------|
| Non-current assets | 2,609 | 946 | 1,884 | 146 | 59 | 142 | 5,786 |
| Net Working Capital | (21) | 70 | 66 | 41 | (24) | | 132 |
| Other non-current assets and liabilities | (610) | (156) | (124) | (7) | (6) | | (903) |
| Net invested capital (NIC) | 1,978 | 860 | 1,826 | 180 | 29 | 142 | 5,015 |
| Shareholders' equity | | | | | | | 2,562 |
| Net financial position | | | | | | | 2,453 |
| Own funds and net financial debt | | | | | | | 5,015 |

Income Statement by business segment, first half of 2019

millions of euro

| | Networks | Waste Management | Energy | Market | Other services | Netting and adjustments | Total |
|---|------------|------------------|------------|-----------|----------------|-------------------------|------------|
| Total revenue and income | 482 | 352 | 785 | 1,512 | 10 | (903) | 2,238 |
| Total operating expenses | (310) | (268) | (619) | (1,457) | (9) | 903 | (1,760) |
| Gross Operating Profit (EBITDA) | 172 | 84 | 166 | 55 | 1 | - | 478 |
| Net am./depr., provisions and impairment losses | (82) | (47) | (64) | (26) | (1) | | (220) |
| Operating profit (EBIT) | 90 | 37 | 102 | 29 | 0 | - | 258 |

Income Statement by business segment, first half of 2018

millions of euro

| | Networks | Waste Management | Energy | Market | Other services | Netting and adjustments | Total |
|---|------------|------------------|------------|-----------|----------------|-------------------------|------------|
| Total revenue and income | 443 | 294 | 644 | 1,241 | 18 | (703) | 1,937 |
| Total operating expenses | (283) | (220) | (438) | (1,178) | (15) | 703 | (1,431) |
| Gross Operating Profit (EBITDA) | 160 | 74 | 206 | 63 | 3 | - | 506 |
| Net am./depr., provisions and impairment losses | (72) | (38) | (60) | (20) | (1) | | (191) |
| Operating profit (EBIT) | 88 | 36 | 146 | 43 | 2 | - | 315 |

Networks SBU

At 30 June 2019 the Network business segment, which comprises the businesses of Gas distribution, Electricity and the Integrated Water Service, recorded revenue of 482 million euro, up by +8.7%, compared to the 443 million euro for the first half of 2018. The consolidation, starting from 1 April 2018, of ACAM Acque, operating in the La Spezia area, contributed to the increase in revenue.

The gross operating profit (EBITDA) amounted to 172 million euro, up +7.5% on the 160 million euro for the first half of 2018, while net operating profit (EBIT) was 90 million euro, an increase of +2.5% compared to 88 million euro in the first half of 2018.

The positive trend in gross operating profit (EBITDA) was partially absorbed by higher amortisation and depreciation for around 9 million euro, related to the increase in technical investments, and by higher net provisions of around 1 million euro.

| | | First half 2019 | First half 2018 restated | Δ % |
|---------------------------------|--------------------------------------|--------------------|--------------------------------|-------|
| Revenue | €/mln | 482 | 443 | 8.7% |
| Gross Operating Profit (EBITDA) | €/mln | 172 | 160 | 7.5% |
| EBITDA Margin | | 35.8% | 36.2% | |
| | <i>from Electricity Networks</i> | €/mln 36 | 35 | 2.3% |
| | <i>from Gas Networks</i> | €/mln 41 | 38 | 7.9% |
| | <i>from Integrated Water Service</i> | €/mln 95 | 87 | 9.8% |
| Operating Profit (EBIT) | €/mln | 90 | 88 | 2.5% |
| Investments | €/mln | 114 | 101 | 13.2% |
| | <i>in Electricity Networks</i> | €/mln 18 | 15 | 16.9% |
| | <i>in Gas Networks</i> | €/mln 23 | 23 | - |
| | <i>in Integrated Water Service</i> | €/mln 74 | 63 | 16.5% |
| Electricity distributed | GWh | 1,828 | 1,861 | -1.8% |
| Gas introduced into the network | Million m ³ | 769 | 789 | -2.5% |
| Water sold | Million m ³ | 90 | 90 | - |

The changes in gross operating profit for the segments concerned are illustrated below.

Networks SBU - Electricity

The gross operating profit of the sector amounted to 36 million euro, up by +2.3% compared to 35 million euro in the first half of 2018.

The increase in the profit was mainly due to an improvement in the tariff revenue constraint (VRT).

During the period investments for 18 million euro were made, up by +16.9% compared to the 15 million euro of the first half of 2018. They were mainly related to new connections, to the construction of new LV/MV substations and LV/MV lines as well as to the completion of a number of primary substations.

Networks SBU - Gas Distribution

Gross operating profit (EBITDA) of gas distribution networks amounted to 41 million euro, up by +7.9% compared to 38 million euro in the first half of 2018. The increase in the profit was mainly due to an improvement in the tariff revenue constraint (VRT).

Investments made in the period amounted to 23 million euro, in line with the investments the corresponding period of 2018, and regarded the provisions of ARERA resolutions, in particular making the network compliant with cathodic protection, and the installation of electronic meters.

Networks SBU - Water Cycle

Gross operating profit for the period amounted to 95 million euro, up +9.8% on the 87 million euro of the first half of 2018. The increase in the profit is attributable to the consolidation of ACAM Acque starting from 1 April 2018, to the increase in the tariff revenue constraint (VRT) and to greater synergies on costs.

Investments in the period totalled 74 million euro, up (+16.5%) compared to the 63 million euro of the first half of 2018 and concerned the construction, development and maintenance of distribution networks and plants, the sewerage network and, in particular, the construction of new water treatment plants.

Waste Management SBU

At 30 June 2019, the revenue of the segment totalled 352 million euro, up by +19.8% compared to 294 million in the first half of 2018. The increase in revenue is attributable for around 44 million euro to expansion of the consolidation scope related to ACAM Ambiente and ReCos (+ 10 million euro), as of 1 April 2018, and San Germano from 1 January 2019 (+34 million euro), as well as to higher revenue from the activity of collection and intermediation of special waste and to an increase in disposal revenue.

| | | First half 2019 | First half 2018 restated | Δ % |
|---|------------------|--------------------|--------------------------------|-------|
| Revenue | €/mln | 352 | 294 | 19.8% |
| Gross Operating Profit (EBITDA) | €/mln | 84 | 74 | 13.9% |
| <i>EBITDA Margin</i> | | 23.7% | 25.0% | |
| Operating Profit (EBIT) | €/mln | 37 | 36 | 1.7% |
| Investments | €/mln | 22 | 10 | (*) |
| Electricity sold | GWh | 248 | 242 | 2.2% |
| Thermal energy produced | GWh _t | 105 | 109 | -3.4% |
| Waste managed | tonnes | 1,328,246 | 1,122,051 | 18.4% |
| Emilia area separate waste collection | % | 76.5 | 73.6 | 4.0% |
| Piedmont area separate waste collection | % | 53.2 | 46.7 | 13.9% |
| Liguria area separate waste collection | % | 73.7 | 67.5 | 9.2% |

(*) Change of more than 100%

Gross operating profit of the segment amounted to 84 million euro, an improvement of +13.9% on the 74 million euro of the first half of 2018. The improvement in the profit is mainly attributable to the positive contribution deriving from the increase in the volumes of waste disposed of in the Group's plants (Rei landfill), to the higher revenue from collection connected with the development of door-to-door collection activities and from the aforementioned expansion of the consolidation scope.

The operating profit was 37 million euro, an improvement of +1.7% compared to the 36 million euro recorded in the first half of 2018. The positive trend of the gross operating profit (EBITDA) was partially absorbed by higher amortisation and depreciation of roughly 8 million euro and higher provisions for risks and impairment of around 1.5 million euro.

The investments made in the period amounted to 22 million euro, up compared to the 10 million euro of the first half of 2018 and refer to investments for the maintenance of various plants and investments in equipment and vehicles supporting waste collection based on the door-to-door and separation method.

Energy SBU

At 30 June 2019 the revenue of the Energy SBU amounted to 785 million euro, an increase of 21.8% compared to the 644 million of the first half of 2018 owing mainly to the effect of the higher electricity production and, although to a lesser extent, the increase in selling prices.

| | | First half 2019 | First half 2018 | Δ % |
|---|------------------------|--------------------|--------------------|--------|
| Revenue | €/mln | 785 | 644 | 21.8% |
| Gross Operating Profit (EBITDA) | €/mln | 166 | 206 | -19.1% |
| <i>EBITDA Margin</i> | | 21.2% | 31.9% | |
| Operating Profit (EBIT) | €/mln | 102 | 146 | -30.5% |
| Investments | €/mln | 22 | 25 | -13.7% |
| Electricity produced | GWh | 5,087 | 4,153 | 22.5% |
| <i>from hydroelectric and other renewable sources</i> | GWh | 644 | 793 | -18.7% |
| <i>from cogeneration sources</i> | GWh | 3,232 | 2,965 | 9.0% |
| <i>from thermoelectric sources</i> | GWh | 1,211 | 395 | (*) |
| Heat produced | GWh _t | 1,643 | 1,571 | 4.6% |
| <i>from cogeneration sources</i> | GWh _t | 1,421 | 1,301 | 9.2% |
| <i>from non-cogeneration sources</i> | GWh _t | 222 | 270 | -17.8% |
| District heating volumes | Million m ³ | 94 | 87 | 7.7% |

At the same date the electricity produced was 5,087 GWh, up by +22.5% compared to 4,153 GWh in the first half of 2018. The increase in production regarded thermoelectric generation and cogeneration while hydroelectric production fell (-18.7%).

Total thermoelectric production was 4,443 GWh, of which 3,232 GWh from cogeneration sources, up (+9%) compared to the 2,965 GWh of financial year 2018 and 1,211 GWh from conventional thermoelectric sources, sharply up compared to the 395 GWh of the first half of 2018.

Production from renewable sources was 644 GWh, of which 633 GWh deriving from hydroelectric sources and, marginally for approximately 11 GWh, from other renewables (photovoltaic); overall production was down by -18.7% compared to the 793 GWh of the first half of 2018 as a result of the extraordinary rainfall that had characterised May and June 2018.

Heat production in the period was 1,643 GWht, up (+4.6%) compared to the 1,571 GWht of the previous year. Overall district heating volumes amounted to approximately 94 million m³, up by +7.7% compared to the approximately 87 million m³ of the first half of 2018 also as a result of the rental of the SEI Energia business unit.

The gross operating profit (EBITDA) amounted to 166 million euro, down by -19.1% compared to 206 million euro in the first half of 2018. The significant drop in profit is attributable firstly to the extraordinary recognition, in the first half of 2018, of approximately 60 million euro of previous energy efficiency certificates and, in addition, to the expiry from 1 January 2019 of the incentives (former green certificates), related to the hydroelectric plants of Pont Ventoux and Bussento also recognised in the first half of 2018 for approximately 22 million euro.

Net of these factors of operating discontinuity the gross operating profit would show an improvement of +33.9% compared to the 124 million euro of 2018. The first half of 2019 was distinguished by electricity prices (Single National Price-SNP) trending downward compared to the beginning of the year but, on average, higher than the first half of 2018. This context, together with a drop in gas prices, thanks also to a particularly mild thermal season, entailed an increase in the profitability of generation which made it possible to absorb the lower profitability of dispatching services (DSM) and the higher costs connected with the increase in ETS prices. The improvement in the profit was due to the activities of the district heating sector associated with rental of the SEI Energia business unit, development of the energy efficiency activities and recognition of a number of items related to energy certificates.

The operating profit (EBIT) of the energy segment totalled 102 million euro, down by -30.5% compared to the 146 million euro of the first half of 2018. Excluding the above mentioned factors of operating discontinuity, the operating profit would show an improvement of +59.4% compared to the 64 million euro of the first half of 2018. The depreciation and amortisation of the period showed an increase of approximately 3 million euro compared to 2018 and there were also higher provisions and impairment losses of approximately 1 million.

Investments in the period amounted to 22 million euro.

Market SBU

At 30 June 2019 the revenue of the segment amounted to 1,512 million euro, up +21.9% from the 1,241 million euro in the same period of 2018. We can note that as of 1 October 2018 the company Spezia Energy Trading came into the consolidation scope of the Market SBU.

The gross operating profit (EBITDA) amounted to 55 million euro, down by -13.4% compared to 63 million euro in the first half of 2018, recovering in the second quarter. The reduction in profit is attributable to the lack of accounting effects associated with previous one-off adjustment items characterising the first half of 2018, related to both gas and electricity sales, and, regarding gas sales, also to an unfavourable season and to worsening in the margin due to the particularly volatile energy scenario.

Operating profit (EBIT) amounted to 29 million euro, down by -31.2% from the figure of 43 million euro in the corresponding period of 2018. Higher depreciation and amortisation of approximately 3 million euro and higher provisions of approximately 2 million euro were recorded.

| | | First half 2019 | First half 2018 | Δ % | |
|---------------------------------|----------------------------------|------------------------|--------------------|--------|--------|
| Revenue | €/mln | 1,512 | 1,241 | 21.9% | |
| Gross Operating Profit (EBITDA) | €/mln | 55 | 63 | -13.4% | |
| <i>EBITDA Margin</i> | | 3.6% | 5.1% | | |
| | <i>from Electricity</i> | €/mln | 9 | 11 | -20.6% |
| | <i>from Gas</i> | €/mln | 45 | 52 | -14.5% |
| | <i>from Other sales services</i> | €/mln | 1 | 0 | (*) |
| Operating Profit (EBIT) | €/mln | 29 | 43 | -31.2% | |
| Investments | | 21 | 15 | 44.4% | |
| Electricity Sold | GWh | 4,756 | 3,878 | 22.6% | |
| Gas Purchased | Million m ³ | 1,633 | 1,540 | 6.0% | |
| | <i>Gas sold by the Group</i> | Million m ³ | 633 | 700 | -9.6% |
| | <i>Gas for internal use</i> | Million m ³ | 909 | 734 | 23.9% |
| | <i>Gas in storage</i> | Million m ³ | 90 | 106 | -14.9% |

(*) Change of more than 100%

Sale of electricity

The volumes of electricity sold amounted to 4,756 GWh (net of pumping, network leaks, dedicated withdrawals and including balancing) up by 22.6% compared to the 3,878 GWh of the first half of 2018. Volumes sold on the free market, including the segments of free business, free retail customers and wholesalers, amounted to a total of 4,538 GWh, up +24.6% compared to 3,643 GWh in the first half of 2018. The increase in free-market sales is attributable mainly to the wholesale segment, for which sales came to 1,194 GWh, up by +146.3% compared to 485 GWh in the first half of 2018. Final customer sales also increased in both the retail segment, at 796 GWh compared with 755 GWh in the first half of 2018 (+0.3%), and in the business segments, coming out at 2,587 GWh compared with 2,403 GWh in 2018 (+7.7%).

Sales in the protected market amounted to 218 GWh, down (-7.8%) compared to 236 GWh in the first half of 2018.

The gross operating profit (EBITDA) of the sale of electricity amounted to 9 million euro, worsening compared to 11 million euro in the first half of 2018. The drop in profit is attributable to the accounting effect of adjustments of past items that the first half of 2018 had benefited from.

Sale of Natural Gas

The volumes purchased amounted to 1,633 million m³, up by +6%, compared to the 1,540 million m³ of the first half of 2018.

The gas sold by the group amounted to 634 million m³, down by -9.6% compared to the 700 million m³ of the first half of 2018, while gas used for internal consumption was 909 million m³, up (+23.9%) compared to 734 million m³ in the first half of 2018.

Gross operating profit (EBITDA) of gas sales amounted to 45 million euro, down by -14.5% compared to the 52 million euro recorded in the first half of 2018. The drop in profit is attributable both to the worsening of unit margins and to a less favourable thermal season compared to the corresponding period of 2018 which entailed a significant reduction in volumes sold. In addition the year reflects the absence of the accounting effect of adjustments of past items that had benefited the first half of 2018, no longer repeatable, partially offset by the positive effects resulting from application of ARERA resolution 737/17.

Sales of heat and other services

Heat sales and other services presented a gross operating profit of 1 million euro, while they substantially broke even in 2018.

Investments in the period totalled 21 million euro, up compared to 15 million euro in the first half of 2018.

Services and other

Revenue of the period in the segment, which includes the activities of the analysis laboratories, telecommunications and other minor activities, was 10 million euro, down compared to the 18 million recorded in the first half of 2018.

| | | First half 2019 | First half 2018 restated | Δ % |
|---------------------------------|-------|----------------------------|---|------------|
| Revenue | €/mln | 10 | 18 | -41.2% |
| Gross Operating Profit (EBITDA) | €/mln | 1 | 3 | -75.3% |
| <i>EBITDA Margin</i> | | 7.7% | 18.3% | |
| Operating Profit (EBIT) | €/mln | 0 | 2 | -98.1% |
| Investments | €/mln | 18 | 14 | 28.6% |
| (*) Change of more than 100% | | | | |

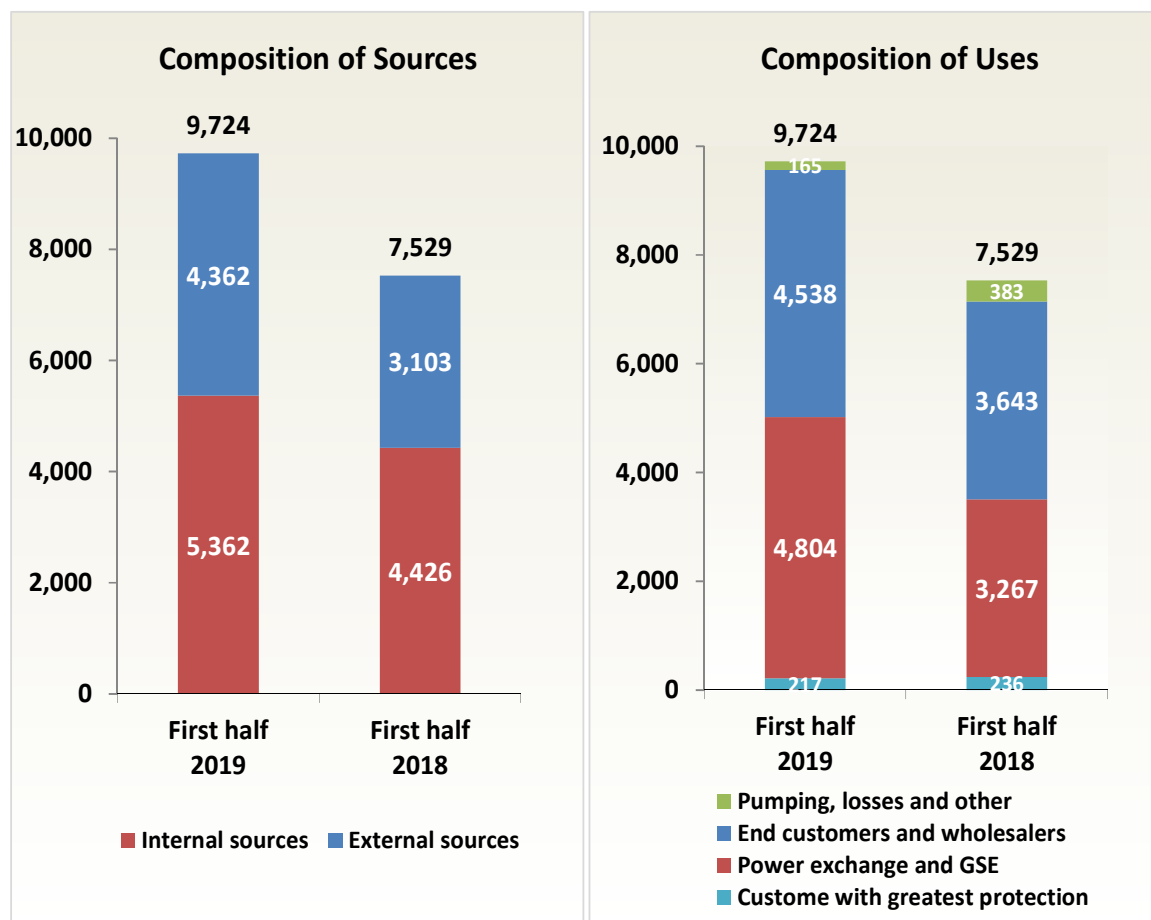
The gross operating profit (EBITDA) amounted to 1 million euro, down compared to the first half of 2018. Investments in the period amounted to 18 million euro, up compared to 14 million in the first half of 2018, and related largely to information technology, vehicles and property services.

ENERGY BALANCES

Electricity balance sheet

| GWh | First half 2019 | First half 2018 | Change % |
|--|-----------------|-----------------|-------------|
| SOURCES | | | |
| The Group's gross production | 5,362 | 4,426 | 21.1 |
| <i>a) Hydroelectric and other renewables</i> | 644 | 793 | (18.8) |
| <i>b) Cogeneration</i> | 3,232 | 2,965 | 9.0 |
| <i>c) Thermoelectric</i> | 1,211 | 395 | (*) |
| <i>d) Production from WTE plants and landfills</i> | 275 | 273 | 0.7 |
| Purchases from <i>Acquirente Unico</i> | 240 | 250 | (4.0) |
| Energy purchased on the Power Exchange | 3,757 | 1,716 | (*) |
| Energy purchased from wholesalers and imports | 366 | 1,137 | (67.8) |
| Total Sources | 9,724 | 7,529 | 29.2 |
| USES | | | |
| Sales to protected customers | 217 | 236 | (8.1) |
| Sales on the Power Exchange | 4,804 | 3,267 | 47.0 |
| Sales to final customers and wholesalers | 4,538 | 3,643 | 24.6 |
| Pumping, distribution losses and other | 165 | 383 | (56.9) |
| Total Uses | 9,724 | 7,529 | 29.2 |

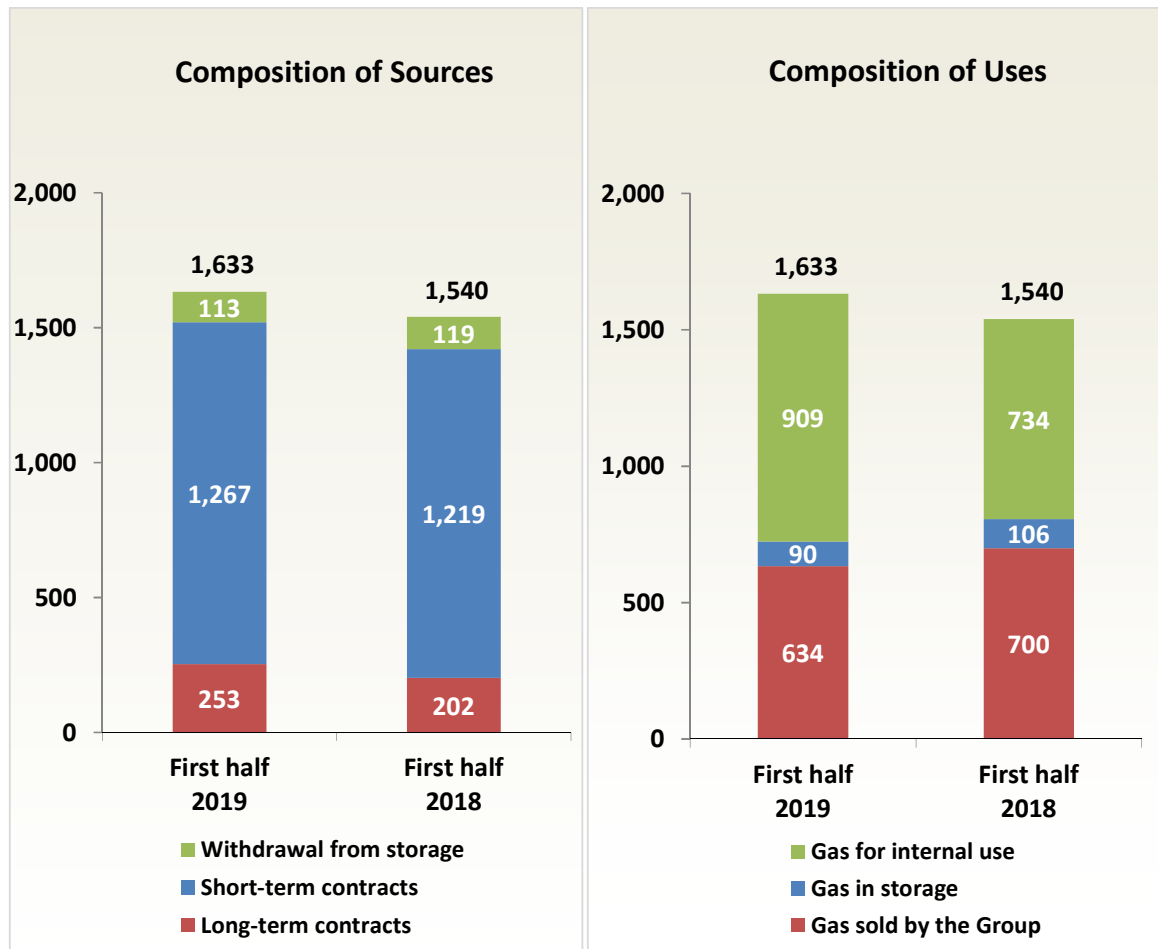
(*) Change of more than 100%



Gas balance sheet

| Millions of m ³ | First half 2019 | First half 2018 | Changes % |
|-------------------------------------|-----------------|-----------------|------------|
| SOURCES | | | |
| Long-term contracts | 253 | 202 | 25.3 |
| Short- and medium-term contracts | 1,267 | 1,219 | 3.9 |
| Withdrawals from storage | 113 | 119 | (5.0) |
| Total Sources | 1,633 | 1,540 | 6.0 |
| USES | | | |
| Gas sold by the Group | 634 | 700 | (9.6) |
| Gas for internal use ⁽¹⁾ | 909 | 734 | 23.8 |
| Gas in storage | 90 | 106 | (15.1) |
| Total Uses | 1,633 | 1,540 | 6.0 |

(1) Internal use involves thermoelectric plants and use for heat services and internal consumption



SIGNIFICANT SUBSEQUENT EVENTS AND BUSINESS OUTLOOK

Acquisition of the waste management unit of FG Riciclaggi and of 100% of Ferrania Ecologia (province of Savona)

On 2 July 2019, after the preliminary contract signed on 22 May by Iren Ambiente and the companies FG Riciclaggi S.r.l. and Liguria Ecologia S.r.l. (a subsidiary of the Duferco group), on fulfilment of the conditions precedent, the acquisition of 100% of the share capital of Ferrania Ecologia S.r.l. was completed. (in which the said FG Riciclaggi and Liguria Ecologia each had a 50% stake), after contribution to the same of the business unit of FG Riciclaggi related to the waste sector.

The unit contributed by FG Riciclaggi regards processing activities involving waste from separate collection (in particular plastic and bulky waste, as well as the Organic Fraction of Municipal Solid Waste (Frazione Organica dei Rifiuti Solidi Urbani - FORSU) and includes three plants at Cairo Montenotte, Savona and Albenga, while Ferrania Ecologia manages the Cairo Montenotte bio-digester with a capacity of 45,000 tonnes/year (30,000 tonnes of FORSU and 15,000 of "green" fraction), already authorised to double this capacity.

In detail, the operation involved two stages:

- the purchase of 50% of the share capital of Ferrania Ecologia, owned by Liguria Ecologia; and
- the purchase of 50% of the share capital of Ferrania Ecologia, owned by FG Riciclaggi, after contribution by the latter of its business unit related to the waste sector, with payment at the same time of a joint capital increase made in kind by FG Riciclaggi and in cash by Iren Ambiente.

The total price for execution of the operation was approximately 6 million euro. It is also planned to sign a contract with Duferco Engineering for doubling the capacity of the Cairo Montenotte bio-digester.

The operation will make it possible to create synergies through the optimisation, in terms of volumes processed, of the plants acquired and through full use of the capacity of the bio-digestion plant after the doubling.

Appointment of the General Manager of Iren S.p.A. and of the corporate bodies of the First Level Companies

On 2 July 2019 the Board of Directors of Iren S.p.A. resolved to establish the position of General Manager, attributing it to Massimiliano Bianco (already Chief Executive Officer) and conferring on the same specific operating powers. At the same meeting, the Board approved the related economic and contractual conditions of the new temporary employment relationship being established.

In addition, during the sessions held on 28 June and 1 July 2019, the Shareholders' Meetings of the First Level Companies (Iren Ambiente, IRETI, Iren Energia and Iren Mercato) appointed the new members of the Boards of Directors and the Boards of Statutory Auditors for the three years 2019-2020-2021 (expiring with approval of the financial statements for financial year 2021).

Contract for the acquisition of Territorio e Risorse

On 23 July 2019 the Iren Group signed a preliminary contract with the company EntsorgaFin S.p.A. for the purpose of acquiring 100% of Territorio e Risorse S.r.l., a company which has built and operates a composting and aerobic digestion plant located in the Municipality of Santhià, in the province of Vercelli. The effectiveness of the operation is subordinated to the fulfilment of certain conditions precedent.

The existing plant is currently authorised to process up to 36,000 tonnes of waste a year, of which 26,000 tons of FORSU and 10,000 of vegetable waste. The company also holds an authorisation for the expansion of this plant, which provides for an increase of the processing potential to a total of 50,000 tonnes through an increase, to 40,000 tonnes, of the FORSU capacity. As a consequence of the expansion, the plant will also be able to produce, with an anaerobic process, approximately 2.6 million cubic metres per year of biogas. The total price of the operation will be approximately 6.5 million euro, including the financial debt; the expansion will entail an additional investment of approximately 10 million euro.

The operation is part of a plan for vertical integration in the field of recovery of the organic fraction coming from domestic separate waste collection, in a way compatible with the Group's plant needs provided for in the Business Plan.

Subscription of a “Climate Action & Circular Economy” loan

On 29 July 2019 Iren S.p.A. signed with the European Investment Bank (EIB) a loan contract for 120 million euro, which supplements the available lines already in being at this institution, and is dedicated to financing initiatives in the waste management and hydroelectric production sectors.

This loan is of the “Climate Action & Circular Economy” type, and is aimed at supporting the Group’s development programme for the period 2018-2023, identifying investments for a total of 210 million euro which come under the objective of “Adaptation to climate change” and on the themes of the circular economy and decarbonisation.

The new loan facility, the first in Italy with the specific features described, represents an important contribution to strengthening Iren’s financial structure and consolidates the multi-annual collaboration with the EIB.

BUSINESS OUTLOOK

The macroeconomic scenario is influenced by an expansive monetary policy implemented by the major central banks, which has contributed to improving the price of shares on the financial markets. The real economy however is not following the positive trend of these markets, owing mainly to the commercial tensions between China and the United States that affect the trading of goods at a global level.

In this context, for 2019 the Iren Group expects, on the one hand, despite falling energy prices, positive clean spark spreads, an increase in electricity production from cogeneration and thermoelectric sources and the normalisation of the dispatching market and, on the other, a reduction in energy production from hydroelectric sources owing to the low snowfalls in the winter months.

As regards the sale of gas and electricity, a partial improvement of margins is expected, in particular in the fourth quarter, thanks to commercial actions that have made it possible not only an increase in the number of customers but also an increase in their loyalty.

As regards the Networks Business Unit growth in revenue is expected owing to the higher investments made in accordance with the Business Plan, aimed at improving the existing infrastructures and at increasing the quality of the service offered to the public, in particular in the integrated water sector, thanks also to the complete contribution of ACAM Acque.

Finally, by the end of the year door-to-door collection in the Municipality of Turin will be extended further, making it possible to increase the Group’s percentage of separate waste collection, already today higher than the national average. As provided for in the Business Plan, discussions are continuing with the relevant bodies to obtain the authorisations necessary for the construction of processing and disposal plants, which will contribute to closing the waste cycle in a circular economy perspective.

FINANCIAL MANAGEMENT

General framework

During the first half of 2019 the short-term part of the interest rate curve remained substantially stable, with a downward movement at the end of the period; the medium/long-term part, in the meantime, continued the decline that had begun at the end of 2018.

The last intervention by the European Central Bank was the cut in interest rates in March 2016. The current rate is 0%. Examining the trend in the six-month Euribor rate we can note that the parameter, which has been in stably negative territory in these last few weeks, fell further and is currently at -0.36%, lower than the previous minima. Fixed-rate quotations, reflected in the figures for the IRS at 5 and 10 years, in the first half of 2019 continued the downward movement that had begun in September 2018 and are recording new record lows.

Activities performed

During the first half of 2019, activities aimed at consolidating the financial structure of the Iren Group continued. The development of funding needs is monitored through careful financial planning, which enables requirements for new financial resources to be anticipated, taking into account the repayments of outstanding loans, the development of debt, the investments, the trend in working capital and the balance of short-term and long-term sources.

The organisational model adopted by the Iren Group, with the goal of financial optimisation of all Group companies, provides for Iren's centralisation of treasury management, medium/long-term loans management and financial risk monitoring and management. Iren has relations with the leading Italian and international banks, for the purpose of finding the types of loans best suited to its needs, and the best market conditions.

Moving on to examine in more detail the operations carried out in the first half of 2019, we can note that in the period no new loans were activated at the Parent Company level; at the level of the subsidiaries, we can report the opening of a new position of 750,000 euro for Studio Alfa.

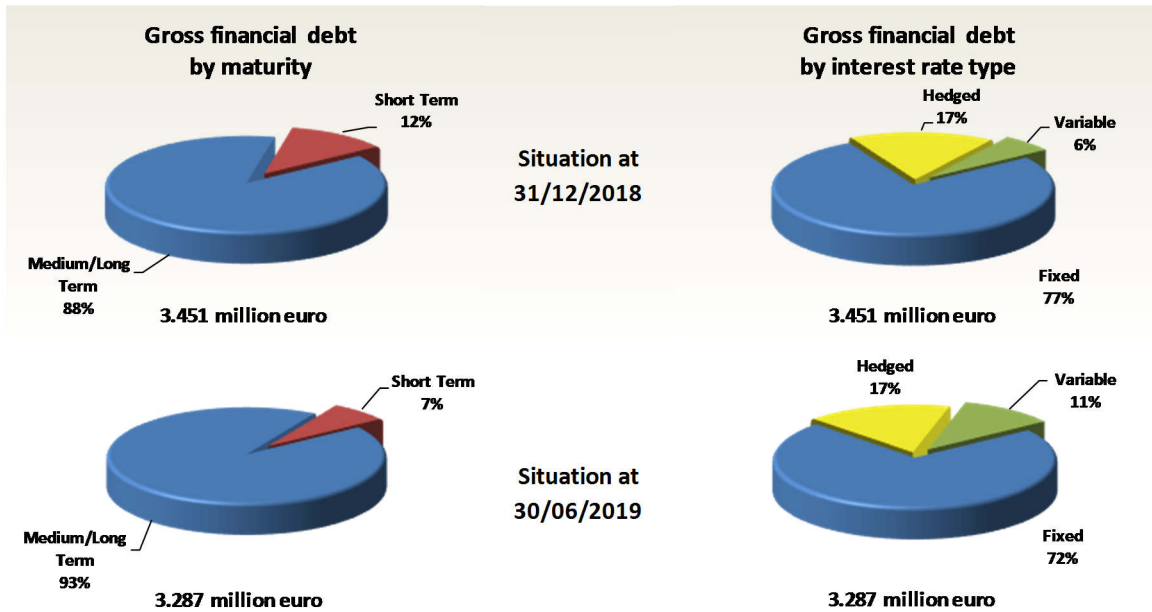
Direct loans not used and available still total 155 million euro, and refer to loans from the European Investment Bank, with terms of up to 15 years.

Financial debt at the end of the period is made up 33% of loans and 67% of bonds.

As regards financial risks, the Iren Group is exposed to various types, including liquidity risk, interest rate risk, and exchange rate risk. As part of its Risk Management activities, the Group uses non-speculative hedging contracts to limit risks of fluctuations in the interest rate. In the period new Interest Rate Swap contracts were signed hedging a total of 100 million euro of debt, with maturity at 2025/2026 and effects starting from December 2020/2021. At 30 June 2019, the portion of variable rate debt not hedged by exchange rate derivatives was 11% of gross financial debt, in line with the objective of the Iren Group which is to maintain adequate protection against significant increases in interest rates.

Overall, the activity carried out is aimed at refinancing debt with a view to improving the financial structure, structurally reducing the cost of capital and extending the average duration of financial debt.

The composition of gross financial debt by maturity and rate type, compared with the situation at 31 December 2018, is shown below.



Rating

In November 2018 the agency Fitch confirmed for Iren and its senior unsecured issues the rating BBB, with outlook stable. The judgement is based mainly on the update of the business plan to 2023 which, in continuity compared to previous years, confirms the prevalence of regulated and quasi-regulated activities (approximately 70% of Gross Operating Profit (EBITDA)), and on the positive track record of the results achieved in the period 2015 – 2018. Fitch, finally, in expressing its judgement assesses positively the management’s financial discipline aimed at pursuing the targets set.

Supporting the Group’s liquidity profile and the rating level, Iren has the aforesaid medium/long-term loan facilities agreed and available but not used for 155 million euro.

As noted in “Significant events of the period”, new committed credit lines of the Sustainability-linked Revolving Credit Facility (RCF) type were also contractualised. At 30 June 2019 these amounted to 150 million euro and are in addition to cash and cash equivalents.

RISKS AND UNCERTAINTIES

The management of business risks is an essential component of the Internal Control System of corporate governance in a listed company, and the Code of Conduct set forth by Borsa Italiana assigns specific responsibilities as regards this aspect. The Enterprise Risk Management model operative within the Group includes the methodological approach to integrated identification, assessment and management of the Group risks.

For each of the following risk types:

- Financial Risks (liquidity, interest rate, exchange rate);
- Credit Risk;
- Energy Risks, attributable to the procurement of gas for thermoelectric generation and to the sale of electricity, heat and gas, and to the hedging derivative markets;
- Operational risks, associated with asset ownership, involvement in business activities, processes, procedures and information flows

Specific “policies” have been defined with the primary goal of fulfilling strategic guidelines, organisational-managerial principles, macro processes and techniques necessary for the active management of the related risks. The Group’s Enterprise Risk Management model also regulates the roles of the various parties involved in the risk management process, which is governed by the Board of Directors, and calls for specific Committees to manage the financial, credit and energy risks.

As the Iren Group pays particular attention also to maintaining trust and a positive image of the Group, the Enterprise Risk Management model also manages “reputational risks” which relate to the impacts on stakeholders of any malpractices.

The “Risk Management” Department, reporting to the Deputy Chairperson, operates within the Holding. This department is formally entrusted with the following activities:

- coordinating the process for integrated management of the Group’s risks, including those related to M&A operations;
- assessing the Group’s insurance needs, designing programmes, signing and managing policies.

A periodic assessment process is also in place with regard to adverse events in the various sectors and across all the Group’s areas in order to circumstantiate their causes and implement the most suitable methods for preventing and/or limiting the impacts of the events.

Details of the active management methods within the Group are provided below for the different types of risk.

1. FINANCIAL RISKS

The Iren Group’s business is exposed to various types of financial risks, including liquidity risk, currency risk and interest rate risk. As part of its Risk Management activities, the Group uses non-speculative hedging contracts to limit exchange rate risk and interest rate risk.

a) Liquidity risk

Liquidity risk is the risk that financial resources available to the company will be insufficient to cover financial and trade commitments in accordance with the agreed terms and deadlines.

The procurement of financial resources was centralised in order to optimise their use. In particular, centralised management of cash flows in Iren makes it possible to allocate the funds available at the Group level according to the needs that from time to time arise among the individual Companies. Cash movements are recognised in intra-group accounts along with intra-group interest income and expense.

A number of investees have an independent financial management structure in compliance with the guidelines provided by the Parent Company.

b) Exchange rate risk

Except as indicated under the section on energy risk, the Iren Group is not significantly exposed to exchange rate risk.

c) Interest rate risk

The Iren Group is exposed to interest rate fluctuations especially with regard to the measurement of financial expenses related to indebtedness. The Iren Group's strategy is to limit exposure to the risk of interest rate volatility, maintaining at the same time a low cost of funding.

Compliance with the limits imposed by the policy are verified during the Financial Risk Committee meetings with regard to the main metrics, together with analysis of the market situation, interest rate trends, the value of hedges and confirmation that the conditions established in covenants have been met.

2. CREDIT RISK

The Group's credit risk is mainly related to trade receivables deriving from the sale of electricity, district heating, gas and the provision of energy, water and environmental services. The receivables are spread across a large number of counterparties, belonging to non-uniform customer categories (retail and business customers and public bodies); some exposures are of a high amount and are constantly monitored and, if necessary, covered by repayment plans. The Iren Group's Credit Management units devoted to credit recovery are responsible for this activity.

In carrying on its business, the Group is exposed to the risk that the receivables may not be honoured on maturity with a consequent increase in their age and in insolvency up to an increase in receivables subject to arrangement procedures or unenforceable. This risk reflects, among other factors, also the current economic and financial situation.

To limit exposure to credit risk, a number of tools have been activated. These include analysing the solvency of customers at the acquisition stage through careful assessment of their creditworthiness, transferring the receivables of discontinued and/or active customers to external credit recovery companies and introducing new recovery methods for managing legal disputes. In addition, methods of payment through digital channels are offered to Customers.

The receivable management policy and creditworthiness assessment tools, as well as monitoring and recovery activities differ in relation to the various categories of customers and types of service provided.

Credit risk is hedged, for some types of business customers, with opportune forms of first-demand bank or insurance guarantees issued by subjects of leading credit standing.

An interest-bearing guarantee deposit is paid for some types of services (water, natural gas, "protected customer" electricity sectors) in compliance with regulations governing these activities. This deposit is reimbursed if the customer uses payment by direct debit from a current account.

The payment terms generally applied to customers are related to the legislation or regulations in force or in line with the standards of the free market; in the event of non-payment, default interest is charged for the amount indicated in the contracts or by the legislation.

Provisions set aside for impairment of receivables reflect, carefully and in accordance with the current legislation, the effective credit risks and are determined on the basis of the extraction from databases of the amounts making up the receivable and, in general, assessing any changes in the said risk compared to the initial measurement and, in particular for trade receivables, estimating the related expected losses determined on a prospective basis, taking into due consideration the historical series.

The control of credit risks is also strengthened by the monitoring and reporting procedures, in order to identify promptly possible countermeasures.

In addition, on a quarterly basis, the Risk Management Department collects and integrates the main data regarding the evolution of the Group companies' trade receivables, in terms of type of customers, status of the contract, business chain and ageing band. Credit risk is assessed at the consolidated, Business Unit and company levels.

Some of the above assessments are carried out at intervals of less than three months or when there is a specific need.

3. ENERGY RISK

The Iren Group is exposed to price risk, on the energy commodities traded, these being electricity, natural gas, environmental emission certificates, etc., as both purchases and sales are impacted by fluctuations in the price of such commodities directly, or through indexing formulae. Exposure to exchange rate risk, typical of oil-based commodities, is present, but is attenuated thanks to the development of the European organised markets that trade the gas commodity in the euro currency and no longer indexed to oil products.

The Group's policy is oriented to a strategy of active management of the positions to stabilise the margin taking the opportunities offered by the markets; it is implemented by aligning the indexing of commodities purchased and sold, through vertical and horizontal use of the various business chains, and operating on the financial markets.

For this purpose, the Group carries out planning of the production of its plants and purchases and energy and natural gas sales, in relation to both volumes and price formulae. The objective is to obtain sufficient stability in the margins through:

- for the electricity supply chain, the opportune balancing of internal production and energy from the futures market with respect to the demand coming from the Group's customers, with adequate recourse to the spot market;
- for the natural gas supply chain the priority of alignment of the indexing of the commodity in purchase and sale.

For a more detailed analysis of the risks dealt with up to now, reference should be made to the paragraph "Group Financial Risks Management" in the Notes to the Financial Statements.

4. OPERATIONAL RISKS

This category includes all the risks which, in addition to those already noted in the previous paragraphs, may influence achievement of the targets, i.e. relating to the effectiveness and efficiency of business transactions, levels of performance, profitability and protection of the resources against losses.

The Group's Enterprise Risk Management model has as its objective the integrated and synergistic management of risks.

The process of managing the Group's risks entails that, for each business line and operating area, the activities performed are analysed and the main risk factors connected with achievement of the objectives are identified. Following the identification activity, the risks are assessed qualitatively and quantitatively (in terms of magnitude and probability of occurrence), thus making it possible to identify the most significant risks. The analysis also involves an assessment of the current and prospective level of control of the risk, monitored by means of specific key risk indicators.

The above stages make it possible to structure specific treatment plans for each risk factor.

Along all the management phases, each risk is subjected on a continuous basis to a process of control and monitoring, which checks whether the treatment activities approved and planned have been correctly and effectively implemented, and whether any new operational risks have arisen. The process of managing operational risks is associated with a comprehensive and structured reporting system for presenting the results of the risk measurement and management activity.

Each process stage is performed in accordance with standards and references defined at Group level. The Group's risk position is updated at least quarterly, indicating the extent and level of control of all risks monitored, including financial, credit and energy risks. The risk reporting is sent to the top management and to the risk owners, who are involved in the management activity. The risk analysis also supports the preparation of planning tools.

Of particular note are:

a. Legal and regulatory risks

The legislative and regulatory framework is subject to possible future changes, and therefore is a potential risk. In this regard a Department operates, reporting directly to the Chief Executive Officer, and dedicated to continual monitoring of the relevant legislation and regulations in order to assess their implications, guaranteeing their correct application in the Group.

b. Plant-related risks

As regards the amount of the Group's production assets, plant-related risks are managed with the approach described above in order to correctly allocate resources in terms of control and preventive measures (preventive/predictive maintenance, control and supervisory systems, emergency and continuity plans, etc.).

For the most important plants the Risk Management department periodically conducts surveys, from which it can accurately detail the events to which such plants could be exposed and consequent preventive action. The risk is also hedged by insurance policies designed considering the situation of the single plants.

c. IT Risks

IT Risks (Cyber Risks) are defined as the set of internal and external threats which can compromise business continuity or cause civil liability damage to third parties in the event of loss or divulgation of sensitive data. From an internal point of view, the operational risks regarding information technology are closely related to the business of the Iren Group, which operates network infrastructures and plants, including through remote control, accounting operational management and invoicing systems and energy commodity trading platforms. The Iren Group is, in fact, one of the leading Italian operators on the Power Exchange and any accidental unavailability of the system could have considerable economic consequences, connected with the non-submission of energy sale or purchase offers. At the same time, problems related to supervision and data acquisition on physical systems could cause plant shutdowns and collateral and even serious damage. A breakdown of invoicing systems could also determine delays in issuing bills and the related collections, as well as damage to reputation.

To mitigate such risks, specific measures have been adopted, such as redundancies, highly-reliable systems and appropriate emergency procedures, which are periodically subject to simulations, to ensure their effectiveness.

The Iren Group is also exposed to the risk of cyber attacks aimed both at acquiring sensitive data and at stopping operations, causing damage to plants and networks and compromising service continuity. Market benchmarks also show that attacks aimed at acquiring companies' and third-party data are increasingly frequent, with consequent civil liability and sanctions, including serious ones, and at acquiring industrial secrets. The perimetral security technologies have been updated. The data network has been further segregated according to the functional use; in addition a vulnerability management system has been introduced, and extended also to suppliers that process sensitive corporate data for various reasons. The support of an external Security Operation Centre (SOC) has been launched for 24h monitoring, with the use of the Iren security platforms.

The operational risk management process also aims at optimising the Group's insurance programmes.

5. STRATEGIC RISKS

The Iren Group has adopted a Business Plan with a time horizon at 2023 which defines its strategic orientations and the related industrial objective from which the economic and financial figures of reference derive. The said objectives refer to:

- a) making the Group's organisation and processes more efficient;
- b) development (investments in regulated and quasi-regulated sectors, increase of the customer base, energy efficiency);
- c) consolidation of the regulated sectors (renewal of concessions: gas distribution, integrated water cycle and waste-management segment);
- d) external growth;
- e) energy scenario;
- f) sustainability and ESG (Environment, Social, Governance) targets.

In application of the Group's policies, the said Plan was subjected to a risk assessment carried out by the Risk Management Department and to the related stress tests, which showed the substantial resistance including in the face of adverse events characterised by specific sensitivities. Besides the risk analysis associated with the Plan, the Risk Management Department contributes with risk assessments specific to merger & acquisition operations which are involving the Iren Group.

TRANSACTIONS WITH RELATED PARTIES

On 12 April 2018, after a favourable opinion of the Committee for Transactions with Related Parties (hereinafter also “CTRP”, made up entirely of Independent Directors), the Board of Directors of Iren approved the Procedure for Transactions with Related Parties (hereinafter also “TRP Procedure”), with entry into force deferred until 1 July 2018, the date on which it replaced the documentation previously in force on the subject, that is the TRP Internal Regulation and the Operating Procedure for the Management of Transactions with Related Parties, becoming the only document of reference in the Group. While awaiting entry into force of the above TRP Procedure, a number of amendments of a formal nature were made to the related text; these were submitted, after a favourable opinion of the CTRP, to the Board of Directors of Iren, which on 2 July 2018 approved an updated version of the TRP Procedure. On 30 May 2019, the Board of Directors approved an update of the TRP Procedure, after amending art. 7.1, on the quantitative composition of the CTRP.

The current TRP Procedure is published on the Iren website (www.gruppoiren.it).

The above documents were prepared implementing:

- the provisions relating to transactions with related parties pursuant to Article 2391-*bis* of the Italian Civil Code;
- the Regulation containing provisions on transactions with related parties, adopted by CONSOB with its Resolution no. 17221 of 12 March 2010 as subsequently amended (“CONSOB Regulation”), taking into account the indications of CONSOB Communication no. DEM/10078683 of 24 September 2010 (the “CONSOB Communication”);
- of the provisions pursuant to Art. 114 of Italian Legislative Decree no. 58 of 24 February 1998 (the Consolidated Law on Finance or CLF) and the provisions of Regulation (EU) no. 596/2014 on market abuse.

The corporate documents adopted in accordance with the legislation on transactions with related parties, defined in coordination with the provisions of the administrative and accounting procedures pursuant to Art. 154-*bis* CLF, have as their purpose, in particular:

- (i) to regulate the performance of transactions with related parties by Iren, directly or through subsidiaries, identifying internal procedures and rules capable of ensuring the substantial and procedural transparency and correctness of such transactions, and
- (ii) to establish the methods of fulfilling the related disclosure obligations, including those provided for in the legal and regulatory measures in force and applicable.

These, very briefly, provide for:

- a) identification of the perimeter of related parties;
- b) the definition of transaction with related party;
- c) identification of cases of exclusion and transactions “for small amounts”;
- d) the procedures applicable to transactions of minor significance;
- e) the procedures applicable to transactions of major significance;
- f) the persons responsible for enquiries on transactions with related parties;
- g) the transactions for which the Shareholders' Meeting is responsible;
- h) the forms of disclosure.

Iren and its subsidiaries carry out transactions with related parties in accordance with the principles of transparency and fairness. These transactions mainly concern services provided to customers in general (gas, water, electricity, heat, etc.) or following concessions and awards of services, in particular for the waste management segment, and are governed by the contracts applied in such situations.

Where the services provided are not the above, the transactions are governed by specific agreements whose terms are established, where possible, in accordance with normal market conditions. If these references are not available or significant, the contractual conditions are defined also in consultation with independent experts and/or professionals.

Information on transactions with related parties is presented in the Notes to the Consolidated Financial Statements in section “V. Information on transactions with related parties” and in paragraph “XI. Annexes to the Condensed Consolidated Interim Financial Statements”, as an integral part of the same.

REGULATORY FRAMEWORK

The main legislative references of the first half of 2019 related to the Group Iren's sectors of competence are presented below.

LOCAL PUBLIC SERVICES OF GENERAL ECONOMIC INTEREST AND LEGISLATION OF GENERAL INTEREST

Regulations relating to local public services of economic importance

The rules on local public services resulting from the regulatory framework are contained in Italian Law no. 221 of 17/12/2012 as amended converting Italian Law Decree no. 179 of 18/10/2012 containing further urgent measures for growth of the country, Art. 34, para. 20 ff, as amended by Italian Law Decree no. 150 of 30/12/2013 - Extension of terms provided for by legislative measures, Art. 13 *Terms on the subject of local public services*, in force since 1 March 2014.

On the basis of the legislative framework indicated, direct assignments granted as of 1 October 2003 to partially publicly-owned companies already listed on the Stock Exchange at that date, and to those controlled by them, cease at the expiry date provided for in the service contract; assignments that do not provide for an expiry date cease, with no extension possible, on 31 December 2020.

The functions of organising local public network services of economic relevance, including those belonging to the municipal waste sector, deciding on the form of management, determining the relevant utility tariffs, assigning the management and the associated control, are performed exclusively by governing bodies within the optimal geographical territories or areas.

With Decision no. 1134 of 8 November 2017, the National Anti-Corruption Authority [ANAC – *Autorità Nazionale Anti-Corruzione*] issued the “New guidelines for implementation of the legislation on preventing corruption and transparency by companies and private-law entities controlled and invested in by public administrations and economic public bodies”, which confirm the exclusion of listed companies from the legislation, except that it applies only to activities of public interest carried out by companies belonging to a listed group but invested in directly by a Public Administration.

The Consolidated Law on Public Investee Companies (CLPIC) was published in the Official Journal with Italian Legislative Decree no. 175 of 19 August 2016, in force since 23 September 2016. The CLPIC was most recently amended by art. 1 paragraph 721 of the 2019 Budget Law (Italian Law no. 145 of 30 December 2018), which provided for the application of the same to listed companies and to companies controlled by them only if expressly provided for.

Code on Public Contracts

The Code on Public Contracts currently in force was approved with Italian Legislative Decree no. 50 of 18 April 2016, and was adjusted with subsequent measures:

- Italian Law Decree no. 135 of 14 December 2018, (the so-called *decreto Semplificazioni*, literally “Simplifications Law Decree”), converted into Italian Law 12/2019 “Conversion into law, with amendments, of Italian Legislative Decree no. 135 of 14 December 2018, containing urgent provisions on support and simplification for businesses and the public administration”;
- Italian Law no. 145 of 30 December 2018 (2019 Budget Law);
- Italian Law Decree no. 32 of 18 April 2019 (the so-called *decreto Sbloccacantieri*, a decree aiming at relaunching the construction sites), containing “Urgent provisions for the relaunch of the public contracts sector, for accelerating infrastructural projects and projects for urban regeneration and reconstruction following seismic events”, approved definitively and converted into Italian Law no. 55 of 14 June 2019, which is set to come into force from 18 June 2019.

In particular:

- the Italian Law Decree known as *decreto Semplificazioni* (entitled “Rules on the subject of simplification and acceleration of procedures in public contracts below the community threshold”), made an amendment to art. 80, paragraph 5 of Italian Legislative Decree 50/2016, introducing a series of reasons for exclusion from the contract or concession procedures referable to the conduct of economic

operators in the stage of participation in the tender procedure or in executing a previous contract. These new provisions apply to procedures whose announcements or notices, with which the tenders are called for, are published after the date of entry into force of the decree in question, and, in the case of contracts without publication of announcements or notices, to the procedures in which, at the same date, invitations to present offers have not yet been sent.

- the so-called *Sbloccacantieri* decree, instead, introduced the following main changes:
 - a number of rules of the Code on Public Contracts are suspended experimentally until 31 December 2020: the obligation to make use of central purchasing bodies for Municipalities that are not Provincial Capitals, the prohibition of supplemented contracts and the obligation to choose the tender commissioners from the ANAC Register;
 - a new single regulation will replace the ANAC guidelines;
 - new rules for awarding work, services and supplies below certain thresholds;
 - fixing of a maximum portion sub-contractable (40%), suspension of the obligation to indicate the list of subcontractors and the checks on the subcontractors during the tender procedure;
 - services and supplies with standardised characteristics or the conditions of which are defined by the market can be awarded at the lowest price, with the exception of services with highly intensive labour;
 - below the threshold, criteria of the lowest price or of the most economically advantageous offer can be applied;
 - in order to prevent disputes in the execution stage of the contract, the parties can appoint a technical consultation board before execution starts and in any case not more than 90 days from the date of this start; this body performs functions of assistance for the rapid resolution of disputes of all kinds that arise during execution of the contract;
 - the “super-accelerated” procedure on the subject of exclusions from tendering is abrogated;
 - the extension to 31 December 2020 is confirmed for the deadline within which the already existing licensees must ensure compliance with the measures provided for in paragraph 1 of art. 177 (portion of award of work, services and supplies assigned through public tender procedure).

Implementing the Code, ANAC’s activity of revising and publishing Guidelines is continuing. During 2019 the following main measures were published:

- following Resolution no. 614 of 4 July 2018 Guidelines no. 11 were issued; these contain “Indications for checking observance of the limit pursuant to article 177, paragraph 1, of the code by public or private bodies that hold concessions for works, public services or supplies already in being at the date of entry into force of the code not awarded with the formula of project finance or with public tender procedures according to European Union law”;
- Communication of the ANAC Chairperson of 8 May 2019 containing “Indications for checking observance of the limit pursuant to article 177, paragraph 1, of the Code on Public Contracts, by public or private bodies that hold concessions for works, public services or supplies already in being at the date of entry into force of the code not awarded with the formula of project finance or with public tender procedures according to European Union law”, in which it is specified that in Guidelines no. 11, in paragraph 5 a number of publication obligations are indicated for licensors and licensees to verify observance of the outsourcing obligations provided for in article 177 of Italian Legislative Decree no. 56 of 18 April 2016. At point 5.6, owing to an error, the first deadline for publication of the data, related to the period 19 April 2018 – 31 December 2019, is set at 31 March 2019 instead of 31 March 2020. Therefore, the deadline for publication must be understood as 31 March 2020. The Authority reserved the right to issue further measures after conversion of the law decree;
- given that Italian Law 55/2019 converting the Italian Law Decree known as *Sbloccacantieri* decree confirmed the deadline of 31 December 2020 for compliance with the prescriptions of art.177 (see above) the first deadline for compliance with the prescriptions pursuant to art.177 for publication of the data related to 2021 will fall due on 31 March 2022.

The Iren Group companies, together with other listed companies that are concessionaires of local public services, appealed the measures to the *Tribunale Amministrativo Regionale – TAR*, literally “Regional Appeals Court” of Lazio with an intervention *ad adiuvandum* of Utilitalia. On 20 June 2019, the first judgements were published in relation to the appeals presented by Iren Group companies.

The RAC found that the measures appealed were not harmful because they were not capable of affecting the legal sphere of the licensees and, therefore, declared the appeals inadmissible. Analogous judgements

were issued in relation to the appeals presented by the other licensees. We shall assess the opportunity of appealing these measures within the deadline of 20 October 2019.

In addition, a Communication was issued from the ANAC Chairperson on 29 May 2019 with which the National Anti-corruption Authority provided opportune clarifications on a number of critical application issues reported by aggregators in relation to the Guidelines no. 13 “Rules on social clauses”. The clarifications regard data that the contracting authority—in observance of the social clause—must indicate in the tender documentation for formulation of the offer and presentation of the compatibility plan by the bidder.

AWARD AND PERFORMANCE OF GAS DISTRIBUTION SERVICES

The rules on the gas distribution service were profoundly changed by the provisions of the Letta Decree, approved with Italian Legislative Decree no. 164 of 2000, which introduced competition into the Italian natural gas market by deregulating gas imports, exports, transport, dispatch and sales.

In a Decree of 19 January 2011 the Italian Ministry of Economic Development determined the geographical areas for the natural gas distribution sector and with Ministerial Decree no. 226 of 12/11/2011, the Criteria Decree (updated most recently with Ministerial Decree no. 106 of 20/05/2015) the Regulation on public tender criteria and the assessment of bids for the assignment of gas distribution services was adopted.

The terms for calling tenders, initially set at six months from when the regulation came into force, were extended several times and the concessions are currently operating under the extended regime pending the calling and award of public tenders.

Although the dates as identified in Italian Law 21 of 25 February 2016 “Conversion into law, with amendments, of Law Decree no. 210 of 20 December 2015” passed some time ago (as per the list presented below), as of today, the tenders in the *Ambiti Territoriali Ottimali* – ATOs [literally “optimal territorial areas”] indicated of interest for the IRETI and ASM Vercelli companies—which were awarded the service—have not yet been called for:

- Reggio Emilia - tender extended for two years owing to earthquake - 11 November 2016
- Parma – 11 July 2016
- Piacenza 1 West – 11 December 2016
- Piacenza 2 East – 11 September 2017
- Genoa – 11 April 2017
- Vercelli – 11 October 2016

On the subject of performance and award of gas distribution services, it is important to mention Resolution 382/2012/R/gas, which presents the standard service contract template for natural gas distribution, MD 226/2011 for the standard tender template and MD 22 May 2014 of the Ministry of Economic Development related to the “Guidelines on criteria and application methods for assessing the reimbursement value of natural gas distribution plants”.

Italian Law no. 124 of 4 August 2017 (OJ no. 189 of 14 August 2017) “Annual law for the market and competition”, in Article 1, paragraph 93, instead regulates cases where, when certain aggregate area parameters are observed, the Residual Industrial Value (VIR)/Regulatory Asset Base (RAB) differences of plants—where the RIV has been determined on the basis of the Ministry’s Guidelines—need not be subject to ARERA assessment. In paragraph 94, it states that ARERA must decide on a simplified procedure for examining tenders and regulating calls when these documents have been prepared in accordance with the “standard” ones laid down by the ministerial decrees (MDs).

Lastly, paragraph 95 provides for an amendment to Art. 10 of MD 226/2011, with reference to participation as Temporary Consortia in tenders for the award of the service. On this point it states that “For the purposes of participating in area tenders as temporary groups of companies and ordinary consortia, the technical capability requirements identified in Article 10, paragraph 6, letters a., c. and d., of the regulation pursuant to Decree no. 226 of 12 November 2011, can be possessed also by only one of the participants; the requirements identified in Article 10, paragraph 6, letter b., must be possessed cumulatively by the participants.”

Italian Legislative Decree no. 56/2017, published on 5 May 2017, contained provisions additional and corrective to the Code on Public Contracts, and in particular supplemented the rules and provided a clarification on the scope of application of Italian Legislative Decree no. 50 of 18 April 2016, on tenders for the award of the gas distribution service, to be read in continuity with the MED Departmental Circular of 23 March 2017.

IRETI appealed the M.D. of 22 May 2014 and the subsequent M.D. 106/2015, and the appeal to the Council of State against judgement no. 11242/2016 is currently pending. With this judgement, the Lazio Regional Administrative Court rejected the appeals lodged for cancellation of the above measures.

The Council of State, for another case brought on the same subject, referred the question to the Court of Justice of the European Union so that it could establish “whether these principles and rules prevent national legislation that provides for retroactive application of the criteria for determining the amount of the reimbursements due to the former concessionaires with an effect on earlier negotiated relationships or whether this application is justified, also in light of the principle of proportionality, by the need to protect other public interests of European significance related to the need to permit greater protection of the competition structure of the relevant market together with greater protection of users of the service that could indirectly suffer the effects of any increase in the amounts due to former concessionaires”.

With Resolution 69/2018/R/Gas, the Authority expressed its observations on the RIV values of the municipalities of the Genoa 1 – City ATeM and Genoa Plant with difference between RIV and RAB more than 10%, in relation to the provisions of article 15, paragraph 5 of Italian Legislative Decree 164/00, as amended most recently by article 1, comma 16, paragraph of Italian Law Decree 145/13.

Functional unbundling

Functional Unbundling, in groups integrated vertically translates into an obligation to manage the essential infrastructures in a neutral manner, without favouring in any way any business that performs commercial activities in the energy sector. According to the rules on Functional Unbundling, natural gas distribution is managed in a neutral manner if it is entrusted to an Independent Operator, that is to say an administrator which, although it operates within the integrated group, has ample decision-making and organisational autonomy, or if the Independent Operator adopts a series of measures capable of preventing discriminatory conduct in the field of governance, organisation, procedures, information technology, personnel, procurement and many other important aspects of business management. Resolution 296/2015/R/com issued by ARERA (Autorità di Regolazione per Energia, Reti e Ambiente - Regulatory Authority for Energy, Networks and the Environment) approved the rules on functional unbundling obligations for companies operating in the electricity and gas sectors ([*TIUF, Testo Integrato Unbundling Funzionale*] - Consolidated Rules on Functional Unbundling) which establish, among other things, an obligation to unbundle the communication policy and the brand between sale and distribution companies.

IRETI is part of the Iren Group, which is a Vertically Integrated Company (VIC) in the sectors of both electricity and natural gas under the terms of Art. 1.1 of the TIUF, because the group performs both activities included in the list pursuant to Art. 4.1 of the TIUF, and deregulated activities in the energy sector. Therefore, in order to implement functional unbundling, it entrusted the administration of the natural gas and electricity distribution business to an Independent Operator, in possession of all the powers and characteristics provided for in the regulations.

With CD 307/2017, ARERA illustrated the Authority's orientations on the subject of recognition of the costs incurred by electricity and natural gas distribution companies for changing the brand and the related communication policies, following the introduction of the provisions of the TIUF (Annex A to Resolution 296/2015/R/com) on the subject. In the context of the aforesaid consultation, the Authority began collecting data regarding the operating and capital costs incurred by operators to fulfil the unbundling obligations, in relation to which with Resolution 237/2017/R/com it established the related proceeding for specific recognition of the costs incurred by electricity and natural gas distributor firms for changing the trademark and the related communication policies.

Default service

The default service temporarily complements and replaces the last-instance supply service destined to operate when in the management of supply contracts with final customers situations in which customers remain without their vendor occur, including for transitional periods. The service in question was

introduced by the Regulatory Authority implementing Art. 7, paragraph 4 of Italian Legislative Decree no. 93 of 2011 with Resolution ARG/gas 99/11. This Resolution was initially considered unconstitutional and suspended by the Lombardy TAR with judgement no. 3296 of 29/12/2012, a judgement then overturned by the Council of State. Very briefly the Council of State, following the AEEGSI's pleadings, decided that the default service is associated with the balancing service and that the same cannot be considered sales activity but, rather, as ex-post settlement activity of the objective debt relationships created following withdrawals made by customers that have remained connected to the distribution network. This was also considering the fact that the typical risk of sales activity does not exist, since the default of the final customer served is almost fully socialised and made chargeable to the community.

With Resolution 513/2017/R/gas of 6 July 2017, the Authority defined the detailed rules for assessing claims aimed at partial payment or exoneration from payment of the amount provided for, in exchange for gas withdrawn, in cases of failure to physically cut off redelivery points provided in the distribution default service, then further supplemented with the subsequent Resolution 190/2018/R/gas of 29 March 2018. These measures are the result of complex discussions with the operators which led to the identification of a taxonomy of typical cases based on events that have really happened and presented to the Authority by the operators themselves.

AWARD AND PERFORMANCE OF ELECTRICITY DISTRIBUTION SERVICES

Italian Legislative Decree no. 79 of 16 March 1999 (the Bersani Decree) established a general regulatory framework for the Italian electricity market which gradually introduced competition in the production of electricity and sale to eligible customers, although it maintained a regulated monopoly arrangement for transmission and distribution. The distribution activity is entrusted to IRETI (formerly AEM Torino Distribuzione S.p.A. and before that AMPS S.p.A.) by the Ministry of Productive Activities in a concession up to 2030 in the respective territories of the Municipalities of Turin and Parma and, through ASM Vercelli, in the Municipality of Vercelli.

Measures were adopted in 2007 to guarantee functional unbundling. As already specified in the section Gas distribution, with Resolution 296/2015/R/COM functional unbundling obligations were introduced also for electricity distribution firms, with reference to which the Authority subsequently launched, with Resolution no. 613/2017/R/com, four proceedings for implementation of the actions provided for in Italian Law no. 124 of 4 August 2017 (annual law for the market and competition), which concluded with Resolution 15/2018/R/com.

Network Code (CADE) and general system expenses

ARERA Resolution 481/17/R/eel defined the new structure of general system expenses.

The rules on general system expenses (GSEs) are laid down primarily in Art. 3, paragraph 11, of Italian Legislative Decree no. 79/99, in Art. 39, paragraph 3, of Italian Law Decree no. 83 of 22 June 2012, and for the methods of exacting them Arts 40 and following of the Consolidated Rules on providing electricity transmission and distribution services.

The Lombardy TAR, accepting appeals presented by a number of vendors, declared illegitimate Resolution 268/2015/R/eel (CADE - Standard Network Code for transport of electricity) in the part in which it states that the guarantees that vendors are obliged to provide to the distributor must cover the GSEs as well as the fees for the transport. This ruling clarified that final customers are the subjects of the electricity supply chain obliged, from the legal and economic points of view, to pay the GSEs, highlighting the absence of laws that provide for translation to vendors of the obligation on final customers and not recognising in this context that the Authority has a power to supplement itself contracts between distributors and vendors.

The Authority appealed the judgement and acted transitionally with Resolution 109/2017/R/eel, on the one hand reducing the quantification of the guarantees and, on the other, launching a proceeding for the purpose of identifying mechanisms aimed at recognising adequate compensation to vendors and distributors for any non-collection of the tariff components covering GSEs.

Council of State Judgement no. 5620/2017 of 30 November 2017 rejected the Authority's appeal confirming the cancellation of Resolution 268/2015/R/eel and implicitly "confirming" that Resolution 109/2017/R/eel is fully in force.

With a press release published on 29 December 2017, after the decision of the Administrative Court mentioned above, ARERA affirmed that resolution 109/2017 contains transitional and provisional rules which are fully applied in all their parts in relation to all parties involved (distribution companies and

transport users), with particular reference to the obligations to pay the general system expenses already laid down in the regulations in compliance with the current legislation covering such parties.

With Resolution 50/2018/R/eel of 1 February 2018, ARERA, in confirming the current management of GSEs, introduced however the recovery of GSEs paid but not collected and not recoverable by the distributor, which may present a request for access to the recovery if it is compliant with the payments of the GSEs from 1 January 2016 and with reference to vendors with a transport contract terminated at least 6 months before. The recovery is covered by a specific account opened at the Cassa per i Servizi Energetici e Ambientali (the Energy and Environmental Services Fund), used also for recovery of the GSE receivables of vendors, as outlined in CD 52/2018/R/eel.

Subsequently with Resolution 430/2018/R/eel of 2 August 2018, ARERA set the deadline for completion of the proceeding for compliance with the judgements handed down by the Lombardy TAR, Sect. II, on the subject of guarantees provided by transport users, pursuant to Resolution 109/2017/R/eel, expanding its scope, and setting as a new deadline for completion 30 June 2019. On 11 December 2018, with Resolution 655/2018/R/eel, the Authority defined urgent actions in terms of rules and resolute remedies applicable by distribution companies, in cases of non-compliance or non-integration of the guarantees given by transport users.

With judgement no. 270/2019 of 6 February 2019 the Milan TAR, as Parliament had not acted, confirmed the legitimacy of Res. 109/2017 for the launch of compliance with judgements 237/2017, 238/2017, 243/2017 and 244/2017, aligning itself with the orientation of the Council of State according to which, briefly, the obligation would be confirmed for final customers to bear the general system expenses together with ARERA's power to impose the provisions of guarantees on sellers in relation to the system expenses already collected by these latter.

AWARD AND PERFORMANCE OF INTEGRATED WATER SERVICES

The Integrated Water Service (IWS) reform process, which began with Italian Law no. 36/94 (the Galli Law), was revised with the approval of Italian Legislative Decree no. 152 of 3 April 2006, (Consolidated Law on the Environment, this too the subject of periodic important amendments) and with the issue of Art. 23-bis of Italian Law Decree no. 112 of 25 June 2008, converted with amendments into Italian Law no. 133 of 6 August 2008, related to "public services of economic significance". Following the Referendum held on 12 and 13 June 2011 with the abrogation of Art. 23 bis, the community legislation on the minimum competition rules on the subject of public tenders for the award of management of public services of economic significance came into immediate force. As regards existing operations, as laid down in Art. 34 of Italian Law Decree no. 179/12 converted into Italian Law no. 221/12 and supplemented by Italian Law no. 115 of 29 July 2015, Art. 8, paragraph 1, the awards of services carried out by listed companies and companies controlled by the former will remain active until the natural expiry envisaged for each of them on the basis of the measures governing the relationship with the individual Municipalities.

The integrated water service is also governed, for the Emilia Romagna Region, by Regional Laws 25/1999 and 10/2008. As regards rules on the subject of ATOs, the Emilia Romagna Region with Regional Law no. 23 of 23 December 2011 set forth the "Rules for the territorial organisation of the functions related to local public environmental services", which lays down the rules relating to regulation of public environmental services and in particular to the territorial organisation of the integrated water service and the integrated urban waste management service in Emilia Romagna, and states that on the basis of the principles of subsidiarity, differentiation and adequacy, the entire regional territory constitutes the optimal territorial area in accordance with Articles 147 and 200 of Italian Legislative Decree no. 152 of 2006. ATERSIR is the Regulatory Agency for environmental local public services of the Emilia-Romagna Region.

The Liguria Region, with Law no. 1 of 24 February 2014, attributed the functions on the subject of organisation and management of the Integrated Water Service and Integrated Waste Management.

As regards the IWS, the Law identified 5 ATOs:

- ATO West – Province of Imperia;
- ATO Centre/West 1 (Coastal ATO) - Province of Savona;
- ATO Centre/West 2 (Po Valley ATO) - Province of Savona;
- ATO Centre/East – Province of Genoa;
- ATO East – Province of La Spezia.

It should be noted that article 10 paragraph 1 of the aforementioned law was declared unconstitutional by the Constitutional Court with judgement no. 31 of 10 February 2015.

On 30 September 2015 the Province of Savona approved Resolution no. 70/2015, with which it approved the Plans of the areas and defined the subjects to which they were to be assigned through an in-house procedure (and therefore excluding Acquedotto di Savona, the Savona water company, merged into IRETI with effect from 1 January 2016). The resolution was appealed by the Group and as of today the proceeding is still pending.

Regional Law no. 1 of 24 February 2014, as amended, had delimited optimal territorial areas identifying two Centre-West ATOs (1 and 2, respectively Coastal and Po Valley ATO).

With Regional Law no. 17 of 23 September 2015 the coastal ATO Centre-West 1 was divided into two optimal territorial sub-areas (Centre-West 1 and 3, this latter known as “western”).

Constitutional Court judgement no. 173, filed on 17 July 2017, entailed the abrogation of Regional Law 17/2015 in relation to the definition of the third ATO, reinstating the initial situation provided for in Regional Law 1/2014, with a single coastal area (ATO Centre-West 1) and a Po Valley area (ATO Centre-West 2).

There were two fundamental criticisms: one of a procedural nature, that the Liguria Region joined the case late, the second, of a substantial nature, that the Liguria Region had issued a law which, in reality, should have been the responsibility of the state. It is written in fact: “The Regions are given the power to modify the dimensions of the ATOs, which however must not normally be smaller than at least the provincial territory’. Exceptions to the dimensions defined by the state legislation are possible, but must observe the criteria established by the same, consisting of the unity of the hydrographic basin, uniqueness and adequacy of management. Exceptions, in addition, are permitted provided that the Region gives reasons for the decision on the basis of territorial and socio-economic differentiation criteria and on the basis of principles of proportionality, adequacy and efficiency with respect to the characteristics of the service, also as proposed by the municipalities”.

As of today, following Constitutional Court judgement no. 173/2017 the Province is engaged, as the Governing Body of the Centre-West 1 Area, in preparing and approving a new single area plan, and a new award of the integrated water service. The Ministry of Infrastructures and Transport with a note of 17 April 2018 reaffirmed the principle and the position that water services in a port area are not a matter governed by the Ministerial Decree of 14 November 1994 (later abrogated by Italian Legislative Decree 232/2017) “because Italian Legislative Decree 152/2006 prevails as the later legislative norm that changes the rules on the entire subject of the integrated water service”. On this point the Tuscany TAR had already expressed itself with judgement 933/2017, according to which the identification of service of general interest in ports, falling under the responsibility of the Port System Authority (and, therefore, to be awarded by the latter through a public tender procedure) must be identified also with reference to the rules for the sector related to the different types of services. Therefore, the integrated water service, also in ports, is governed by Italian Legislative Decree 152/2006.

AWARD AND PERFORMANCE OF INTEGRATED DISTRICT HEATING SERVICES

Under the current legislation, and according to the most recent jurisprudential guidance (Lombardy TAR sect. I judgement no. 1217 of 9 May 2014), the district heating service does not constitute in and of itself a local public service, but represents in any case a natural monopoly. The classification of district heating is, therefore, not unequivocal and depends on a discretionary and grounded assessment by the single entities, on the basis of the specific conditions of the relevant market and the existence or otherwise of limitations on competition that can represent a barrier to universal and non-discriminatory offers. Besides, some time ago ARERA began regulatory activity in the sector.

AWARD AND PERFORMANCE OF WASTE MANAGEMENT SERVICES

Integrated Waste Management is understood as all the activities of transportation, treatment and disposal of waste, including street sweeping and the management of these operations. The legislation of a general nature applicable to the Integrated Waste Management Services sector is contained at the national level in the Environmental Code (Italian Legislative Decree 152/2006 amended most recently by the Ministerial Decree of 15 January 2014), Italian Law no. 68 of 22 May 2015 “Rules on the subject of crimes against the environment”, in Italian Legislative Decree 36/2003 (landfills), in Italian Legislative Decree 133/2005 (incineration and co-incineration) and in Italian Presidential Decree no. 59 of 13 March 2013 (Single Environmental Authorisation).

Regional legislation

Given that Territorial Area Authorities ceased to exist on 31 December 2012, the Emilia Romagna Region set up the Territorial Agency of Emilia Romagna (ATERSIR) for water and waste services in which all the municipalities and provinces take part and which is responsible for the regulatory functions for the entire regional territory, and determination of the urban waste disposal tariffs on the basis of the regional criteria, of the private and public plants. This agency became operational in 2012.

The Piedmont Region instead adopted the Regional Waste Management Plan on 30 September 2009, completing a process launched in 2007. The Plan had a 2009 – 2015 time horizon.

At the same time as adopting the Plan, the establishment of 3 optimal territorial areas, combining the 8 previous areas divided by Province, was provided for.

Piedmont Regional Law 7/2012 further modified the structure of the Areas by dividing them into four. The four current Areas are made up as follows:

- a) area 1: Novarese, Vercellese, Biellese and Verbano, Cusio, Ossola;
- b) area 2: Astigiano and Alessandrino;
- c) area 3: Cuneese;
- d) area 4: Turinese.

The ATOs have a role of planning the activities and applying the provisions of the Regional Waste Management Plan, and planning the flows and disposal tariffs. In turn the ATOs are divided into Catchment Area Consortia which have a significant role at the management level.

The Emilia Romagna Region recently approved the following measures:

- Regional Law no. 24 of 21 December 2017, containing “regional rules on the protection and use of the territory”;
- Regional Law no. 4 of 20 April 2018, Annex A.2 - Rules on assessment of the environmental impact of projects;
- Regional Executive Resolution no. 34 of 15 January 2018, “Provisions on waste flows pursuant to the Regional Waste Plan approved with Legislative Assembly Resolution no. 67 of 3 May 2016”;
- Regional Executive Resolution no. 1758 of 22 October 2018 - Analysis concerning the trend in waste production in 2018 and provisions related to waste flows implementing art. 25 of the Technical Rules of the Regional Waste Management Plan approved with Legislative Assembly Resolution no. 67 of 3 May 2016;
- Regional Executive Resolution no. 1762 of 22 October 2018 - Standard Regulation governing the waste tariff payable: acknowledgement of the work of the Guidance Committee for implementation of the Memorandum of Understanding signed by the Emilia-Romagna Region, ATERSIR and ANCI on the subject of precise tariffs;
- Regional Executive Resolution no. 326 of 4 March 2019 - Urgent provisions on agronomic use of water treatment sludge.

The Piedmont Region recently issued the following measures:

- Regional Council Resolution no. 253-2215 of 16 January 2018 - Regional Special Waste Management Plan (RSWP);
- Regional Law no. 1 of 10 January 2018 - Rules on the subject of waste management and integrated municipal waste management service and amendments to regional laws no. 44 of 26 April 2000 and no. 7 of 24 May 2012;
- Legislative Assembly Resolution no. 1 of 6 March 2018 epigraph - Supplement to the Regional Waste and Reclamation Plan approved with Legislative Assembly Resolution no. 14 of 25 March 2015, (Regional Waste and Reclamation Plan including monitoring plan and summary declaration). Adoption of the criteria for assessing the risk of defining action priorities;
- Regional Executive Resolution no. 27-7252 of 20 July 2018 Regional Law no. 1/2018 art. 3 – Resolution of the Regional Committee no. 140-14161 of 19 April 2016 - Regional Plan for the Management of Municipal Waste and Water Treatment Sludge. Provisions on experiments for reducing waste production with instruments different from application of the precise tariff implementing the Environmental Monitoring;
- Regional Executive Chairperson Resolution no. 3/R of 18 March 2019 - Regional Regulation containing: “Rules on formalities regarding the special tax for depositing waste at landfill sites (articles 15, paragraphs 3 and 16 of Regional Law no. 1 of 10 January 2018)”, published in the O.B. of Piedmont no. 12 of 21 March 2019, S.O. no. 3.

The Liguria Region, with Regional Law no. 1 of 24 February 2014 (subsequently amended with Law no. 12/15), laid down rules for identifying optimal territorial areas for exercising the functions concerning integrated waste management.

A single regional area was established and divided into four areas coinciding with the territories of the Metropolitan City of Genoa and the Provinces of Imperia, Savona and La Spezia.

The Liguria Region is responsible for governing the waste cycle in the regional ATO, which exercises these functions through an Area Committee made up of: President of the Regional Council or his/her delegate, the competent regional executive members, the mayor of the Metropolitan City of Genoa or his/her delegate, the presidents of the Provinces or their delegates.

The functions connected with the organisation and award of the services, to be performed with reference to the respective territorial area, are the responsibility of the Metropolitan City of Genoa and the Provinces of Imperia, La Spezia and Savona.

These entities can delimit in their respective territories uniform zones under the terms of Italian Law no. 56/14 (Delrio Law) which represent management areas, designating a leading Municipality and delegating the functions related to awarding the services to the Municipalities located in each area.

The aforementioned Law no. 1/14 also states that the Provinces and the Metropolitan City must approve the Area Plan and the Metropolitan Plan, containing the structuring and organisation of the services related to waste collection and transport, separate collection and use of the infrastructures serving the separate collection, the definition of the award areas and the management of residual non-separate waste and its disposal, within a year from approval of the Regional Plan, with RCR no. 14 of 25 March 2015.

The Liguria Region recently issued the following measures:

- Regional Council Resolution no. 1 of 6 March 2018 - Supplement to the Regional Waste and Reclamation Plan approved with Liguria Legislative Assembly Resolution no. 14 of 25 March 2015, (Regional Waste and Reclamation Plan including Monitoring Plan and summary declaration). Adoption of the criteria for assessing the risk of defining action priorities;
- Regional Executive Resolution no. 574 of 14 July 2017 - Determination of the amount of the contribution for the area management system, with which the contribution due to the Region for the area waste management system is determined on the basis of the recycling results achieved in 2016 by the Municipalities, ascertained with Regional Executive Resolution no. 448 of 7 June 2017;
- Regional Executive Resolution no. 889 of 31 October 2018 - Treatment activity on residual municipal waste prior to conferment to landfills for non-hazardous waste. Integration of the Regional Guidelines pursuant to Regional Executive Resolution no. 1208 of 20 December 2016.

National legislation

The regulation on cessation of the classification of milled asphalt as waste was published in the Official Journal of 18 June 2018; this is the Decree of the Ministry for the Environment no. 69 of 28 March 2018, in force since 3 July 2018.

The Ministerial Decree of 1 February 2018, in force since 23 February 2018, regards operators that perform activities of collection and transport of non-hazardous waste of ferrous and non-ferrous metals and are registered in the National Register of Environmental Operators both according to the ordinary procedure, as described in Art. 212 of Italian Legislative Decree 152/2006, and according to the simplified registration methods.

With Resolution no. 108 of 22 December 2017, published in the Official Journal of 15 May 2018, the Inter-ministerial Committee for Economic Planning (ICEP) updated the National Strategy for Sustainable Development (NSSD), the national document of reference for implementation of the 17 Sustainable Development Goals (SDGs) defined by the 2030 Agenda for Sustainable Development, adopted in 2015 by the United Nations.

Decree no. 94 of 28 March 2018 was also issued by the Ministry of the Environment; this sets forth new rules for the preparation of ascertainment, charging and notification reports of the proceedings provided for in the context of the sanctions system on the subject of environmental impact assessment (EIA).

Italian Law no. 108 of 21 September 2018, converted the Italian Law Decree known as “Milleproroghe” (A Thousand Extensions), extending to 30 June 2019 the term for the start of the obligation to manage in an associated form the fundamental functions of small municipalities (up to 5,000 residents, 3,000 if in Mountain Communities): these include, in particular, associated management of collection, sending for recovery and disposal of municipal waste and collection of the related taxes.

Italian Law 130/2018 (known as the "Ponte Morandi" Decree), on the subject of purification sludge in agriculture, confirmed that the only current law of reference is Italian Legislative Decree 99/1992, adding a series of exceptions.

Italian Law no. 132 of 1 December 2018 (conversion of the safety decree), lays down in art. 26 bis an obligation on operators of existing or newly-built waste storage and processing plants to prepare an internal emergency plan.

During the meeting on 9 May 2019 the Council of the National System for the Protection of the Environment (Sistema Nazionale per la Protezione dell'Ambiente - SNPA) adopted, with Resolution 54/2019, the "Guideline on application of the rules for the use of excavated earth and rocks".

The new version of paragraph 3 of article 184-ter of the Consolidated Environmental Law (Testo Unico Ambientale -TUA), as replaced by Art.1 paragraph 19 of the *Sbloccacantieri* decree has been in force since 18 June 2019. The "2018 European Law" (Italian Law no. 37 of 3 May 2019) has been published and has been in force since 26 May 2019. This law amends the text of art. 185, paragraph 1, letter f) of the TUA, providing for exclusion from the scope of application of the rules on waste for "cuttings and prunings carried out as part of good agricultural practices, and cuttings and prunings deriving from maintenance of the public green spaces of municipalities". Finally, with Circular no. 4 of 7 March 2019 the National Committee of the Register of Environmental Operators clarified how the moral requisites of candidates for registration must be assessed. In particular, Art. 10 of Italian Ministerial Decree 120/2014, expressly requires that, for registration, it is necessary for the owner or legal representative of the firm not to have been sent to prison for crimes under the provisions of laws on environmental protection, including laws protecting health, laws on the construction industry and on town planning, and not to have been imprisoned for more than one year for offences involving negligence.

SISTRI

The above mentioned *decreto Semplificazioni* definitively abrogated the electronic system of control on the traceability of waste (SISTRI), with effect from 1 January 2019.

European legislation

On 4 July 2018 the four "Circular Economy" directives (all dated 30 May 2018) came into force in Europe; these were published in EU OJ L. 150 of 14 June 2018. Directive 849 amends the previous ones in relation to end-of life vehicles, batteries, accumulators and WEEE, no. 850 amends Directive 1999/31/EC on landfills, 852 the rules on packaging and, finally, 851 which amends amply and substantially the same Waste Framework Directive, that is Directive 98/2008/EC. These directives must be transposed by the Member States by 5 July 2020. EU Commission Notice no. 124 published in EU OJ C 124 of 9 April 2018 ("technical guidance on the classification of waste") clarifies the classification of so-called "mirror entries". On the subject of cessation of classification as waste, the EU Court of Justice with judgement C60 of 28 March 2019 admits the possibility of individual cases in particular on the basis of applications presented by holders of the substance or the object classified as waste. States still have the task of "monitoring" and "enabling the implementation of the circular economy". The judgement of the European Court of Justice, therefore, opens to the End of Waste with respect to the Italian position which, with judgement of the Council of State no. 1229/2018, stated that ordinary authorisations issued to recovery plants could not lead to cessation of classification as waste in all cases not governed by the few European Regulations and ministerial decrees. On the basis of this judgement, on expiry of the single authorisations for waste processing and the environmental integrated authorisations, existing plants can therefore no longer transform waste into products or raw materials. We can note finally that Directive (EU) 2019/904 of the European Parliament and of the Council, on reducing the impact of certain plastic products on the environment, was approved on 5 June 2019.

Tariff system for waste management services

The 2014 Stability Law established from 1 January 2014 the IUC tax (Imposta Unica Comunale - Single Municipal Tax) comprising: a municipal property tax (IMU), a component referring to "indivisible" services (TASI) and the waste tax (TARI) destined to finance the cost of the municipal waste collection and disposal service. The prerequisite for the TARI tax is the ownership or possession of properties likely to produce waste and is commensurate with the floor area of the property. The rates can be reviewed by the municipalities on the basis of service quality standards. Italian Law 205/2017 extended for 2018 for Municipalities the method of making the TARI commensurate on the basis of the ordinary average criterion.

CONCESSIONS AND ASSIGNMENTS

MAJOR HYDROELECTRIC SHUNT CONCESSIONS

The legislative change regards the introduction in Italian Law no. 12 of 11 February 2019 (published in Italian OJ no. 36 of 12 February 2019), on conversion of Italian Law Decree no. 135 of 14 December 2018, (*decreto Semplificazioni*), of new rules on the subject of large hydroelectric shunts that provides for:

- modification of the ownership regimen and of the criteria for determining the compensation due to the outgoing concessionaire on expiry of the concession: for so-called “wet” works, transfer of ownership to the Regions in a status of regular operation is provided for, subject – if the concessionaire has carried out at its own expense, in the period of validity of the concession, investments provided for in the deed of concession or in any case authorised on the “wet” works – to payment of compensation equal to the value of the part of the asset not depreciated; for so-called “dry” works, application of art. 25 para. 2 ff. of Italian Royal Decree 1775/1933 is provided for; on the basis of this the State has the option of taking immediate possession of the same, paying a price equal to the estimated value of the material in the work, calculated at the moment of entry into possession, net of the depreciated assets. In any case, for dry works the price will be paid according to the methods that will be established by the regional laws, without prejudice to a different regimen according to whether these are movable and immovable assets which are expected to be used by the new concessionaire;
- assignment to the Regions of the task of governing with their laws, by 31 March 2020, the methods and procedures for assigning major water shunting concessions. These new concessions may have a duration of 20 and 40 years, which may be increased by up to a maximum of 10 years. The procedures must be launched within two years from the date of entry into force of the related regional law;
- the provision for a six-monthly fee for concessionaires of large shunts to be paid to the Regions. This fee will be determined in a regional law, after consulting ARERA, and divided into a fixed component linked to the average nominal power of the concession and a variable component linked to revenue;
- the possibility for the Regions to lay down in a law the obligation for concessionaires of large shunts for hydroelectric purposes to provide annually and free of charge to the same 220 kWh for each kW of average nominal power of the concession, for at least 50% destined for public services and categories of users of provincial territories affected by the shunts;
- attribution to Regions which have not already taken action, of the power to regulate with their laws (within one year from entry into force of the law and in any case no later than 31 March 2020) methods, conditions and amounts of the additional fees and any other consequent charges payable for large shunt concessions that provide for a term of expiry prior to 2023, including those already expired “*for the continuation on behalf of the Regions themselves of operation of the shunts, works and plants after the expiry of the concession and for the time necessary for completion of the assignment procedures and in any case no later than 31 December 2023*”; it is also specified that expired concessionaires “*up to assignment of the concession*” are obliged to provide at the request of the Region energy of an amount and according to the methods established by the new law and to pay an additional fee, with respect to the public land fee, for operating the plants while awaiting the assignment. The definition of the minimum value of the said additional fee is deferred to a decree of the MED (after consulting ARERA) and after obtaining the opinion of the State-Regions Conference but, in the absence of this, it may be determined by the Regions in an amount in any case not less than 20 euro for each kW of average nominal power of the concession for each year.

NATURAL GAS DISTRIBUTION

Genoa area

As regards the natural gas distribution service in the area of the Municipality of Genoa and Municipalities nearby, the same is provided by IRETI (a company deriving, among other things, from the merger by incorporation of Genova Reti Gas, the previous Operator and of the parent company of the latter Iren Acqua Gas into Iren Emilia). We can note that the concessions are currently operating under the extended regime pending the launch of public invitations to tender, the deadline for launching which is specified in the paragraph above “Gas distribution”.

Emilia Romagna area

The natural gas distribution service in the Emilia provinces is managed by IRETI (formerly Iren Emilia S.p.A.). These assignments are currently operating under the extended regime pending the launch of public invitations to tender.

Other geographical areas

The Iren Group also operates in numerous other areas throughout Italy through assignments or concessions given to mixed capital companies in which Iren Group companies have a direct or indirect investment. These concessions are currently operating under the extended regime pending the launch of public invitations to tender.

The main assignments and concessions are:

- Province of Ancona / Macerata - ASTEA S.p.A. (in which a 21.32% stake is held by the G.P.O. Consortium, which IRETI controls in turn with 62.35%): Municipalities of Osimo (AN), Recanati (MC), Loreto (AN) and Montecassiano (MC) assignment expired on 31 December 2010 and in *prorogatio*;
- Municipality of Vercelli and other municipalities of the Province – ASM Vercelli S.p.A. (formerly ATENA S.p.A., which IRETI controls with 60%): award of 1999 expired on 31 December 2010 and in *prorogatio*;
- Province of Livorno - ASA S.p.A. (40% owned by IRETI): Municipalities of Livorno, Castagneto Carducci, Collesalveti, Rosignano Marittimo and San Vincenzo – award expired on 31 December 2010 and in *prorogatio*;
- Province of Parma, Municipality of Busseto - Busseto Servizi S.r.l, a company 100% owned by IRETI, following the award of the tender procedure called by the municipality for the sale of the entire share capital: an award which expired on 31 December 2010 and is in *prorogatio*.

ELECTRICITY

IRETI manages the public service of electricity distribution in the City of Turin on the basis of a ministerial concession. This concession expires on 31 December 2030. IRETI also distributes electricity in the Municipality of Parma, with the same expiry date.

Through local mixed companies, the Iren Group also distributes Electricity in the following main areas:

- Municipality of Vercelli, with the subsidiary ASM Vercelli S.p.A., which manages in the City the public electricity distribution service on the basis of a ministerial concession, which expires on 31 December 2030;
- Marche area, with DEA S.p.A., controlled by ASTEA S.p.A., manages the public electricity distribution service in the municipalities of Osimo (AN), Recanati (MC) and Polverigi (AN), with expiry on 31 December 2030.

DISTRICT HEATING

Iren Energia manages the district heating distribution service through concession, award or authorisation to lay networks in the following areas:

- Municipalities of Turin and Moncalieri (TO);
- Municipality of Nichelino (TO);
- Beinasco (TO);
- Reggio Emilia;
- Parma;
- Piacenza;
- Genoa.

In addition, Iren Energia holds an equity investment in the company Asti Energia Calore, established on 18 May 2015, which was awarded the sub-concession for the district heating service in the town of Asti.

INTEGRATED WATER SERVICE

Liguria area

IRETI S.p.A. holds the management assignment for the integrated water service in the 67 municipalities of the Province of Genoa, serving a total of 880,000 residents. The assignment was granted by Decision no. 8 of the Genoa ATO Authority on 13 June 2003 and will expire in 2032.

The integrated water service in the territory of the Municipalities of the Province of Genoa is managed by IRETI through the safeguarded operators. The authorised and/or safeguarded companies of the Iren Group that perform the function of operator are Iren Acqua S.p.A. (formerly *Mediterranea delle Acque*, 60% controlled by IRETI), Iren Acqua Tigullio S.p.A. (formerly *IdroTigullio*, 66.55% controlled by Iren Acqua) and AMTER S.p.A. (in which Iren Acqua, again, has a 49% stake).

IRETI also provides the drinking water distribution service in the Municipalities of Camogli, Rapallo, Coreglia and Zoagli in the Genoese ATO.

The company (for the perimeter of the former *Acquedotto di Savona - Savona Water Company*) manages finally only the segment of the water service in the following ATOs:

- Savona area, in the municipalities of Albissola Marina, Albissola Superiore, Quiliano, Vado Ligure, Celle Ligure, Noli, Spotorno, Bergeggi, Savona, Stella, Varazze;
- Centre West 2 - comprises all the municipalities located on the Po valley side, managing the service, through the C.I.R.A. Consortium in the municipalities of Altare, Cairo Montenotte, Carcare, Cengio;
- as regards the Province of Imperia: Bordighera, Camporosso, Isolabona, Dolceacqua, Perinaldo, Vallecrosia, San Biagio della Cima, Vallebona, Seborga, Soldano. For AIGA, IRETI manages *in prorogatio* a part of the territory of the Municipality of Ventimiglia.

On 11 April 2018, the operation was also finalised for the acquisition by Iren of the ACAM Group, which operates in La Spezia and its Province, managing (through ACAM Acque) the water service with a concession valid until 31 December 2033.

On the basis of the Resolution of the Governing Body of the La Spezia Area no. 3 of 29 January 2019, and of the Resolution of the Council of the Municipality of Carro no. 51 of 28 December 2018, ACAM Acque took on the operational and administrative management of the integrated water service in the territory of the aforesaid Municipality, starting from 1 April, and which is therefore added to the 26 in which, for years, the service has already been provided.

Emilia Romagna area

The Iren Group provides the Integrated Water Service on the basis of specific assignments granted by the respective Local Authorities, governed by agreements signed with the competent ATOs.

Based on the laws of the Emilia Romagna Region, water service Agreements provide for 10-year assignments, in a safeguarding arrangement, except for the agreement relating to the Parma ATO, which sets the expiry of the assignment at 30 June 2025, by virtue of the disposal to private entities of 35% of the AMPS capital by the Municipality of Parma in 2000 through a public offering.

The Integrated Water Service in the Parma, Piacenza and Reggio Emilia ATOs is managed by the companies of the IRETI Group. Ownership of the assets and networks of the water segment was transferred to companies wholly owned by public entities. These companies made their networks and assets available to the Iren Group on the basis of a rental contract and against the payment of a fee.

On 19 April 2016, ATERSIR Emilia Romagna published the tender based on a restricted procedure in the EU Official Journal for the assignment in concession of the IWS for the Province of Piacenza, including the instrumental works. IRETI submitted its bid on 10 June 2016.

As a consequence of the dispute that arose in the Rimini area and the negative results, the ATERSIR Area Board, on 31 January 2018, resolved to revoke, in self-protection, the measures related to the restricted procedure opened for Piacenza and to give a mandate to the technical structure of the Agency to carry out the procedure of updating the list of assets destined for performance of the Integrated Water Service and the related residual value to be paid to the outgoing operator for the purposes of the new award, and to give a mandate to the technical offices for the preparation of the documents of the Procedure opened for the award in concession of the IWS. We are awaiting publication of the call for tenders.

In the Province of Reggio Emilia, ATERSIR, with Resolution CLRE/2015/7 of 17 December 2015, approved the “Proposed assignment to publicly- and privately-owned companies, with an operating private industrial partner chosen through a competitive public tender procedure”.

With a resolution of the Local Council of Reggio Emilia (Consiglio Locale di Reggio Emilia - CLRE) 2018/2 of 30 July 2018 - “Guidelines for Local Authorities of the province of Reggio Emilia for the future mixed company under public control of the integrated water service” were approved. These are useful for guiding the Agency in performing the technical, economic and legal enquiries in preparation for drafting the documentation needed for the tender procedure aimed at implementing the “ARCA” - Azienda Reggiana per la Cura dell'Acqua (Regional Water Care Company) - Project. We are awaiting publication of the call for tenders.

The table below summarises the data on the existing agreements in the Group’s main areas of operation:

| ATO | REGIME | SIGNING DATE | EXPIRY DATE |
|----------------------|------------------------|---------------------|----------------------|
| <i>Genoa area</i> | ATO/operator agreement | 16-4-2004/5-10-2009 | 31 December 2032 |
| <i>Reggio Emilia</i> | ATO/operator agreement | 30 June 2003 | 31 December 2011 (*) |
| <i>Parma</i> | ATO/operator agreement | 27 December 2004 | 30 June 2025 |
| <i>Piacenza</i> | ATO/operator agreement | 20 December 2004 | 31 December 2011 (*) |
| <i>Vercelli</i> | ATO/operator agreement | 13 March 2006 | 31 December 2023 |
| <i>La Spezia</i> | ATO/operator agreement | 20 October 2006 | 31 December 2033 |

(*) Service extended until new agreements are defined

Other geographical areas

The Iren Group also operates in the Integrated Water Service sector in other parts of Italy through assignments or concessions given to mixed-capital companies in which it has a direct or indirect investment. The main assignments and concessions are:

- Tuscany Coast ATO – ASA S.p.A. (in which IRETI has a 40% stake) Integrated water service in the Municipality of Livorno and other municipalities in the Province;
- Central Marche Territorial Area, Macerata (ATO3) - ASTEA S.p.A. (21.32% owned by Consorzio GPO, which is in turn 62.35% controlled by IRETI) only for the municipalities of Recanati, Loreto, Montecassiano, Osimo, Potenza Picena and Porto Recanati;
- Municipality of Ventimiglia: AIGA S.p.A. (in which IRETI has a 49% stake);
- Municipality of Imperia: AMAT S.p.A. (in which IRETI has a 48% stake);
- Alessandria ATO: ACOS S.p.A. (in which IRETI has a 25% stake) for the Municipality of Novi Ligure; Cuneo ATO: Mondo Acqua S.p.A. (in which IRETI has a 38.5% stake) – manages the Municipality of Mondovì and 7 other municipalities in the Cuneo area.

ENVIRONMENTAL SERVICE MANAGEMENT

The Iren Group provides waste management services on the basis of specific service assignments from the Local Authorities, governed by agreements signed with the provincial ATOs. The table below contains details of existing agreements in the Group's main areas of operation:

| ATO | REGIME | SIGNING DATE | EXPIRY DATE |
|--|---------------------------------|------------------|---|
| <i>Reggio Emilia</i> | ATO/operator agreement | 10 June 2004 | 31 December 2011 (*) |
| <i>Parma</i> | ATO/operator agreement | 27 December 2004 | 31 December 2014 (*) |
| <i>Piacenza</i> | ATO/operator agreement | 18 May 2004 | 31 December 2011 (*) |
| <i>Turin</i> | ATO/operator agreement | 21 December 2012 | 30 April 2033 (*) |
| <i>Vercelli (Municipality)</i> | Municipality/operator agreement | 22 January 2003 | 31 December 2028 |
| <i>Other Municipalities in the Vercelli area (except Borgosesia)</i> | Work contract with C.O.Ve.Va.R. | 1 February 2011 | 31 January 2019 |
| <i>La Spezia (Municipality)</i> | Municipality/operator agreement | 10 June 2005 | 31 December 2028 (collection and road sweeping) 30 January 2043 (waste disposal) |

(*) Service extended until new agreements are defined

(**) the term is 20 years running from the end of provisional operation of the Waste-to-Energy plant of TRM S.p.A.

We can note that Iren Ambiente presented a tender for "The award in concession of the public service of integrated municipal and similar waste management in the territorial catchment area of Parma" (44 Municipalities) and for the analogous award in Piacenza. ACAM Ambiente, controlled by Iren Ambiente and operating in La Spezia and its Province, manages the service of the integral waste cycle, with in-house award, in 20 Municipalities of the Province (including the Municipality of La Spezia). In addition, it performs the activity of waste disposal, with award in a contract/on a time-and-materials basis/in-house, in 12 other Municipalities of the said Province.

Services provided to the Municipality of Turin

On 31 October 2006, Iren Servizi e Innovazione took over the following from AEM Torino S.p.A.:

- the agreement signed with the Municipality of Turin for the assignment of street lighting and traffic light services in the Municipality of Turin, expiring on 31 December 2036;
- the management services assignment for the municipal heating plants, expiring on 31 December 2014;
- the management services assignment for the electrical and special systems in municipal buildings, expiring on 31 December 2014.

By a resolution of 3 November 2010, the Turin City Council decided to assign service agreements to Iren Servizi e Innovazione for the thermal plants and electrical and special systems for municipal buildings until 31 December 2017. The assignments were extended up to 31 December 2020 with a resolution of the Turin Municipal Executive Committee of 27 November 2012. Following the merger by incorporation of Iren Servizi e Innovazione into Iren Energia, with a deed of 27 December 2016, starting from 1 January 2017, Iren Energia took over the above Agreement and the above service contracts. From 1 October 2018, following the partial demerger of the business unit related to management of the public lighting service, traffic lights and heating, electric and special systems maintenance for the Municipality of Turin, Iren Rinnovabili took over from Iren Energia in the said activities.

REGULATORY LEGISLATION IN THE FIRST HALF OF 2019

The main regulatory measures referred to the first half of 2019 with the greatest impact for the energy businesses of the Iren Group are presented below.

GAS

Gas Energy Management

Res 148/2019 - Reform of the rules on gas settlement

Resolution 148/2019 amended the Consolidated Rules on Gas Settlement (Testo Integrato del Settlement Gas - TISG) to incorporate the reform of the process of updating the relationship of correspondence between balancing user and redelivery point of the distribution network approved by resolution 155/2019: this states that management of the commercial supply chain must be entrusted to the Integrated Information System (IIS) from 1 January 2020: the relationship of correspondence between Balancing User (shipper), distribution user (seller company) and redelivery point (RP) will therefore be mapped on the IIS. This process is also functional to reform of the processes of conferment on the City Gate which will come into force from thermal year 2020-2021.

Res 147/2019, Res. 155/2019 - Revision of the processes of defining commercial relationships between balancing users and distribution users. Revision of the processes of conferring capacity at redelivery points on the transport network

With resolution 147/2019/R/gas, the Regulatory Authority for Energy, Networks and the Environment (Autorità di Regolazione per Energia Reti e Ambiente - ARERA) reformed the process of conferment of capacity at the output points of the gas transport network that supply distribution networks (City Gates), starting from 1 October 2020. The measure simplifies the process as the capacity no longer has to be requested from the Balancing User (BU) and the conferment is completed automatically, at the moment in which the Central Register of the IIS certifies the "relationship of correspondence" that defines, for each RP present in the distribution contract of a Distribution User (DU), to which BU the withdrawals must be attributed. The quantities conferred are determined on the basis of only the characteristics of the RPs served on the distribution network by the DUs: annual consumption, withdrawal profile and metering frequency. In particular, this resolution, which follows CDs nos 114/2018/R/gas and 512/2018/R/gas, provides for:

- The definition of maximum "conventional withdrawal" of an RP, which:
 - in the case of points with daily metering, coincides with the figure of the consumption peak of the year,
 - for points with daily metering, is equal to the maximum amount of the conventional profile;
- the definition of "conventional capacity" of the withdrawal point which is equal to the maximum conventional withdrawal multiplied by a repositioning coefficient "z" which takes into account the contemporaneity of consumption and converts the figure for "consumption" into "capacity";
- the "capacity conferred" to a balancing user, understood as the sum of the conventional capacities of the withdrawal points served by it.

The automatic attribution to the BU of the capacity on the City Gates determines the superseding of the current conferment procedures and of the penalties for exceeding the capacity conferred.

Res 114/2019 - Criteria for tariff adjustment for the service of transport and metering of natural gas for the fifth regulatory period (5RP)

For the fifth regulatory period ARERA, with resolution 114/2019 which follows CD 512/2019, defines a 40/60 entry/exit division of revenue (as in the transitional arrangement) and, in addition, the inclusion of the regional networks in the entry/exit perimeter, as provided for in the TAR Code, with attribution of the revenue from the regional network totally to the exit (the resulting entry/exit ratio would be 28/72). The variable component of the transport tariff will be applied in the same way at the exit.

As regards determining the reference prices ARERA has approved the methodology based on the weighted distance for the capacity provided for again in the TAR code. ARERA's new regulations on the subject are

aimed at safeguarding the competitiveness of the Italian system in relation to the costs of importing and exporting natural gas.

Finally, as regards determining the revenue recognised, ARERA has begun to introduce a number of incentivising elements (output-based regulation elements in preparation for gradual transition to TOTAl EXpense regulation). With Resolution 201/2019 the new tariffs were approved; these will be applied from 1 January 2020.

Gas networks

Res 75/2019 - Determination of the bonuses and penalties related to recoveries of security of the natural gas distribution service for the year 2015 and amendment of the RQDG

The measure determines, for the year 2015, the bonuses and penalties related to recoveries of security/quality of the natural gas distribution service and updates the 2015-2019 trend levels.

Res 98/2019 – Determination of the definitive reference tariffs for the gas distribution and metering services, for the year 2018

The Authority approved the definitive reference tariffs for the gas distribution and metering services for the year 2018, considering also the requests for adjustment of the figures presented by 15 February 2019 and of the applications for tariff re-determination presented by the distributors.

CD 170/2019 - Courses of action for the regulation of tariffs and quality of the gas distribution and metering services in the fifth regulatory period

ARERA published the consultation in which it illustrates its orientations on the main courses of action for the definition of the criteria for the regulation of tariffs and quality of the gas distribution and metering services in the 5RP, which will start from 2020, or from 2021 if the proposed extension is granted.

As regards the regulation of distribution service tariffs, the Authority's proposals are related to:

- **Operating Expenses:**
 - costs will be recognised with the price-cap criterion through a productivity recovery rate (X-factor) which will be constant during the regulatory period and the objective of full convergence among operators of different sizes;
 - for operating expenses recognised for the 1st year of 5RP, the Authority proposes to calculate a weighted average between effective expenses and expenses recognised in 2018, with range between 40% and 50% for effective expenses and between 50% and 60% for expenses recognised.
- **Capital costs:**
 - in the context of recognition of capital expenses for new investments in distribution networks, bonus/penalty mechanisms will be introduced; these will be based on the gap between effective costs and standard costs fixed by the Authority in terms of increases/reductions of the remuneration rate of the invested capital;
 - in relation to the remuneration rate of the invested capital, for the parameter β , the Authority proposes to supersede the current differentiation between distribution and metering. As regards instead the level of gearing, the proposed realignment with that of the other regulated services will be analysed.

ELECTRICITY

Energy management

Ministerial Decree of 28 June 2019

The Ministry of Economic Development approved the Rules of the Capacity Market, so the first auctions will be held by the end of 2019 with delivery years 2022 and 2023.

In detail, for the purposes of defining the demand for capacity, with the Decree the MED sets at 6 hours/year the value of the adequacy indicator of the electricity system beneath which the electricity system is inadequate.

Terna must carry out and update annually the assessments of adequacy of the capacity and transmit the results to the MED and to ARERA, subsequently publishing them on its website. The adequacy assessment

must take into account the positive effects deriving from development of the networks and the interconnections with other countries, the scenarios and the adequacy analyses at the regional and European level developed by ENTSO-E (the European network of electricity transmission system operators), of the evolution of generation from renewable sources, distributed generation, the resources of demand and storage systems, in keeping with the objective of developing the integrated electricity market. As regards plants that receive the incentives disbursed by the GSE, including exchange on site and dedicated withdrawal, the Rules state that these incentives, with the exclusion of White Certificates (as specified by the ARERA in its Opinion), will not be cumulative with the remuneration of the capacity market. As specified in addition in the Decree, the waiver of the same is related to the entire duration of the delivery period covered by the competitive procedures.

TERNA - Capacity Market (CM) - Rules of the system of remuneration of the availability of electricity capacity - First and Full Implementation Stages

In the Rules, approved by the MED, it is stated that the CM can be accessed by subjects that:

- are holders or have received a mandate without representation for existing or new production capacity, referred to Production Units located in Italy directly or indirectly connected to the National Transmission Grid and that must have a "Unit Emission Index" of not more than 550 gr CO₂/kWh and must observe the limit of "Unitary Total Emissions" of not more than 350 kg CO₂/kW;
- have a capacity referred to UCMCs (Consumption Units) as defined in the Regulation, located in Italy;
- are admitted to operate on the Day-Ahead Market (DAM), if they intend to formulate offers with reference to a Foreign CDP.

The market will be organised into multi-session descending auctions in order to maximise the net value of the transactions on the entire system compatibly with observance of the transit limits between Areas of the significant network.

Terna states finally that the provisions contained in these Rules will be updated on the basis of the evolution of the operating needs of the electricity system, taking into account also the results of the first auctions, with particular reference to (i) requisites of flexibility and methods of participating in the capacity market of the Flexible UPs; (ii) obligations of the UCMCs; (iii) system of guarantees.

ARERA Opinion 281/2019/R/eel on the draft Decree for approval of the rules on the capacity market

The ARERA, in expressing a favourable opinion on the draft of the related decree of the MED, specifies that, as regards unauthorised new capacity, the MED expressed the indication of allowing the same to participate in the mechanism, stating, however, that the procedures for performing the auctions must contain the elements necessary to reduce the risk of moral hazard and adverse selection and to ensure procurement at the minimum cost and entry into service with the timing provided for of the capacity necessary for the purposes of adequacy.

To complete the rules on the CM, the Authority will have to resolve on the subject of the final economic parameters of the mechanism.

ELECTRICITY NETWORKS

2G Smart Metering Systems

Res 307/2018 - Further extension of the duration of monitoring of communication performance through "Chain 2" in the second generation (2G) smart metering system of e-distribution

This measure had postponed the conclusion of the procedure for defining version 2.1 to 31 March 2019 and the monitoring of performance of communication on "Chain 2" in the 2G e-distribution system to 31 December 2018 to extend it to further subjects and check the current monitoring. Parallel with this resolution, CD 245/2018 continued the process of defining the functional specifications of 2G version "2.1". In this regard, for 2019, an ARERA seminar on 22 May illustrated the results of the monitoring campaign carried out for the whole of 2018 on the performance of communication between the new 2G meters and the user devices (known as "Chain 2") and the data collected are currently being assessed by the Authority for completion of the proceeding pursuant to Res. 289/2017/R/eel.

CD 100/2019/R/eel – proposals for large-scale plans launched in 2020 - 2022

The ARERA put out for consultation the rules on cost recognition of the large-scale plans for the installation of 2G smart meters in being launched in the three years 2020-2022. In detail, it confirms the incentive mechanism on only investment costs already provided for in the 2017-2019 plans, introducing however a number of refinements (accelerated conventional profile of replacement of 1G devices, maximum recognition of 120-130 euro/2G for access to the abbreviated cost recognition procedure). The importance of providing for an obligatory term for large-scale installation of the meters is stressed: by the end of 2025 for distributors (DSOs) with more than 100,000 PODs, by the end of 2026 for those with less than 100,000 PODs.

Electricity distribution and metering tariffs

Res 76/2019

This resolution, among other things, defined the definitive 2018 distribution and metering tariffs for DSOs with more than 100,000 PODs.

Res 117/2019

This resolution defines the provisional 2019 distribution and metering tariffs for DSOs with more than 100,000 PODs and defers the definition of those for DSOs with more than 25,000 PODs for further studies still in progress after the specific data collection.

Res 232/2019

This resolution defined the definitive 2018 distribution and metering tariffs for medium-sized DSOs (with more than 25,000 PODs).

Res 126/2019

This launches the proceeding (expected to be completed by 20 December 2019) for possible simplifications/amendments to the regulations on tariffs and quality of electricity transmission, distribution and metering services for the new regulatory period 2020-2023 (NPR2). Among the points in consultation as regards tariffs we can note:

- development of specific regulatory mechanisms for incentives for aggregations between DSOs;
- new prices and power thresholds for reactive energy for EHV and HV;
- possible permanence of experiments concerning fixed contributions for variations of power requested by domestic users;
- maintenance of the current BTVE (bassa tensione veicoli elettrici - low voltage electric vehicles) tariff for recharging electric vehicles;
- gradual introduction of a Totex approach from 2024 for larger DSOs.

While, in consultation as regards output-based regulation for electricity distribution, we can note the following points:

- launch of incentives for recovery from severe and extended weather events;
- for continuity of the service, the consideration of the effects of weather events in calculating bonuses/penalties, the revision of operation of the Fund for Exceptional Events and the launch of testing of the restoration of Risers.

DISTRICT HEATING

Res 278/2019/R/tlr - Completion of rules on exercising the right of withdrawal in the district heating and district cooling service

The resolution changes the methods of exercising the right of withdrawal provided for in the Consolidated Text on Connection Prices and the Right of Withdrawal (Testo Unico dei corrispettivi di Allacciamento e del diritto di Recesso - TUAR), introducing rules differentiated on the basis of the user's characteristics.

REGASIFICATION

Capacity assignment auctions

Res 168/2019 - Criteria for the regulation of the conditions, including economic conditions, for access and provision of services offered through LNG storage sites and rules on accounting separation for small scale LNG services. Amendments and additions to Authority resolution 137/2016/R/com – TIUC

This measure defines the criteria, to be applied starting from the fifth regulatory period.

The Authority states that:

- in the case of capacity dedicated to small-scale LNG (SSLNG) services in addition to that of regasification, SSLNG services must be accessed on the basis of procedures defined autonomously by the operator of the infrastructure, while it remains opportune that the revenue achieved through providing these services will contribute to covering the costs for use of part of the infrastructure shared between regasification service and SSLNG services;
- in the case of SSLNG services that use part of the regasification capacity (competing capacity), that the users of the SSLNG services must follow, for the delivery of the LNG to the terminal, the conferment procedures defined by the Authority under the terms of the Integrated Text on adoption of guarantees of free access to the liquefied natural Gas Regasification service (Testo Integrato in materia di adozione di garanzie di libero accesso al servizio di Rigassificazione del Gas naturale liquefatto - TIRG).

In addition, ARERA established that, in the case of additional and dedicated capacity with respect to that authorised for regasification, a portion of the revenue deriving from the supply of SSLNG services contributes to reducing the revenue recognised for the regasification service for the purposes of remunerating the common costs, reducing consequently also the expenses chargeable to the system in the case of application of the factor correcting the revenue; in the case of capacity competing with the regasification capacity, the users of the SSLNG services, for delivery of the LNG to the terminal, bear the cost resulting at the end of the competitive procedures for access to the infrastructure pursuant to the TIRG, remunerating the portion of common costs.

Res 234/2019 - Provisions on the definition of reserve prices for conferment of the regasification capacity

ARERA updates the reserve prices in relation to the annual and multi-annual auctions in order to make them more competitive.

WASTE

As regards the waste sector it is worth noting that the Regulatory Authority ARERA began to perform its functions actively between the end of 2018 and the beginning of 2019. The most significant measures issued during the first half of the year are presented below.

CD 139/2019/A and Res 242/2019/A “2019-2021 Strategic Framework”

Following the consultation the main strategic objectives in the waste sector were approved; these regard in particular:

- clear and transparent tariff rules for covering the efficient costs of waste management;
- Improvement of the quality of service and limitation of arrears in the waste cycle;
- promotion of adequate infrastructures for management of the waste cycle.

The strategic objectives also incorporate a number of Iren’s observations, presented at the consultation stage, on graduality, specific local features, maintaining the economic and financial balance and supporting innovation.

WATER SERVICE

Regulation of the procedures for limiting arrears

CD 158/2019 – Consultation document for limiting arrears in the Integrated Information System

With respect to the procedures for limiting arrears, in January 2019, ARERA clarified that the prohibition on cutting off the supply is valid exclusively in relation to the users that are direct beneficiaries of bonuses and users classified under the terms of the Integrated Text on Prices of Water Services (Testo Integrato dei Corrispettivi dei Servizi Idrici - TICSI) as “public and not disconnectable”.

In April the Authority published, with CD 158/2019, the final orientations on the instructions for limiting arrears: this document innovates profoundly the proposals formulated in previous years, providing for:

- a) on the categories of non-disconnectable users: inclusion also of users with physical difficulties;
- b) for resident domestic users (not beneficiaries of bonuses): differentiated timing for the limitation and disconnection of the supply according to the ratio between the amount of receivable in arrears and the counter-value of the minimum vital supply;
- c) for condominium users: there is the option for users to obtain deferred payments in the case of paying, within the deadline indicated in the notice of default, at least 50% of the amount owed.

Publication of the final resolution is expected in July; according to what is indicated in the above CD the regulation a) should become effective a few months after publication of the resolution, in order to enable companies to adopt the necessary management and IT adjustments, b) should regard arrears that will originate starting from the date of effectiveness of the resolution.

Res 34/2019 – Launch of proceeding for the definition of the Water Tariff Method for the third regulatory period

The Authority launched a proceeding for the definition of the Water Tariff Method for the third regulatory period (MTI 3), also ordering the fusion of this proceeding with the one launched with resolution 518/2018 for control of the implementation of planned investments in the integrated water service, providing for the related identification of a single deadline for completion of the proceeding, which will be completed by 31 December 2019.

The Head of the Water Systems Department was identified as the manager of the proceeding.

OTHER GENERAL MATTERS

Incentives – White certificates

Res 487/2018 and Res 273/2019 - Definition of the tariff contribution to cover the costs incurred by electricity and natural gas distributors subject to the obligations in the context of the energy efficiency certificate mechanism, under the terms of the inter-ministerial decree of 10 May 2018

The Authority approved the new rules on the tariff contribution for EECs, which, implementing the “corrective” inter-ministerial decree of 10 May 2018, provide for, among other things, the setting of a ceiling of 250 euro/certificate. The formula previously in force for determining the contribution was applied up to the date of publication of the resolution. The Authority also amended the text of the Rules on Operation of the Market for Energy Efficiency Certificates eliminating the passages related to the “session relevant reference price”, by now no longer necessary after the introduction of the cap of 250 euro/EEC.

In 2019, Res. 273 on the subject finally changed the calculation formula pursuant to Res 487/2018 in the terms in which, for the weighting, only the quantities of bilaterals traded at a price lower than the ceiling provided for are considered.

PERSONNEL

At 30 June 2019, the employees working for the Iren Group totalled 8,027, up compared to the 7,042 employees at 31 December 2018. The table below provides a breakdown of personnel at 30 June 2019, divided into Holding and first-level companies and related subsidiaries, compared with the figure at 31 December 2018.

| Company | Workforce at 30.06.2019 | Workforce at 31.12.2018 |
|--------------------------------|----------------------------|----------------------------|
| Iren S.p.A. | 1,048 | 1,036 |
| IRETI and subsidiaries | 2,141 | 2,120 |
| Iren Ambiente and subsidiaries | 3,464 | 2,550 |
| Iren Energia and subsidiaries | 868 | 832 |
| Iren Mercato and subsidiaries | 506 | 504 |
| Total | 8,027 | 7,042 |

The main changes in the workforce compared to 31 December 2018 were due to:

- acquisition in January 2019, by Iren Ambiente, of the Company San Germano and its subsidiary C.M.T. for a total of 770 resources;
- acquisition, with effect from 1 January 2019, by ReCos (controlled by Iren Ambiente) of a business unit related to the management of two waste processing plants located in the province of La Spezia. The unit transferred involves 13 employment relationships held with employees operating in the context of the functions transferred;
- acquisition by IReti S.p.A., again in January 2019, of the entire equity investment held by the Municipality of Busseto in the company Busseto Servizi, including 2 resources;
- sale of the business units related to the water supply services in a number of municipalities of the Provinces of Brescia (with effect from 1 January) and Verona (with effect from 1 May). In this regard, respectively 4 and 5 employment relationships relate to the units transferred;
- continuation of the generational turnover plan.

RESEARCH AND DEVELOPMENT

In the IREN Group technological innovation is central to strategic decisions and in defining the products and services offered. The Business Plan to 2023, approved by the Board of Directors of Iren S.p.A. on 27 September 2018, confirms the centrality of innovation in the Group's Vision which will be expressed over the period of the plan in the development of all the sectors in which it operates, with the objective of making IREN an example of excellence and innovation in the multi-utility sector.

The main research, development and innovation lines on which the Group is investing regard:

- energy efficiency divided into several levels and assets (customer, building, urban agglomerate, energy assets of the Group);
- study of new systems for the recovery of energy losses and an increase in the efficiency of the plants;
- advanced remote management, remote reading, smart metering and multi-metering systems;
- thermal and electrical storage systems;
- processes aimed at maximising the recovery of energy and materials from different waste fractions;
- Internet of Things (IoT) and home automation;
- data intelligence ICT tools;
- optimised management of the integrated water cycle (districtualisation, identification and reduction of network losses) and instruments in support of sensors in the field;
- systems for the quantitative reduction and recovery of material and/or energy from sludge deriving from waste water treatment processes;
- electrical mobility and self-driving;
- "industry 4.0" solutions in support of the personnel involved in plant operation and maintenance activities, for predictive maintenance and monitoring in the field;
- projects with a view to smart cities.

Iren manages the innovation processes through an open innovation model and in , keeping with this model it has in progress fruitful collaborations with Universities, Research Centres, Innovation Hubs and innovative Startups. In addition it takes an active part in working groups and associations on specific research and development and promotes events such as conferences, workshops and hackathons.

The first half of 2019 was characterised both by the continuation of technical activities related to the Group's various co-financed projects and by the development, also in partnership with innovative companies and startups, of internal technological projects on the basis of planning which, starting from an analysis of the long-term scenario, is aimed at giving the Group the tools needed to seize the opportunities and mitigate the risks deriving from evolution of the markets in which it operates.

"IREN UP", an innovative Corporate Venture Capital programme with the objective of accompanying the Italian startups with the highest potential in the "cleantech" sector, from clean technologies to the circular economy, was further structured in 2019 with a first operation with the startup Enerbrain, operating in the field of energy efficiency. Activities also continued and were strengthened in the search for startups that have developed innovative solutions capable of bringing benefits on the Group's business lines, also through participation in events devoted to putting into contact the demand and the supply of technology. IREN, more specifically, makes available a completely new personalised package of services that may include testing, technical support, legal advice, market tests, and commercial and industrial agreements. The programme provides for investments of more than 20 million euro for the first three years, with investment tickets from 100,000 to 2 million euro, depending on the stage of life of the startup and the needs.

During 2019, the collaboration also continued between IREN and the "Up the Frequency", group of students who were the winners of the Challenge launched by IREN in 2018 at the ContaminationLab in Turin, a meeting place for students of all disciplines from the Polytechnic and University of Turin. More specifically, the young people are supporting IREN in the development of feasibility studies and technical-economic analyses of innovative projects in the field of electric mobility.

Also in this first half of 2019 IREN contributed to the implementation of important innovation projects. On this point, the main projects underway are presented below. The total investment for the Group is approximately 7.8 million euro, of which 3.8 million being financed. In relation to these amounts, the expense incurred in the first half of 2019 was 450,000 euro, of which approximately 300,000 covered by loans.

FINANCED RESEARCH PROJECTS IN PROGRESS

Water Services

SmartWaterTech (MEUR - Ministry of Education, Universities and Research)

The project arises from the merger of two project ideas WATERTECH and SMART WATER presented under the MEUR Smart Cities tender with a view to offering a more robust analysis of the integrated water service, aiming both to manage problems related to water distribution networks, and to apply innovative models and technologies for treating waste water.

Partners: IRETI, IREN Acqua, ABC, Acquedotto Pugliese, ASTER, CAE, Digimat, Fast, Foxbit, Icampus, International University College, University of Bologna, University of Naples Federico II, University of Palermo, University of Trento, Irea-CNR.

Status: The project provides for technical specifications with project work planned on the water pipe network in the Rapallo area and in the metropolitan area of Genoa. In more detail, the water pipe network serving the city of Rapallo was modelled and calibrated with the support of the University of Bologna. The water pipe system was also divided into districts, installing pressure control valves enabling significant savings in terms of volumes of water supplied. In the metropolitan area of Genoa similar activity is planned on the urban drainage network; this will be carried out with the support of the University of Palermo.

WATERSPY – High performance, compact, portable photonic device for pervasive water quality analysis (H2020)

The WATERSPY project intends to develop and define a method for detecting the presence of heterotrophic bacteria in aqueous matrices such as eColi, pseudomonas aeruginosa and salmonella. The instrument, to be developed at the prototype level for use in the field at water service supply sources (artificial lakes) and in the distribution network, provides for a stage of pre-concentration which enables the bio-sensor to bind the bacteria onto a surface which will then be analysed with laser technology. The development of an instrument which works in the range indicated could open up significant opportunities in pervasive monitoring of water quality.

Partners: Iren (with IRETI and IREN Laboratori), CyRIC Ltd, Consiglio Nazionale delle Ricerche (National Research Council), Alpes Lasers SA, National Technical University of Athens, ID Quantique SA, AUG Signals Hellas, Cyprus/Italy end-users.

Status: During the first half of the year, IREN took part in the activity of integrating the planned modules and coordinated the activities connected with product standardisation and/or the procedures for validating the analyses performed. IREN is also involved in the activity of monitoring the standards issued by the unification bodies and in debugging the measurement chain incorporated in the instrument, which includes a thread devoted to concentration of the bacteria, developed by the University of Monaco and a module dedicated to incubation of the sample. The thread will shortly be installed at the sections of a water supply system managed by IRETI in the Prato district (Genoa).

Waste Management

Biometh-ER (Life+)

The aim of this project is to create the first plants for the production and distribution of biomethane to end users in Italy. The plants will be designed, managed and maintained around innovative, state-of-the-art technologies; the entire system will be monitored for the duration of the project and the operating results of the pilot plants will then be examined and disclosed to the project partners involved. These plants represent a departure point for assessment of the expansion capacity of this experiment to all of the Emilia Romagna Region and for the creation of the regional biomethane distribution network.

Partners: IRETI, IREN S.p.A., IREN Rinnovabili, Centro Ricerche Produzioni Animali - C.R.P.A., Hera Ambiente, SOL.

Status: During the first half of 2019 contacts were made with the technological suppliers of the compression, storage and distribution station and these components were installed for refuelling motor vehicles. Activities continued on analysing the biogas produced by the upgrading plant to check conformity according to the legislation.

Recovery of material from WEEE R1/R2 (Ministry of the Environment Call for Tenders)

The project has as its main objective the development of technologies that are highly replicable and rapidly transferable to the industrial world, aimed at optimising the management of waste electrical and electronic equipment (WEEE).

The purposes of the project are:

- the recovery of polyurethane from refrigerators (WEEE R1) as secondary raw material, through the implementation of a process of refining the polyurethane generated by the R1 line of the AMIAT's Durable Goods Processing (Trattamento Beni Durevoli -TBD) plant;
- optimisation of the separation of cement from the carcass of washing machines (WEEE R2), through the creation of a easily-industrialised prototype machine that makes it possible to cut, precisely and without damaging the internal components, the carcass of the most common types of washing machine for the extraction of the cement.

Partners: IREN Ambiente, AMIAT, Chiaro Macchine Speciali, Turin Polytechnic (DIATI and DIMEAS), APIRAEE.

Status: The project was officially launched at the end of January 2019, with the kick-off meeting of the partners. In the first 6 months of operation the activities of analysis and characterisation of polyurethane from refrigerators were launched, for the purpose of identifying the main technical and physical/chemical characteristics that can be used in the recovery and recycling process. At the same time, in collaboration with the Turin Polytechnic and Chiaro, an assessment was carried out of the main common elements of a sample of washing machines and work was begun on the development of the planning and operational schemes of the prototype for gripping and cutting the carcass to extract the cement counter-weight.

SATURNO (Call for Tenders for a Bioeconomic Technological Platform – Piedmont Region)

The project involves validating, on an industrial platform, the conversion of the organic fraction of waste and the CO₂ from vehicle exhausts and from industrial productions into biofuels and biochemicals.

More specifically, the project involves making use of the organic fraction of municipal waste, normally converted into thermal energy, electricity, bio-gas and compost, through the extraction of substances with high added value such as hydrogen, carboxylic acids, biofertilisers and biostimulants.

Hydrogen and the carboxylic acids generated by the first transformation of the Organic Fraction of Municipal Solid Waste (Frazione Organica dei Rifiuti Solidi Urbani - FORSU) will be used as "building blocks" for the production of alcohols and methanol.

The plastics separated from organic waste upstream of the processing will be treated separately, with a view to recovering their fractions usable in compounding polymers or, in the case of biodegradable fractions, making the material compatible with the degradation times envisaged in the fermentation stages already present.

The other waste flow to be made use of, CO₂, captured from vehicle emissions and industrial processes, will be converted into methanol and solvents to be tested as bio-fuels for motor vehicles.

Partners: IREN S.p.A, GAIA, NOVAMONT, ACEA Pinerolese Industriale, C.R.F, Cornaglia, Buzzi Unicem, Environment Park, IIT, Turin Polytechnic, University of Turin , University of Eastern Piedmont and 11 other SMEs.

Status: The project was assessed positively by the Piedmont Region and the kick-off meeting is planned for July 2019.

Energy

5G-Solutions (Horizon 2020)

The objective of the 5G-Solutions project is to test, in different field tests, the functioning, potential and limits of the 5G network, con particular attention to assessing the performance indicators defined by the standardisation bodies responsible. These tests will involve the following verticals: Factories of the Future, Smart Energy, Smart Cities, Smart Ports, Media & Entertainment. IREN will take an active part in the activities of the “Energy” vertical, assessing the benefits related to integration and use of the 5G network (and of its main characteristics of speed, limited latency and high reliability) in the cases of use of Demand Side Management at the industrial level and of Smart Charging of electrical vehicles.

Partners: Telecom Italia, Alcatel-Lucent Israel, Appart Ae New Technologies, Centre Tecnologic de Telecomunicacions de Catalunya, Cyberethics Lab, Ebos Technologies, Elliniki Etairia Tilepikoinonion Kai Tilematikon Efarmogon, Enel X, Glanbia Ingredients Ireland Designated Activity Company, IBM Ireland, Inlecom Group, Institut fur Rundfunktechnik, IREN S.p.A., Iris Technology Solution, Sociedad Limitada Liveu, L.M. Ericsson, Norges Teknisk-Naturvitenskapelige Universitet NTNU, Nurogames, Orbis MES, Panepistimio Patron, Procter&Gamble Services Company, Promozione per l’Innovazione fra Industria e Università Associazione, Tenelor, Waterford Institute of Technology, Yara International.

Status: The project began officially on 1 June 2019 with the kick-off meeting organised by Telecom Italia, the coordinator of the project.

CHESTER (Horizon 2020)

The project has the objective of developing and integrating an innovative solution of the Power-to-Heat-to-Power type that will enable maximisation of the exploitation of non-programmable electricity RESs and thermal RESs already combined with TLR (district heating) systems. The system involved in the study, named CHEST, making use of heat pumps, latent heat storages and Organic Rankine Cycles (ORCs), will make it possible to transform electricity into heat, store it and subsequently produce new electricity.

Partners: IREN S.p.A., IREN Energia, TECNALIA, DLR, University of Stuttgart, PLANENERGI FOND, AIGUASOL, Encontech B.V., University of Ghent, University of Ulster, Universitat Politècnica De Valencia, PNO Innovation, GOIENER.

Status: During the first half of 2019, the project partnership completed the tests on the main components of the CHEST system and defined the technical documentation to continue with installation in the laboratory. At the same time, the business cases for application of this system were preliminarily defined.

ENERGYNIUS (POR-FESR 2014-2020 Emilia Romagna)

The ENERGYNIUS (acronym of Energy Networks Integration for Urban Systems) project intends to outline models of development that enable Energy Communities and Energy Districts to carry out bidirectional exchanges with energy networks, thus offering energy and services to the regional/national system. In this context, software instruments based on optimised management algorithms, real-time simulation models and energy district diagnostics will also be developed to identify the best technological and control solutions for energy production, storage and distribution systems. Some of the algorithms developed will be

integrated into a hardware device for the control of energy plants. Software and hardware instruments will be validated, in both simulated and real environments, on at least three study cases.

Partners: IREN S.p.A. (as beneficiary), LEAP, CIDEA, CIRI FRAME, MECHLAV, ENEA. Other beneficiaries are: BorgWarner Systems Lugo, CPL Concordia, OPTIT, SIRAM.

Status: The project was launched at the end of June 2019 with the kick-off meeting. Iren, over the period of the project, will collaborate on the analysis of the technical, economic and regulatory aspects involved in access to the dispatching services market (DSM) by energy districts, on the study of optimised participation strategies and, more specifically, on the development of algorithms for the optimised management of complex energy systems from a demand-response viewpoint, on the dynamic modelling of energy networks and, with particular attention, on user control algorithms with a view to thermal prosumers to improve their energy efficiency.

ESACOM (Piedmont Region - innovation hubs tender)

The ESACOM (acronym of Energy SAving and COMfort optimisation) project is intended to develop a platform of sensors, algorithms, databases and Apps capable of providing an instrument, scalable to different levels, of data management and implementation; this is a support for energy optimisation decisions, in order to implement energy management that takes into account the effective condition of well-being of the users of a building. The project provides for testing the platform on two civil buildings in the city of Turin.

Partners: IREN S.p.A. (coordinator), IREN Energia, Pro Logic Informatica, Modelway, Screen 99, Eurix.

Status: The first half of 2019 was characterised by the continuation of the field tests on the two pilots provided for, updating and refining the setpoints on the basis of the specific needs of the sites. At the end of the thermal season the policies were defined also for summer implementation. Finally activities on designing the system management platform and activities related to preparing the operation of virtual sensors continued.

EVERYWH2ERE (Horizon 2020)

The objective of the project is to develop a power generator with “plug and play” fuel cells, easy to transport around the city for temporary electrical power in various sectors (building sites, music festivals, temporary events, exhibition centres).

The IREN Group, as a third party of Environment Park, will test a hydrogen skid for electricity production during events/trade fairs (uninterruptible power supply/mobile generator mode).

Partners: Rina Consulting, VTT, Powercell Sweden AB, Genport, Swiss Hydrogen, Mahytec, FHA, Delta1 gUg, Environment Park, Acciona Construcción, ICLEI, Linde Gas Italia

Status: During the first half of 2019 IREN took part in the project giving support to Environment Park in order to provide technical/legislative indications on the technology to be developed.

Evolution2G (EMEurope Call 2016)

The “eVolution2G” project, which began in June 2018, is intended to study in depth and test directly in the field the Vehicle to Grid (V2G) concept, that is a system in which electric vehicles have a balancing role on electricity grids. The main innovations of the project are based on:

- development of light quadricycles with an innovative battery management system and a bidirectional recharge system, capable of interfacing with the electricity grid both to recharge and to “give back” its charge;
- development of an EMCS (Energy Management and Control System) prototype, for data management according to the various subjects involved, with a view to improving the balance of the electricity network;
- tests on prototypes of V2G recharging solutions, at both the domestic level and the public/urban level.

Partners: IREN S.p.A. (coordinator), Mecaprom, CTC Cartech Company, Aalborg University.

Status: In the first half of 2019 IREN prepared for the scouting of V2G recharging technologies to equip the pilot area on which to test the Vehicle 2 Grid system. The activities of designing the specifications and functions of the management and network, aggregator and market interface platform also continued.

NEMO- Hyper-Network for electroMobility (Horizon 2020)

The NeMo project aims to develop an e-roaming platform applied to different electricity mobility systems (recharging infrastructure and motor vehicles). The main objective is to create a “Hyper network”, namely a high-level ICT infrastructure that can standardise data originating from various stakeholders and generate innovative services and applications on different verticals. IREN’s role consists of defining the use-cases, with special reference to the distributors’ and electricity vendors’ requirements, providing technical and regulatory expertise to identify their requirements/constraints and assessing the results and developments of the project.

Partners: IREN S.p.A., IRETI, Fiat Research Centre, TecnoSitif, ICOOR, Renault, Verbund, TomTom, other foreign industrial partners, Italian and European SMEs.

Status: The first half of 2019 saw IREN taking an active part in the activities of designing and testing the functions envisaged for the Italian pilot, and in particular related to advanced solutions for the planning of long itineraries to be travelled with electric cars. IREN also took an active part in the final European test drive of the project to test the roaming at the level of recharging infrastructures.

OTTEMPO (Piedmont Region tender - innovation hubs)

The project aims to study and test methods for distributing, through a fibre-optic or wireless telecommunication network, the time sample, that is the exact time, with a precision in the order of microseconds for the sector of multiutility companies. In particular, the operating applications will be designed for real-time systems for the monitoring and analysis of the electricity distribution networks and the water service.

Partners: Iren S.p.A., TOP-IX Consortium, Hal Service.

Status: The first half of 2019 saw the planning and installation at a number of IREN offices of the telecommunication infrastructures necessary for the field tests related to the performance and reliability of systems for transmitting time signals between areas also distant from each other.

PLANET – (Horizon 2020)

The project aims at developing technologies and analysing the regulatory constraints for taking synergistic advantage of the distribution networks (electricity, gas and heat). During the project storage and conversion technologies will be modelled; multigrid intelligent automated management systems will be simulated; new business models will be created; energy conversion systems will be tested, in a physical pilot.

Partners: IREN S.p.A., IREN Energia, IRETI, IREN Mercato, Turin Polytechnic, ISMB, Teknologian tutkimuskeskus VTT Oy, HYPERTECH, CERTH, Grindrop, ITM Power (trading), VAASAETT, FGH, Sorea, Merit Consulting House.

Status: During the first half of 2019, IREN continued with the use case scouting activities, which led to the identification of the pilot building on which to test the innovative technology. The IT data processing platform is being developed. The subsequent activities were planned; these will lead to the creation of the experimental pilot during the year.

Pump-Heat – (Horizon 2020)

The project has the objective of increasing the flexibility of conventional fossil source plants, in particular combined cycles, in order to satisfy the ever-increasing needs of the network to offset the demand fluctuations deriving from renewable sources. The project will study the combination of heat pumps with cogenerative combined cycle and conventional combined cycle plants; the combination with systems for heat and cold storage will also be analysed. In particular, at the IREN facility of Moncalieri (TO) a pilot plant will be built, in which the technologies studied and developed during the project will be tested as regards cogenerative combined-cycle applications.

Partners: IREN S.p.A. and IREN Energia, University of Genoa, Rina Consulting, Ansaldo Energia, KTH, Aristotele University, Mitsubishi Hitachi Power Systems Europe, Mayekawa, Siemens, Alfalaval, i-TES, Limmat Scientific, Novener, Orlen.

Status: The pilot is currently being designed. In particular IREN is responsible for the preliminary design of the Balance of Plant for connecting the pilot with the cogenerative combined cycle (3GT unit) of the Iren facility of Moncalieri. At the same time, the partners are proceeding with the design of the innovative heat pump, the Phase Change Materials storage system and the control system.

Store&Go – (Horizon 2020)

The STORE&GO project will demonstrate 3 innovative Power to Gas (P2G) systems located in Germany, Switzerland and Italy, in order to identify and overcome the technical, economic, social and legal barriers. The project has the ambition of assessing the possibility of integrating the P2G storage system into leading-edge energy production and distribution systems. IREN's role involves the study of the technical/economic possibilities of integrating P2G technology into thermoelectric production systems.

Partners: IREN S.p.A. and IREN Energia, Turin Polytechnic, Hysytech, Atmosstat, Climeworks; Studio BFP, DWGV, HSR, other university and industrial partners.

Status: The technical-economic analysis was completed, in collaboration with the Polytechnic of Turin on the combination of P2G in combined cycles in order to increase its flexibility and recovery of the energy lost in the balancing and of the combination of P2G to offset the fluctuation of non-programmable renewable sources. The three pilots (Falkenhagen – Germany, Solothurn – Switzerland and Troia – Italy) were commissioned and inaugurated and the experimental operation stage is in progress with a view to the end of the project set for February 2020.

OTHER INNOVATION ACTIVITIES

During 2019, alongside the financed projects, IREN launched numerous self-financed projects, which involved the engagement of resources internal and external to the company. In particular, as regards external collaborations, IREN activated numerous research contracts with Italian Universities which regarded aspects such as the design and testing of innovative plant solutions in support of the IREN businesses, the creation of models and the identification of new processes and services. A number of significant self-financed projects are presented below.

Acoustic data transmission

Since 2017, a prototype system has been designed and installed. This has demonstrated the feasibility of the acoustic telemetry technique on metal pipes, applied to the management of filling a mountain tank. In 2018, an additional research project was launched, with the objective of finalising and engineering the prototype system developed, testing the acoustic data transmission on plastic pipes making the system energetically autonomous through the design and production of a microturbine. The technological nucleus developed was the subject of a patent application, accepted by the patents office of the Ministry of Productive Activities in the first half of 2019. Currently activities are in progress with the aim of assessing the engineering for the purpose of producing and marketing the technological nuclei developed.

Monitoring of hydraulic transients in water distribution networks

In the first half of 2019, after a test carried out on devices for monitoring of hydraulic transients in water distribution networks, IREN installed more loggers testing prospectively the use of the measurements acquired in the dynamic management of the pressures in a water district to be identified.

Management of Water Treatment Sludge

During the first half of 2019 activities continued on making purification processes more efficient minimising the production of sludge and improving the production of by-products (biogas or biomethane), reducing the total operating costs. The activities include the definition of performance indicators and the on-line measurement process parameters that enable accounting for mass balances, and the analysis of the costs, benefits and technical/economic implications. In particular, collaboration activity with a startup was completed, with the objective of assessing yields and applicability of an innovative hydrothermal conversion (HTC) process capable of transforming sludge and other organic waste with high humidity content (including digestate) into a biocarbon with chemical and physical characteristics comparable to those of peat or fossil lignite.

As regards biochar, a study was carried out to assess its possible applications, outlet markets and consequent economic value on the basis of the transformation process (pyrolysis, gasification, HTC) and the starting substrate (sludge, digestate). Again on the subject of processing and reduction of sludge testing activity began on an innovative hydrodynamic cavitation process as mechanical pre-processing before the anaerobic bio-digestion of the sludge.

Projects included in the Amga Foundation's research programme

During 2019, IREN collaborated on the selection and identification of a number of financed research projects, included in the AMGA Foundation's programme; these projects refer to economic regulatory issues and technical-scientific questions associated with water, energy and environmental resources. Among these, we can note the research on:

- i. Applicability of Landfill Mining to old landfill sites in Italy;
- ii. MYRAEE - MYco Recovery of Electrical and Electronic Equipment;
- iii. Nanocatalysers based on manganese oxides for sustainable energy production (Mn4Energy);
- iv. Comparative assessment of biogas cleaning and upgrading processes;
- v. Markets in search of regulation: tender procedures for gas distribution concessions;
- vi. Optimal methods of managing urban drainage systems based on innovative monitoring of rainfall using IoT low-power wide-area network technology;
- vii. The economic, environmental and organisational performance of the Italian water sector;
- viii. Reuse of purified waste water: analysis of the hygienic-sanitary impact;
- ix. Regulation of water and environmental services: analysis of the factors that determine the operating and capital expenses and possible reflections on the models of cost recognition in tariffs;

- x. Energy markets and switching by consumers: what the drivers are and what instruments for action are potentially effective.

Waste Management

Research activity on capture and fixing of CO₂ from combustion processes

In the early months of 2019, research activity was launched with the Department of Earth Sciences of the University of Turin for the development and testing of a reaction for fixing CO₂ deriving from combustion processes in matrices at the solid state, using reactions that make use of ascorbic and/or analogous acids extractable from vegetable substances, with precipitation of calcium oxalates.

In the first half of the year, after the creation of the experimental set-up at the University laboratories, the first tests were carried out with the objective of characterising yields and reaction kinetics on the basis of the process variables.

Research activity on inertisation and reuse of bottom and fly ashes from WtE plants

During 2019, the research activity entrusted by TRM to the Department of Earth Sciences of the University of Turin continued; this regards the use that can be made of bottom and fly ashes produced by the Group's incineration plants. The activity, which began in 2017, involved a first chemical-physical characterisation and division into sub-classes of the matrices being studied, and then identifying the possible processing alternatives for inertising them and then enabling their subsequent reuse. During 2019, the activity focused on validation, through laboratory tests, of the processing alternatives for the classes of ashes identified (washing, carbonation, use of inorganic binders) and the objective of the next actions will be to define the optimal parameters of the single reactions to be able to determine the technical and plant arrangements on the pilot scale of the process.

Research bursary for the study of innovative methods and processes for the recycling of WEEE

During the early months of 2019 a research bursary was awarded for the study and testing of innovative processes and methods for the recovery of material from waste electrical and electronic equipment (WEEE). In particular, the study concentrated on certain fractions of WEEE which as of today do not have a recycled market outlet, that is the PVC deriving from cables and mixed unusable plastics from the processing of small electrical appliances. The first activities regarded the study of the state of the art of recycling these materials, their chemical-physical characterisation and identification of the possible alternatives for their reuse, for which further studies and laboratory tests were launched.

Optimisation of the techniques for measuring the concentration of odours from discontinuous precise sources

During the first half of the year, in agreement with IREN Ambiente and IREN Laboratori, a project was defined with the aim of correlating chemical concentration and concentration of odour, implementing interesting monitoring with functions of control and prevention of any excessive emissions of odour from plants managed by IREN Ambiente.

The project activities involve finalising a methodology capable of characterising in a representative way sources of precise and discontinuous odours reducing the risks of disputes with the authority responsible for control, increasing the rapidity of response of the olfactory and odour threshold value and finally enabling assessment of the odour abatement systems. The project activities are being contractualised.

Energy

Industry 4.0 Programme

During 2017, IREN continued activity on seeking innovative solutions falling under the definition of "Industry 4.0" applicable to the Energy Business Unit, with particular reference to the maintenance sector. The analysis focused on specific verticals, that is operator safety, infrastructure monitoring and big data, concentrating on the thermoelectric, hydroelectric and district heating sectors. At the end of the analysis activity, more than twenty projects were identified; these were and will be tested during 2018 and 2019.

The activities in question involved the study and adoption of remote-controlled solutions to supplement the current corporate practices adopted during inspections. In continuity with what was already done in 2017, survey activities on reservoirs continued with the use of drones in order to quantify the volumes of residues.

The testing activity was also extended to the inspection of rocky slopes overlooking the reservoirs. The solutions involved in the collaboration made it possible to reduce considerably the time taken by activities performed with conventional techniques and increased the safety of the workers involved. Development of a rover for inspecting shunting tunnels is also in the completion stage. The robot will be capable of travelling along tunnels, acquiring images and 3D maps, communicating with the outside world via a wireless network which it will lay out during the inspection.

Again, in the hydroelectric sector, and in particular at the Venaus and Telesio plants, tests are continuing on the use, in an operating context, of smart glasses systems in order to enable interaction between the operating field and the control room and real-time data communication.

Training days were organised for maintenance staff.

The monitoring activity was extended also to district heating networks and thanks to the use of a high-resolution thermographic camera, mounted on an aircraft, it was possible to fly, in a winter night, over the city of Turin and identify using thermal image processing software the water and heat leaks of the network. This technology was then industrialised during 2019.

In the field of predictive maintenance, models are being tested at the Group's main plants. These, starting from the operating data of the plant, are capable of predicting its operation, thus optimising the maintenance activities and preventing any malfunctioning and breakdowns.

In the district heating field an experimental activity was completed for the remote monitoring of the environmental parameters of the network valve chambers, considered confined spaces, making use of a connectivity technology capable of sending the data to a centralised database and analysing this information. The goal of the project is to increase operator safety and provide additional information useful for planning maintenance activities in such spaces.

Installation of storage systems on the district heating network

In the City of Turin, IREN is engaged in the work to create two new heat storage systems serving the district heating network at the Mirafiori North site and in the San Salvatio quarter, which, added to the currently existing 15,000 m³ in the city, will increase the current total capacity by a further 5,000 m³.

Monitoring of the Ciardoney glacier

During June 2019 research activities continued on the behaviour of the Valle Orco glaciers, through monitoring of the Ciardoney glacier in the Gran Paradiso National Park. The initiative, launched in the 1990s, is carried out in the context of an agreement with the Italian Meteorological Society, renewed on 28 June 2018 during the 7th National "Energy and Territory" Conference held in Locana (TO), Italy. The research is oriented to monitoring the reduction of glaciers in the Alps supporting the planning of the production of hydroelectric plants in Valle Orco.

The snow coverage season was characterised by abundant snowfalls at the end of October-November 2018 and in April 2019, with a long period in between of low precipitation between December 2018 and March 2019. The unusual cold of May 2019 then determined - compared to the recent warm springs - a certain delay in the beginning of the snow melt. The situation found at the date of the survey, in June, can therefore be considered representative of the maximum accumulation of snow at the end of the season.

The water equivalent averaged over the entire glacier (winter balance) was 1,780 mm, (+45% compared to the 1992-2018 average of 1,220 mm), and indicative of good availability of water for hydroelectric uses in summer 2019.

LoRA network on Turin

During the first half of 2019, the second stage of the LoRa project was launched, involving the completion of an Internet of Things (IoT) connectivity network based on the LoRaWan communication protocol covering the City of Turin. This stage featured procurement and installation of 22 LoRa gateways to ensure network coverage over the entire city and by completion of operation of the two servers (one to manage the gateways - Network Server; one to create dashboards and display data - Application Server). The choice of the positioning of the gateways was made in coordination with multiple corporate structures (IRETI, AMIAT, TRM, IREN Energia) to enable suitable signal coverage for the territory of the City of Turin. During 2019, the testing of IoT equipment also began with a view to smart services (e.g. Smart Parking), in collaboration with ST. IREN and the Municipality of Turin then signed a collaboration agreement to regulate the principles of use of the LoRa network for different stakeholders (third-party bodies, Municipality of Turin and the “innovation ecosystem”, a set of start-ups and companies authorised to access the infrastructure).

Corporate Venture Capital

In addition, in the context of the Corporate Venture Capital programme, various activities were carried out. Primarily, the first investment agreement was made with a startup, Enerbrain. Thanks to the agreement signed in December 2018, the group was able to exercise its option rights, acquiring an equity investment in the company at the same time as the capital increase in progress.

Together with the investment operation, the commercial agreement was implemented with the Energy Business Unit. In fact the, Enerbrain devices were installed in approximately 90 target buildings, obtaining an energy saving according to the expectations.

The scouting activities and the analysis of the best startup opportunities at the national level were expanded. From January to today, contacts have been made with approximately 200 startups, 6 of which are at an advanced stage of study of the dossier.

The acceleration programmes related to the two winning startups of the IREN Startup Award 2018 were completed successfully. The call for startups, 2019 version, is being organised.

The collaboration with these innovative enterprises led to the testing of new technologies in order to validate their operation and assess their commercial potential. In particular, 2 “Proofs of Concept” were organised: one, completed in March in the field of energy efficiency and one, being launched, in the field of workplace safety and “man down” systems.

In addition, in order to assess as well as possible the investment opportunities, a number of studies of the sector and of specific fields of application were entrusted to Universities. With the performance of these studies, not only is new information acquired for decision-making in terms of investments, but also subjects and sectors are studied for which there are no internal competencies, discovering new markets and opportunities.

On the subject of negotiations and contracts, standard Venture Capital contracts were prepared, which will make it possible in the next few months to pursue negotiations more quickly, reducing the investment times.

Iren S.p.A.

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Reggio Emilia Business Register
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Condensed Consolidated Interim
Report and **Notes**
at 30 June 2019

STATEMENT OF FINANCIAL POSITION

thousands of euro

| | Notes | 30.06.2019 | of which related parties | 31.12.2018 | of which related parties |
|---|-------|------------------|--------------------------------|------------------|--------------------------------|
| ASSETS | | | | | |
| Property, plant and equipment | (1) | 3,546,108 | | 3,471,958 | |
| Investment property | (2) | 12,399 | | 12,820 | |
| Intangible assets with a finite useful life | (3) | 2,050,133 | | 2,009,986 | |
| Goodwill | (4) | 162,745 | | 149,713 | |
| Investments accounted for using the equity method | (5) | 140,416 | | 134,594 | |
| Other equity investments | (6) | 7,226 | | 7,223 | |
| Non-current trade receivables | (7) | 87,122 | 25,617 | 69,068 | 10,286 |
| Non-current financial assets | (8) | 145,154 | 132,291 | 147,867 | 137,329 |
| Other non-current assets | (9) | 41,711 | 6,995 | 43,130 | 6,944 |
| Deferred tax assets | (10) | 382,212 | | 360,298 | |
| Total non-current assets | | 6,575,226 | 164,903 | 6,406,657 | 154,559 |
| Inventories | (11) | 65,179 | | 73,799 | |
| Trade receivables | (12) | 912,801 | 111,272 | 983,836 | 112,518 |
| Current tax assets | (13) | 7,209 | | 11,445 | |
| Other receivables and other current assets | (14) | 251,253 | 979 | 241,879 | 537 |
| Current financial assets | (15) | 55,702 | 8,088 | 78,775 | 26,889 |
| Cash and cash equivalents | (16) | 144,622 | | 369,318 | |
| Total current assets | | 1,436,766 | 120,339 | 1,759,052 | 139,944 |
| Assets held for sale | (17) | 372,424 | 371,900 | 402,424 | 401,900 |
| TOTAL ASSETS | | 8,384,416 | 657,142 | 8,568,133 | 696,403 |

thousands of euro

| | Notes | 30.06.2019 | of which related parties | 31.12.2018 | of which related parties |
|--|-------------|------------------|--------------------------------|------------------|--------------------------------|
| EQUITY | | | | | |
| Equity attributable to shareholders | | | | | |
| Share capital | | 1,300,931 | | 1,300,931 | |
| Reserves and retained earnings (losses) | | 738,815 | | 642,396 | |
| Net profit (loss) for the period | | 150,638 | | 242,116 | |
| Total equity attributable to shareholders | | 2,190,384 | | 2,185,443 | |
| Equity attributable to minorities | | 348,099 | | 376,928 | |
| TOTAL EQUITY | (18) | 2,538,483 | | 2,562,371 | |
| LIABILITIES | | | | | |
| Non-current financial liabilities | | | | | |
| Non-current financial liabilities | (19) | 3,065,955 | | 3,013,303 | |
| Employee benefits | (20) | 105,423 | | 108,109 | |
| Provisions for risks and charges | (21) | 430,252 | | 439,497 | |
| Deferred tax liabilities | (22) | 218,410 | | 211,553 | |
| Other payables and other non-current liabilities | (23) | 476,487 | 122 | 474,778 | 111 |
| Total non-current liabilities | | 4,296,527 | 122 | 4,247,240 | 111 |
| Current financial liabilities | | | | | |
| Current financial liabilities | (24) | 221,261 | 3,870 | 437,363 | 6,042 |
| Trade payables | (25) | 811,672 | 27,898 | 914,938 | 32,073 |
| Other payables and other current liabilities | (26) | 327,599 | 34 | 284,285 | 98 |
| Current tax liabilities | (27) | 98,978 | | 32,049 | |
| Provisions for risks and charges - current portion | (28) | 89,896 | | 89,887 | |
| Total current liabilities | | 1,549,406 | 31,802 | 1,758,522 | 38,213 |
| Liabilities related to assets held for sale | (29) | - | | - | |
| TOTAL LIABILITIES | | 5,845,933 | 31,924 | 6,005,762 | 38,324 |
| TOTAL EQUITY AND LIABILITIES | | 8,384,416 | 31,924 | 8,568,133 | 38,324 |

INCOME STATEMENT

thousands of euro

| | Notes | First half 2019 | of which related parties | First half 2018 Restated (*) | of which related parties |
|--|-------|--------------------|--------------------------|------------------------------|--------------------------|
| Revenue | | | | | |
| Revenue from goods and services | (30) | 2,153,312 | 165,956 | 1,771,999 | 163,155 |
| Change in work in progress | (31) | (9) | | 27 | |
| Other income | (32) | 84,954 | 3,506 | 164,930 | 1,901 |
| Total revenue | | 2,238,257 | 169,462 | 1,936,956 | 165,056 |
| Operating expenses | | | | | |
| Raw materials, consumables, supplies and goods | (33) | (793,342) | (27,971) | (625,735) | (32,360) |
| Services and use of third-party assets | (34) | (723,349) | (16,663) | (598,190) | (15,082) |
| Other operating expenses | (35) | (34,831) | (5,842) | (25,344) | (3,852) |
| Capitalised expenses for internal work | (36) | 14,255 | | 13,804 | |
| Personnel expense | (37) | (222,930) | | (195,644) | |
| Total operating expenses | | (1,760,197) | (50,476) | (1,431,109) | (51,294) |
| GROSS OPERATING PROFIT (EBITDA) | | 478,060 | 118,986 | 505,847 | 113,762 |
| Depreciation, amortisation, provisions and impairment losses | | | | | |
| Depreciation and amortisation | (38) | (191,510) | | (169,237) | |
| Provisions for impairment of receivables | (39) | (16,845) | | (16,436) | |
| Other provisions and impairment losses | (39) | (12,053) | | (5,154) | |
| Total depreciation, amortisation, provisions and impairment losses | | (220,408) | | (190,827) | |
| OPERATING PROFIT (EBIT) | | 257,652 | 118,986 | 315,020 | 113,762 |
| Financial income and expense | | | | | |
| Financial income | (40) | 17,872 | 9,482 | 19,305 | 9,563 |
| Financial expense | | (45,843) | (2) | (49,952) | (223) |
| Total financial income and expense | | (27,971) | 9,480 | (30,647) | 9,340 |
| Share of profit (loss) of associates accounted for using the equity method | (41) | 4,752 | | 825 | |
| Value adjustments on equity investments | (42) | - | | (329) | |
| Profit (loss) before tax | | 234,433 | 128,466 | 284,869 | 123,102 |
| Income tax expense | (43) | (70,197) | | (88,239) | |
| Net profit (loss) from continuing operations | | 164,236 | | 196,630 | |
| Net profit (loss) from discontinued operations | (44) | - | | - | |
| Net profit (loss) for the period | | 164,236 | | 196,630 | |
| attributable to: | | | | | |
| - Profit (loss) for the period attributable to shareholders | | 150,638 | | 184,650 | |
| - Profit (loss) for the period attributable to minorities | (45) | 13,598 | | 11,980 | |
| Earnings per ordinary and savings share | | | | | |
| - basic (euro) | (46) | 0.12 | | 0.14 | |
| - diluted (euro) | | 0.12 | | 0.14 | |

(*) As provided for in IFRS 3, the economic balances of the first half of 2018 were restated to take into account, at the acquisition date, the effects deriving from the completion, at the end of financial year 2018, of the allocation of the purchase price at the definitive fair value of the acquired assets and liabilities (Purchase Price Allocation) of the ACAM group companies and of Re.Cos.. For further information, please see the paragraph entitled "Restatement of amounts at 30 June 2018" in the section "Content and structure of the condensed consolidated interim report".

STATEMENT OF OTHER COMPREHENSIVE INCOME

| | | thousands of euro | |
|---|-------------|-----------------------|---------------------------------------|
| | | First half 2019 | First half 2018 Restated (*) |
| Profit/(loss) for the period – Shareholders and minorities (A) | | 164,236 | 196,630 |
| Other comprehensive income that will subsequently be reclassified to the Income Statement | | | |
| - effective portion of changes in fair value of cash flow hedges | | (44,055) | 46 |
| - changes in fair value of financial assets | | - | - |
| - share of other profits/(losses) of companies accounted for using the equity method | | 1,719 | 222 |
| Tax effect of other comprehensive income | | 11,746 | (53) |
| Total other comprehensive income that will subsequently be reclassified to the Income Statement, net of tax effect (B1) | (47) | (30,590) | 215 |
| Other comprehensive income that will subsequently not be reclassified to the Income Statement | | | |
| - actuarial gains/(losses) on employee defined benefit plans (IAS 19) | | - | - |
| - portion of other profits/(losses) of companies accounted for using the equity method related to employee defined benefit plans (IAS 19) | | - | - |
| Tax effect of other comprehensive income | | - | - |
| Total other comprehensive income that will subsequently not be reclassified to the Income Statement, net of tax effect (B2) | (47) | - | - |
| Total comprehensive income/(expense) (A)+(B1)+(B2) | | 133,646 | 196,845 |
| attributable to: | | | |
| - Profit (loss) for the period attributable to shareholders | | 121,333 | 184,963 |
| - Profit (loss) for the period attributable to minorities | | 12,313 | 11,882 |

(*) As provided for in IFRS 3, the economic balances of the first half of 2018 were restated to take into account, at the acquisition date, the effects deriving from the completion, at the end of financial year 2018, of the allocation of the purchase price at the definitive fair value of the acquired assets and liabilities (Purchase Price Allocation) of the ACAM group companies and of Re.Cos.. For further information, please see the paragraph entitled "Restatement of amounts at 30 June 2018" in the section "Content and structure of the condensed consolidated interim report".

STATEMENT OF CHANGES IN EQUITY

| | Share capital | Share premium reserve | Legal reserve |
|--|------------------|-----------------------|---------------|
| 31/12/2017 | 1,276,226 | 105,102 | 49,998 |
| First application of IFRS 9 and IFRS 15 Retained earnings | | | |
| 01/01/2018 | 1,276,226 | 105,102 | 49,998 |
| Capital increase | 24,705 | 27,917 | |
| Legal reserve | | | 8,348 |
| Dividends to shareholders | | | |
| Changes in consolidation scope | | | |
| Change in equity interests | | | |
| Other changes | | | |
| Comprehensive income for the period of which: | | | |
| - Net profit for the period | | | |
| - Other comprehensive income | | | |
| 30/06/2018 Restated (*) | 1,300,931 | 133,019 | 58,346 |
| 31/12/2018 | 1,300,931 | 133,019 | 58,346 |
| Legal reserve | | | 6,296 |
| Dividends to shareholders | | | |
| Retained earnings | | | |
| Purchase of treasury shares | | | |
| Changes in consolidation scope | | | |
| Change in equity interests | | | |
| Other changes | | | |
| Comprehensive income for the period of which: | | | |
| - Net profit for the period | | | |
| - Other comprehensive income | | | |
| 30/06/2019 | 1,300,931 | 133,019 | 64,642 |

(*) As provided for in IFRS 3, the financial balances at 30 June 2018 were restated to take into account, at the acquisition date, the effects deriving from the completion, at the end of financial year 2018, of the allocation of the purchase price at the definitive fair value of the acquired assets and liabilities (Purchase Price Allocation) of the ACAM group companies and of Re.Cos.. For further information, please see the paragraph entitled "Restatement of amounts at 30 June 2018" in the section "Content and structure of the condensed consolidated interim report".

thousands of euro

| Cash flow hedging reserve | Other reserves and retained earnings (losses) | Total reserves and retained earnings (losses) | Profit (loss) for the period | Total equity attributable to shareholders | Equity attributable to minorities | Total equity |
|---------------------------|---|---|------------------------------|---|-----------------------------------|------------------|
| (1,729) | 454,813 | 608,184 | 237,720 | 2,122,130 | 376,673 | 2,498,803 |
| | (133,719) | (133,719) | | (133,719) | (4,273) | (137,992) |
| | 237,720 | 237,720 | (237,720) | - | | - |
| (1,729) | 558,814 | 712,185 | - | 1,988,411 | 372,400 | 2,360,811 |
| | | 27,917 | | 52,622 | | 52,622 |
| | (8,348) | - | | - | | - |
| | (91,065) | (91,065) | | (91,065) | (21,908) | (112,973) |
| | - | - | | - | 59 | 59 |
| | (445) | (445) | | (445) | 415 | (30) |
| | (1,409) | (1,409) | | (1,409) | 190 | (1,219) |
| 313 | | 313 | 184,650 | 184,963 | 11,882 | 196,845 |
| | | | | - | | |
| | | | 184,650 | 184,650 | 11,980 | 196,630 |
| 313 | - | 313 | | 313 | (98) | 215 |
| (1,416) | 457,547 | 647,496 | 184,650 | 2,133,077 | 363,038 | 2,496,115 |
| (17,353) | 468,384 | 642,396 | 242,116 | 2,185,443 | 376,928 | 2,562,371 |
| | (6,296) | - | | - | | - |
| | (108,995) | (108,995) | | (108,995) | (40,731) | (149,726) |
| | 242,116 | 242,116 | (242,116) | - | | - |
| | (7,959) | (7,959) | | (7,959) | | (7,959) |
| | - | - | | - | - | - |
| | 490 | 490 | | 490 | (415) | 75 |
| | 72 | 72 | | 72 | 4 | 76 |
| (29,305) | - | (29,305) | 150,638 | 121,333 | 12,313 | 133,646 |
| | | | | | | |
| | | | 150,638 | 150,638 | 13,598 | 164,236 |
| (29,305) | - | (29,305) | | (29,305) | (1,285) | (30,590) |
| (46,658) | 587,812 | 738,815 | 150,638 | 2,190,384 | 348,099 | 2,538,483 |

STATEMENT OF CASH FLOWS

thousands of euro

| | First half 2019 | First half 2018 Restated (*) |
|---|--------------------|------------------------------------|
| A. Opening cash and cash equivalents | 369,318 | 169,086 |
| Cash flows from operating activities | | |
| Profit (loss) for the period | 164,236 | 196,630 |
| Adjustments: | | |
| Income tax expense for the period | 70,197 | 88,239 |
| Share of profit (loss) of associates and joint ventures | (4,752) | (825) |
| Net financial expense (income) | 27,971 | 30,647 |
| Amortisation of intangible assets and depreciation of property, plant and equipment | 191,510 | 169,237 |
| Net impairment losses (reversals of impairment losses) on assets | 2,707 | 1,739 |
| Net provisions for risks and other charges | 63,612 | 39,284 |
| Capital (gains) losses | (1,942) | 345 |
| Utilisations of employee benefits | (6,911) | (4,666) |
| Utilisations of provisions for risks and other charges | (25,236) | (11,784) |
| Change in other non-current assets and liabilities | (5,463) | (2,248) |
| Other changes in capital | (11,493) | (19,106) |
| Taxes paid | - | - |
| B. Cash flows from operating activities before changes in NWC | 464,436 | 487,492 |
| Change in inventories | 9,307 | (5,668) |
| Change in trade receivables | 55,604 | 191,060 |
| Change in tax assets and other current assets | 3,359 | 20,236 |
| Change in trade payables | (123,257) | (266,215) |
| Change in tax liabilities and other current liabilities | 37,681 | (24,523) |
| C. Cash flows from changes in NWC | (17,306) | (85,110) |
| D. Cash flows from/(used in) operating activities (B+C) | 447,130 | 402,382 |
| Cash flows from/(used in) investing activities | | |
| Investments in property, plant and equipment and intangible assets | (196,960) | (164,179) |
| Investments in financial assets | (103) | - |
| Proceeds from the sale of investments and changes in assets held for sale | 5,760 | 13,930 |
| Changes in consolidation scope | (16,205) | (220,960) |
| Dividends received | 785 | 1,224 |
| E. Total cash flows from/(used in) investing activities | (206,723) | (369,985) |
| F. Free cash flow (D+E) | 240,407 | 32,397 |
| Cash flows from/(used in) financing activities | | |
| Capital increase | - | 52,622 |
| Purchases of treasury shares | (7,959) | - |
| Dividends paid | (145,773) | (112,973) |
| New non-current loans | - | - |
| Repayment of non-current loans | (331,451) | (120,115) |
| Change in financial payables for leasing | (5,618) | (3,176) |
| Change in other financial payables | (16,187) | 78,192 |
| Change in financial receivables | 57,877 | 36,146 |
| Interest paid | (22,795) | (28,066) |
| Interest received | 6,803 | 7,325 |
| G. Total cash flows from/(used in) financing activities | (465,103) | (90,045) |
| H. Cash flows for the period (F+G) | (224,696) | (57,648) |
| I. Closing cash and cash equivalents (A+H) | 144,622 | 111,438 |

(*) As provided for in IFRS 3, the cash flows of the first half of 2018 were restated to take into account, at the acquisition date, the effects deriving from the completion, at the end of financial year 2018, of the allocation of the purchase price at the definitive fair value of the acquired assets and liabilities (Purchase Price Allocation) of the ACAM group companies and of Re.Cos.. For further information, please see the paragraph entitled "Restatement of amounts at 30 June 2018" in the section "Content and structure of the condensed consolidated interim report".

NOTES TO THE FINANCIAL STATEMENTS

INTRODUCTION

Iren S.p.A. is an Italian multi-utility company, listed on the Italian Stock Exchange (Borsa Italiana), created on 1 July 2010 through the merger of IRIDE and ENÌA.

The Group is structured according to a model which provides for an industrial holding company, with registered office in Reggio Emilia, and four companies responsible for the single business lines operating in the main operating bases in Genoa, La Spezia, Parma, Piacenza, Reggio Emilia, Turin and Vercelli.

The business segments in which the Group operates are:

- Networks (Electricity Distribution Networks, Gas Distribution Networks, Integrated Water Service)
- Waste Management (Waste collection and disposal)
- Energy (Hydroelectric Production and production from other renewable sources, Combined Heat and Power, District Heating Networks, Thermoelectric Production, Public Street Lighting, Global services, Energy efficiency services)
- Market (Sale of electricity, gas, heat)
- Other services (Laboratories, Telecommunications and other minor services).

Paragraph X, Information by operating segments, includes the information required by IFRS 8.

The company's condensed consolidated interim financial statements at 30 June 2019 include those of the Company and its subsidiaries, (collectively referred to as the "Group" and individually as "Group entities") and the Group's equity interest in jointly-controlled companies and in associates measured using the equity method.

I. CONTENT AND STRUCTURE OF THE CONDENSED CONSOLIDATED INTERIM REPORT

The interim financial statements of the Iren Group at 30 June 2019 were prepared under the terms of Art. 154-ter, Section 2 of Italian Legislative Decree no. 58 of 24 February 1998 as amended by Italian Legislative Decree no. 195 of 6 November 2007.

The condensed consolidated interim financial statements at 30 June 2019 have been prepared in accordance with the International Financial Reporting Standards (IFRSs), issued by the International Accounting Standards Board (IASB) and endorsed by the European Union, as well as with the provisions set forth in implementation of Art. 9 of Italian Legislative Decree No. 38/2005. "IFRS" also includes the International Accounting Standards ("IAS") and all interpretations issued by the International Financial Reporting Interpretations Committee ("IFRC"), previously known as the Standing Interpretations Committee ("SIC").

In particular these condensed interim financial statements, as they have been prepared in accordance with IAS 34 - Interim Financial Statements, do not include all the information required in the annual financial statements and must be read together with the annual financial statements prepared for the financial year ended 31 December 2018 and available at the company's registered office, at Borsa Italiana S.p.A., and on the website www.gruppoiren.it.

The financial statements have been drawn up on the basis of the historical cost principle, except for certain financial instruments measured at fair value. The accounting standards applied in drawing up these condensed interim financial statements, were the same as those adopted for the previous year's statements, to which you are referred for a more ample discussion, with the exception of the following standards and interpretations adopted for the first time starting from 1 January 2019 and illustrated in detail in the paragraph "Accounting standards, amendments and interpretations applied from 1 January 2019" below.

The financial statement formats adopted by the Iren Group in preparing these financial statements are the same as those applied in preparing the financial statements at 31 December 2018, with the exception of the Statement of Cash Flows to which has been added the item "Change in financial payables for leases".

In line with what was previously published, in the statement of financial position, assets and liabilities are classified as "current/non-current". Assets and liabilities classified as discontinued or held for sale are shown separately. Current assets, which include cash and cash equivalents, are those that will be realised, transferred or consumed during the Group's ordinary operating cycle or during the twelve months following the end of the period. Current liabilities are those for which settlement is envisaged during the Group's ordinary operating cycle or during the twelve months following the end of the period.

The Income Statement is classified on the basis of the nature of the costs. In addition to the Operating Profit (EBIT), the Income Statement also shows the Gross Operating Profit (EBITDA) obtained by deducting total operating expense from total revenue.

The indirect method is used in the cash flow statement. The cash configuration analysed in the cash flow statement includes cash on hand and cash in current accounts.

In the present dossier a number of alternative performance measures (APMs) have been used; these are different from the financial measures explicitly required by the IAS/IFRS international accounting standards adopted by the Group. For details of these measures please see the specific paragraph "Alternative Performance Measures".

These condensed consolidated interim financial statements are stated in euro, the company's functional currency. All amounts expressed in euro are rounded to the nearest thousand.

The financial statements of consolidated entities are drawn up at the reporting date of the half-year period of reference.

ALTERNATIVE PERFORMANCE MEASURES

The Iren Group uses alternative performance measures (APMs) in order to convey more effectively the information on the profitability performance of the businesses in which it operates, and on its patrimonial and financial situation. These measures are different from the financial measures explicitly required by the IAS/IFRS international accounting standards adopted by the Group.

On the subject of these measures, CONSOB issued Communication no. 92543/15 which makes applicable the Guidelines issued by the European Securities and Markets Authority (ESMA) on their presentation in the regulated information distributed or in prospectuses published. These Guidelines are aimed at promoting the usefulness and transparency of the alternative performance measures included in regulated information or prospectuses that fall within the scope of application of Directive 2003/71/EC, in order to improve their comparability, reliability and comprehensibility.

In line with the aforementioned communications, the criteria used to construct these measures presented in the present financial report are provided below.

Net invested capital: determined by the algebraic sum of Non-current assets, Other non-current assets (liabilities), Net working capital, Deferred tax assets (liabilities), Provisions for risks and employee benefits and Assets (Liabilities) held for sale. For further details on the construction of the single items that make up the indicator please see the statement of reconciliation of the reclassified balance sheet with the accounting statement presented in the annexes to the consolidated financial statements.

This APM is used by the Group in the context of documents both internal to the Group and external and is a useful measure for the purpose of measuring total net assets, both current and non-current, also through comparison between the period with which the report is concerned and previous periods or financial years. This indicator also makes it possible to carry out analyses on operating performance and to measure performance in terms of operating efficiency over time.

Net financial debt: determined by the sum of Non-current financial liabilities net of Non-current financial assets and Current financial liabilities net of Current financial assets and of Cash and cash equivalents.

This APM is used by the Group in the context of documents both internal and external to the Group and is a useful measure of the Group's financial structure, also through comparison between the period with which the report is concerned and previous periods or financial years.

Gross operating profit (EBITDA): determined subtracting total operating expenses from total revenue.

This APM is used by the Group in the context of documents, both internal to the Group and external, and is a useful tool for assessing the Group's operating performance (as a whole and at the individual Business Unit level), also through comparison between the operating profit of the period with which the report is concerned and those of previous periods or financial years. This indicator also makes it possible to carry out analyses on operating performance and to measure performance in terms of operating efficiency over time.

Operating profit (EBIT): determined subtracting from Gross Operating Profit (EBITDA) depreciation, amortisation, provisions and operating impairment losses.

Operating cash flow: determined starting from net profit /(loss) for the period, adjusted for financial income and expenses and for non-monetary items (depreciation and amortisation, provisions, impairment losses...), to which are added the changes of Net working capital, utilisations of provisions and employee benefits and other operating changes.

This APM is used by the Group in the context of documents both internal to the Group and external and measures the cash generation capacity of the group's operating activities and therefore its self-financing capacity.

Free cash flow: determined adding to the operating cash flow the financial resources used or provided by investing activities represented by investments in property, plant and equipment, intangible and financial assets, disposals, changes in the consolidation scope and dividends received.

Investments: determined by the sum of investments in property, plant and equipment, intangible assets and financial assets (equity investments) and presented gross of capital grants. This APM is used by the

Group in the context of documents both internal to the Group and external and is a measure of the financial resources absorbed in purchases of durable goods in the period.

Gross operating profit over revenue: determined making a proportion, in percentage terms, between gross operating profit and value of revenue.

This APM is used by the Group in the context of documents both internal to the Group and external and is a useful instrument for assessing the Group's operating performance (both as a whole and at the level of single Business Units), also through comparison with previous periods or financial years.

Net financial debt over equity: determined as the ratio between net financial debt and equity including minority interests.

This APM is used by the Group in the context of documents both internal to the Group and external and is a useful instrument for assessing the financial structure in terms of relative proportion of financing sources between third-party funds and own funds.

ACCOUNTING STANDARDS, AMENDMENTS AND INTERPRETATIONS APPLIED FROM 1 JANUARY 2019

As of 1 January 2019, the following accounting standards and amendments to accounting standards, issued by the IASB and endorsed by the European Union, are obligatorily applicable:

IFRS 16 – Leases. Standard published by the IASB on 13 January 2016, intended to replace IAS 17 - Leases, as well as the interpretations IFRIC 4 "Determining whether an Arrangement contains a Lease", SIC 15 "Operating Leases - Incentives" and SIC 27 "Evaluating the Substance of Transactions In the Legal Form of a Lease". The new standard provides a new definition of lease, irrespective of the contractual form adopted (leasing, rental or hire) and in practice marks the end of the distinction between operating leasing and financial leasing.

IFRS 16 introduces a criterion based on the right of use for an asset to distinguish leasing contracts from services contracts, identifying as discriminating factors: identification of the asset, the right to replace the same, the right to obtain substantially all economic benefits deriving from use of the asset and the right to control use of the asset underlying the contract. On the lessee's part, the new standard provides for recognition in the balance sheet of the assets and related financial liabilities for all leasing contracts with a duration of more than 12 months, unless the underlying asset is of little value; in the income statement depreciation and interest expense must be recognised separately. On the lessor's part the impact on the financial statements consists only of greater disclosure.

Application in the Iren Group took effect from 1 January 2019 although early adoption was permitted for entities that adopt IFRS 15. On the basis of the analyses carried out the contracts in which Iren plays the role of lessee refer mainly to property leasing and long-term hires of cars and other motor vehicles.

In accordance with the provisions of IFRS16.C3 the Iren Group decided to apply the standard to contracts previously classified as leases in accordance with IAS 17 *Leases* and IFRIC 4 *Determining Whether an Arrangement Contains a Lease*, instead of redetermining whether or not a contract is or contains a lease.

With reference to leases previously classified as operating leases, as practical expedients provided for in the transitory provisions of IFRS 16, the Iren Group opted to:

- Apply the standard retroactively accounting for the cumulative effect of initial application of IFRS16 at the date of initial application, without redetermining the comparative information, but instead recognising any cumulative effect as an adjustment of the opening balance of retained earnings (IFRS 16.C5 b) and C7);
- measure the leasing liability at the date of initial application at the present value of the remaining payments owed undiscounted using the Iren's marginal loan rate at the date of initial application (IFRS16.C8 a);
- measure the asset consisting of the right of use at an amount equal to the initial leasing liability, net of any prepaid expenses recognized in the statement of financial position immediately before the date of initial application (IFRS16.C8 b (ii))
- not recognize assets and liabilities related to leases the term of which ends with 12 months from the date of initial application. These leases are treated as short-term leases in accordance with IFRS16.C10 c.

The effects of first application of IFRS 16, taking into account the aforementioned practical expedients, entailed an increase in financial liabilities of 104,974 thousand euro and an equivalent increase in assets for property, plant and equipment. The impact on equity is therefore zero.

The weighted average of the marginal borrowing rate, applied to leasing liabilities recognised in the statement of financial position at 1 January 2019, is 3.20%. This rate is determined weighting the market returns of bond loans issued by Iren diversified according to the duration of the various leasing contracts.

Amendment to IFRS9 - Prepayment Features with Negative Compensation. The amendments, endorsed with Reg. (EU) 2018/498 of 22 March 2018, introduces an exception for particular financial assets that would feature contractual cash flows that are solely payments of principal and interest (IFRS 9, para. 4.1.2), but do not fulfil this condition owing only to the presence of a contractual clause providing for prepayment. In particular, the amendments state that financial assets with a contractual clause that allows (or imposes on) the issuer to repay a debt instrument or permits (or imposes on) the holder to repay a debt instrument to the issuer before maturity can be measured at amortised cost or at fair value through other comprehensive income, subordinately to assessment of the business model in which they are held, if the following conditions are met:

- the company acquires or issues the financial asset with a premium or a discount with respect to the nominal amount of the contract;
- the prepayment amount is substantially the nominal contractual amount and the contractual interest accrued (but not paid), which can include reasonable additional compensation for early termination of the contract; and
- when the entity initially recognises the financial asset, the fair value of the prepayment feature is insignificant.

IFRIC 23 – Uncertainty over Income Tax Treatments. The interpretation, issued in June 2017 and endorsed with Reg. (EU) 2018/1595 of 23 October 2018, clarifies how to apply the recognition and measurement requirements of IAS 12 in the case of uncertainty over tax treatments related to income taxes. If there are uncertainties on the application of the tax laws to a specific transaction or group of transactions, IFRIC 23 requires the company to assess whether it is probable that the tax authority will accept the choice made by the company on the tax treatment of the transaction: on the basis of this probability, the company must recognise in its financial statements an amount of taxes that it may pay or defer with respect to what is included in its income tax filings.

Amendments to IAS 28 – Long-term Interests in Associates and Joint Ventures. The amendment, issued in October 2017 and endorsed with Reg. (EU) 2019/237 of 8 February 2019, clarifies that an entity must apply the provisions of IFRS 9 to any other long-term interest that substantially represents a further component of the equity investment in the associate or joint venture, to which the equity method is not applied (e.g. privileged shares, loans and non-trade receivables). Any losses recognised on the basis of the equity method, in excess with respect to the equity investment of the entity in ordinary shares of the associate or joint venture, are attributed to the other components of the equity investment in inverse order with respect to their degree of subordination (that is, liquidation priority) after applying IFRS 9.

Annual improvements to IFRSs 2015-2017 cycle. Issued in December 2017 and endorsed with Reg. (EU) 2019/412 of 14 March 2019, the document contains formal amendments and clarifications to already existing standards. We can note in particular the following amendments:

- *IFRS 3 - Business Combinations.* The amendment specifies that a joint operator, which acquires control over a jointly-controlled activity that represents a business, must remeasure previously held interests in the jointly-controlled business at fair value at the acquisition date.
- *IFRS 11 – Joint Arrangements.* The amendment clarifies that when an entity that has an interest in a jointly-controlled activity that represents a business (under the terms of IFRS 3) without exercising joint control, acquires joint control, the entity does not have to remeasure previously held interests in that business.

IAS 23 – Borrowing Costs. The amendment establishes that the capitalisation rate applied in order to determine the amount of borrowing costs capitalised must correspond to the weighted average of interest rates related to *all* loans outstanding during the period, other than those obtained specifically for the purpose of acquiring an asset. Therefore the part of specific borrowing remains outstanding, after the

related “qualifying asset” is ready for its intended use or sale, must be included in the amount of funds that an entity borrows generally.

ACCOUNTING STANDARDS, AMENDMENTS AND INTERPRETATIONS NOT YET ENDORSED BY THE EUROPEAN UNION

Endorsement by the relevant bodies of the European Union is currently in progress for the following updates and amendments to the IFRSs (already approved by the IASB):

Amendments to IFRS 3 - Business Combinations. The amendment involved the definition of business, to be understood as an integrated set of activities that it is possible to conduct and manage for the purpose of providing goods and services to customers, generating investment income (such as dividends or interest) or generating other income from ordinary activities. This clarification makes it possible to distinguish whether an acquisition refers to a business or a group of assets: only in the first case goodwill can be recognised. The new definition of business must be applied to acquisitions made starting from 1 January 2020.

Definition of Material - Amendments to IAS 1 and IAS 8. The amendment, issued on 31 October 2018, has the purpose of clarifying better the definition of “material”, providing indications useful for identifying all the relevant information to be included in the financial statements and making uniform the application of the concept of materiality in the body of the International Accounting Standards. The amendment will be applicable, after endorsement, for annual reporting periods beginning on or after 1 January 2020.

As regards the new standards applicable starting from financial year 2020 or subsequent years, assessments for their correct application and analyses of the presumable impacts on future financial statements are in progress.

USE OF ESTIMATES

In order to prepare the condensed interim report in compliance with the IFRSs, estimates and related assumptions are based on previous experience and other factors, which are deemed reasonable and were adopted to define the carrying amount of assets and liabilities to which they refer. The later results that derive from occurrence of the events could differ from these estimates. Estimates have been used to recognise the accrual of some sales revenue, provisions for credit risks, risks for inventory obsolescence, depreciation, amortisation and impairment losses on assets, employee benefits, to determine the fair value of derivatives and of some financial assets available for sale, current and deferred taxes and other provisions for risks. These estimates and assumptions are regularly revised. Any changes deriving from the revision of accounting estimates are recognised in the period in which they are revised, if the revision refers only to the period under evaluation. Should the revision involve both current and future periods, the variation is recognised in both the year in which the revision occurs and in the related future periods.

It should also be noted that certain complex valuation processes, such as the determination of any impairment losses on non-current assets, are generally carried out in full only on preparing the annual financial statements, when all the information that may be needed is available, except in cases when there is evidence of impairment that requires an immediate measurement of any losses.

In accordance with IAS 36, during the first half of 2019 the Group checked the non-existence of specific impairment triggers with particular reference to goodwill; in addition no impairment indicators emerged in relation to equity investments and assets.

In the same way, the actuarial valuations necessary to determine employee benefit funds are normally carried out on the occasion of preparing the annual financial statements.

SEASONALITY

We can also note that the Iren Group's results for the period reflect the seasonality characteristic of the sectors in which it operates. These are influenced above all by the weather trends, and consequently cannot be extrapolated for the entire year.

RESTATEMENT OF AMOUNTS AT 30 JUNE 2018

In April 2018 the Group acquired control over the ACAM Group and RECOS S.p.A.. For these acquisitions the definitive fair value of the identifiable assets acquired, and the identifiable liabilities assumed, was determined at the end of financial year 2018. Therefore, in the condensed consolidated interim report at 30 June 2018 it had been recognised provisionally, as permitted by IFRS 3.

With completion of all the measurements at fair value required by IFRS 3, the value of certain identifiable assets acquired and of certain identifiable liabilities assumed recognised in the condensed consolidated interim report at 30 June 2018 was updated to reflect the better knowledge gained in the meantime.

On the basis of the provisions of IFRS 3, the amounts of fair value were updated with effect from the acquisition date and, therefore, all the changes were made on the statement of financial position of the Companies acquired at that date. The resulting balances in the condensed consolidated interim report at 30 June 2018 were restated to take the new values into account.

In detail, the changes that occurred in the fair values of the identifiable assets acquired and the identifiable liabilities assumed, previously recognised, determined on the Income Statement for the first half of 2018 the following adjustments:

| | thousands of euro | | |
|---|---------------------------------|-------------------------------|--------------------------------|
| | First half 2018 Published | Effect of IFRS3 accounting | First half 2018 Restated |
| Depreciation and amortisation | (168,972) | (265) | (169,237) |
| OPERATING PROFIT (EBIT) | 315,285 | (265) | 315,020 |
| Value adjustments on equity investments | 2,061 | (2,390) | (329) |
| Profit (loss) before tax | 287,524 | (2,655) | 284,869 |
| Income tax expense | (88,314) | 75 | (88,239) |
| Net profit (loss) for the period | 199,210 | (2,580) | 196,630 |
| attributable to: | | | |
| - Profit (loss) for the period attributable to shareholders | 187,152 | (2,502) | 184,650 |
| - Profit (loss) for the period attributable to minorities | 12,058 | (78) | 11,980 |

In detail, the changes that occurred in the fair values of the identifiable assets acquired and the identifiable liabilities assumed, previously recognised, determined on the representation of cash flows for the first half of 2018 the following adjustments:

| | thousands of euro | | |
|---|---------------------------------|-------------------------------|--------------------------------|
| | First half 2018 Published | Effect of IFRS3 accounting | First half 2018 Restated |
| Profit (loss) for the period | 199,210 | (2,580) | 196,630 |
| Adjustments: | | | |
| Income tax expense for the period | 88,314 | (75) | 88,239 |
| Amortisation of intangible assets and depreciation of property, plant and equipment | 168,972 | 265 | 169,237 |
| Net impairment losses (reversals of impairment losses) on assets | (651) | 2,390 | 1,739 |
| Operating cash flow | 402,382 | - | 402,382 |
| Cash flows for the period | (57,648) | - | (57,648) |

II. CONSOLIDATION PRINCIPLES

The consolidation scope includes subsidiaries, joint ventures and associates.

Subsidiaries

Entities controlled by the Group are considered subsidiaries, as defined by IFRS 10 - *Consolidated Financial Statements*. Control exists when the Parent Company has at the same time:

- decision-making power over the investee, that is the power to direct the relevant activities of the investee, that is activities that have a significant influence on the results of the said investee;
- the right to variable (positive or negative) returns from its involvement with the entity;
- the ability to use its decision-making power to determine the amount of the returns coming from its involvement with the entity.

The financial statements of the subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases.

Equity and portion of profit/loss attributable to non-controlling interests are identified separately in the consolidated statement of financial position and income statement.

Subsidiaries are consolidated on a line-by-line basis intra-group balances, transactions, unrealised income and expenses are eliminated in full.

We can note also that: a) all changes in the equity interest that do not constitute a loss of control are treated as *equity transactions* and therefore have a contra entry in equity; b) when a parent company transfers control to one of its investees, but continues all the same to hold an interest in the company, it measures the equity investment retained in the financial statements at *fair value* and recognises any gains or losses deriving from loss of control in the income statement.

Joint ventures

These are companies over whose activity the Group has joint control, in virtue of contractual agreements. Joint control, as defined by IFRS 11 – *Joint Arrangements*, is the “contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control”.

With reference to entities jointly owned by mixed public and private ventures, given the objective possibility for the public shareholder to influence the company not only by means of *governance* agreements, but also because of its nature of public entity, the existence of joint control is judged on the basis of contractual agreements, assessing the actual possibility for the private partner to jointly control strategic decisions regarding the joint venture.

Joint arrangements are divided into 2 types:

- a Joint Venture (JV) is an arrangement whereby the parties have rights to the net assets of the arrangement. Joint ventures are measured using the equity method;
- a Joint Operation (JO) is an arrangement whereby the parties are not limited exclusively to participating in the company’s net profit or loss, but have rights to its assets and obligations for its liabilities. In this case the assets/revenues on which the joint operator exercises such rights and the liabilities/costs of which the joint operator assumes the obligations are fully consolidated.

Associates (accounted for using the equity method)

An associate is a company over which the Group has significant influence, but not control or joint control over its financial and operating policies. The consolidated financial statements include the Group’s share of the associates’ profit or loss recognised using the equity method from the date that significant influence commences until the date that significant influence ceases. If the Group’s share of losses of an associate equals or exceeds the carrying amount of its interest in the associate, the carrying amount is reduced to nil and recognition of further losses is not detected, except to the extent that the Group is obliged to respond.

Transactions eliminated on consolidation

Intra-group balances and significant transactions and any unrealised gains and losses arising from intra-group transactions are all eliminated in preparing the consolidated financial statements. Unrealised gains and losses arising from transactions with jointly controlled entities are eliminated to the extent of the Group's interest in the entity. The related tax effect is calculated for all consolidation adjustments.

III. CONSOLIDATION SCOPE

The consolidation scope includes the companies directly or indirectly controlled by the Parent Company, plus joint ventures and associates.

Parent Company:

Iren S.p.A.

Companies consolidated on a line-by-line basis

The four companies responsible for the single business lines and their direct and indirect subsidiaries are consolidated on a line-by-line basis.

- 1) Iren Ambiente and its subsidiaries:
 - ACAM Ambiente
 - Amiat V and the subsidiary:
 - AMIAT
 - Bonifica Autocisterne
 - CMT
 - Montequerce
 - ReCos
 - San Germano
 - TRM
- 2) Iren Energia and its subsidiaries:
 - Iren Rinnovabili and its subsidiary:
 - Studio Alfa and the subsidiary
 - Coin Consultech
 - Maira and its subsidiary:
 - Formaira
- 3) Iren Mercato and its subsidiaries:
 - Salerno Energia Vendite
 - Spezia Energy Trading
- 4) IRETI and its subsidiaries:
 - ACAM Acque
 - ASM Vercelli and the subsidiary:
 - ATENA Trading
 - Busseto Servizi
 - Consorzio GPO
 - Iren Laboratori
 - Iren Acqua and the subsidiaries:
 - Iren Acqua Tigullio
 - Immobiliare delle Fabbriche

During the first half of 2019 the mergers by incorporation into Iren Ambiente S.p.A. of the subsidiary R.E.I. S.r.l. and into Iren Energia S.p.A. of the subsidiaries Greensource S.p.A., Enia Solaris S.r.l. and Varsi Fotovoltaico S.r.l. took effect.

Although they had an effect on the Group's structure, these operations did not entail changes in the consolidation scope, and they occurred as part of the Group's "overall" corporate and organisational rationalisation Project, aimed at simplifying the equity investment structure and reducing the number of business Companies wholly held, directly or indirectly, by the Parent Company and at integrating/optimising the business processes/activities with uniform operating characteristics.

For details of the subsidiaries, joint ventures and associates please see the lists included in the Annexes.

CHANGES IN FULL CONSOLIDATION SCOPE

The full consolidation scope changed during the period following the acquisitions, which occurred in January, of Busseto Servizi S.r.l., operating in the gas distribution sector, of San Germano S.r.l. and CMT S.p.A., active in the waste cycle field, as well as the acquisition of a business unit related to the operation of plants of the waste management business.

Control over Busseto Servizi was obtained through the purchase by IRETI of 100% of the company's share capital for a price of 4,099 thousand euro. The positive difference between the price transferred and the fair value of the identifiable assets acquired and the identifiable liabilities assumed, determined provisionally at the acquisition date as permitted by IFRS 3 – Business Combinations, was recognised as goodwill for 1,641 thousand euro.

As regards the acquisition of San Germano and CMT, again in the context of what is permitted by IFRS 3 the positive difference between the price transferred, subject to adjustment, and the provisional fair value of the net assets acquired was recognised as goodwill of 2,352 thousand euro.

Finally, on 1 January 2019 the acquisition of a business unit related to the activity of managing waste processing plants located in the province of La Spezia, involving the subsidiary ReCos, came into effect; the positive difference between the acquisition price of the unit and the provisional fair value of the net assets acquired was recognised as goodwill of 9,039 thousand euro.

IV. GROUP FINANCIAL RISK MANAGEMENT

The management of business risks is an essential component of the Internal Control System of corporate governance in a listed company, and the Code of Conduct set forth by Borsa Italiana assigns specific responsibilities as regards this aspect.

A summary of the risk management and control methods is shown below with respect to financial instruments (liquidity risk, exchange rate risk, interest rate risk, credit risk) and commodity price risk related to fluctuations in the prices of energy commodities.

1. FINANCIAL RISKS

The Iren Group's business is exposed to various types of financial risks, including liquidity risk, currency risk and interest rate risk. As part of its Risk Management activities, the Group uses non-speculative hedging contracts to limit exchange rate risk and interest rate risk.

a) Liquidity risk

Liquidity risk is the risk that financial resources available to the company will be insufficient to cover financial and trade commitments in accordance with the agreed terms and deadlines. The procurement of financial resources was centralised in order to optimise their use. In particular, centralised management of cash flows in Iren makes it possible to allocate the funds available at the Group level according to the needs that from time to time arise among the individual Companies. Cash movements are recognised in intra-group accounts along with intra-group interest income and expense. A number of investees have an independent financial management structure in compliance with the guidelines provided by the Parent Company.

The financial position, both current and forecast, and the availability of adequate credit facilities are constantly monitored, and no critical points have emerged regarding the coverage of short-term financial commitments. At the end of the period short-term bank credit facilities used by the Parent Company totalled zero.

The nominal cash flows required to settle financial liabilities related to loans and bonds and the contractual conditions of the existing loans were substantially unchanged with respect to what was presented in the Notes to the Consolidated Financial Statements at 31 December 2018 in the paragraph "a) Liquidity risk" in Section "VI. Group financial risk management".

Iren has relations with the leading Italian and international banks, for the purpose of searching for the types of loans most suited to its needs, and the best market conditions.

Details of the activities performed in this area and of the individual transactions are shown in the chapter Financial Income and Expenses of the Directors' Report.

Financial debt at the end of the period is made up 33% of loans and 67% of bonds.

At 30 June 2019, 80% of the residual amount payable for loans was contractualised at a fixed interest rate and 20% at a floating rate.

With regard to the liquidity risk potentially deriving from contractual clauses allowing counterparties to withdraw financing should certain events occur (default and covenant risk), we can note that the clauses in Iren's loan agreements are being observed. In particular, for certain medium/long-term loan agreements Iren is committed to observing financial covenants (such as Debt/EBITDA, EBITDA/Financial expense ratios) with annual verification. Moreover, other covenants have been provided for. One is the Change of Control clause, which states that the Iren Group should be kept under direct and indirect control by Local Authorities. In addition, there are Negative Pledge clauses, under which the company undertakes not to give collateral beyond a specific limit, and the *Pari Passu* clause, which reserves an equal treatment to lending banks with respect to the treatment for other unsecured creditors. The medium/long-term loan agreements of certain companies which contribute to the Group's Net Financial Position, in particular the Project Finance contract with TRM, also envisage the observance of financial indices which have been satisfied.

b) Exchange rate risk

Except as indicated under the section on energy risk, the Iren Group is not significantly exposed to exchange rate risk.

c) Interest rate risk

The Iren Group is exposed to interest rate fluctuations especially with regard to the measurement of financial expenses related to indebtedness. The Iren Group's strategy is to limit exposure to the risk of interest rate volatility, maintaining at the same time a low cost of funding.

In a non-speculative view, the risks associated with the increase in interest rates are monitored and, if necessary, reduced or eliminated by swap and collar contracts with financial counterparties of high credit standing, for the sole purpose of hedging. At the end of the period, all the contracts entered into meet the requisite of limiting the exposure to the risk of oscillation of interest rates and, except for a few positions with insignificant impacts, they also meet the formal requirements for the application of hedge accounting. The total fair value of the aforementioned interest rate hedges was a negative 88,599 thousand euro at 30 June 2019.

The hedging contracts entered into, together with fixed-rate loans, hedge approximately 89% of gross financial debt against interest rate risk, in line with the Iren Group target of maintaining adequate protection against significant increases in the interest rate.

For a more complete understanding of the interest rate risks to which the Group is subject, stress testing is performed, annually, at 31 December, on the sensitivity of net financial expenses and evaluation components in derivatives contracts to changes in interest rates.

2. CREDIT RISK

The Group's credit risk is mainly related to trade receivables deriving from the sale of electricity, district heating, gas and the provision of energy, water and environmental services. The receivables are spread across a large number of counterparties, belonging to non-uniform customer categories (retail and business customers and public bodies); some exposures are of a high amount and are constantly monitored and, if necessary, covered by repayment plans. The Iren Group's Credit Management units devoted to credit recovery are responsible for this activity.

In carrying on its business, the Group is exposed to the risk that the receivables may not be honoured on maturity with a consequent increase in their age and in insolvency up to an increase in receivables subject to arrangement procedures or unenforceable. This risk reflects, among other factors, also the current economic and financial situation.

To limit exposure to credit risk, a number of tools have been activated. These include analysing the solvency of customers at the acquisition stage through careful assessment of their creditworthiness, transferring the receivables of discontinued and/or active customers to external credit recovery companies and introducing new recovery methods for managing legal disputes. In addition, methods of payment through digital channels are offered to Customers.

The receivable management policy and creditworthiness assessment tools, as well as monitoring and recovery activities differ in relation to the various categories of customers and types of service provided.

Credit risk is hedged, for some types of business customers, with opportune forms of first-demand bank or insurance guarantees issued by subjects of leading credit standing.

An interest-bearing guarantee deposit is paid for some types of services (water, natural gas, "protected customer" electricity sectors) in compliance with regulations governing these activities. This deposit is reimbursed if the customer uses payment by direct debit from a current account.

The payment terms generally applied to customers are related to the legislation or regulations in force or in line with the standards of the free market; in the event of non-payment, default interest is charged for the amount indicated in the contracts or by the legislation.

Provisions set aside for impairment of receivables reflect, carefully and in accordance with the current legislation, the effective credit risks and are determined on the basis of the extraction from databases of the amounts making up the receivable and, in general, assessing any changes in the said risk compared to the initial measurement and, in particular for trade receivables, estimating the related expected losses determined on a prospective basis, taking into due consideration the historical series.

The control of credit risks is also strengthened by the monitoring and reporting procedures, in order to identify promptly possible countermeasures.

In addition, on a quarterly basis, the Risk Management Department collects and integrates the main data regarding the evolution of the Group companies' trade receivables, in terms of type of customers, status of the contract, business chain and ageing band. Credit risk is assessed at the consolidated, Business Unit and company levels.

Some of the above assessments are carried out at intervals of less than three months or when there is a specific need.

With reference to credit concentration we can note the relations between the subsidiaries Iren Energia and AMIAT and the Municipality of Turin. For further details, see in particular Note 8 "Non-current financial assets" of the Notes to the statement of financial position.

3. ENERGY RISK

The Iren Group is exposed to price risk, on the energy commodities traded, these being electricity, natural gas, environmental emission certificates, etc., as both purchases and sales are impacted by fluctuations in the price of such commodities directly or through indexing formulae. Exposure to exchange rate risk, typical of oil-based commodities, is present, but is attenuated thanks to the development of the European organised markets that trade the gas commodity in the euro currency and no longer indexed to oil products. The Group's policy is oriented to a strategy of active management of the positions to stabilise the margin taking the opportunities offered by the markets; it is implemented by aligning the indexing of commodities purchased and sold, through vertical and horizontal use of the various business chains, and operating on the financial markets.

For this purpose, the Group carries out planning of the production of its plants and purchases and energy and natural gas sales, in relation to both volumes and price formulae.

The objective is to obtain sufficient stability in the margins through:

- for the electricity supply chain, the opportune balancing of internal production and energy from the futures market with respect to the demand coming from the Group's customers, with adequate recourse to the spot market;
- for the natural gas supply chain the priority of alignment of the indexing of the commodity in purchase and sale.

Besides the normal activity with physical contracts, Over the Counter (OTC) commodity derivative contracts (Commodity swaps on TTF, PSV and SNP indices) are in place to hedge the energy portfolio, for a total of 10.1 TWh. As regards activity on the EEX regulated platform, derivative operations on the SNP are in place for a total notional amount of 3.9 TWh. The Fair Value of these instruments at 30 June 2019 totalled a negative 60,156 thousand euro.

RECOGNITION OF DERIVATIVES

Derivatives are measured at fair value, determined on the basis of market values or, if unavailable, according to an internal measurement technique.

In order to recognise derivatives, it is necessary to distinguish between transactions that meet all of the IFRS 9 requirements in order to account for them in compliance with the hedge accounting rules and transactions that do not fulfil all of the aforesaid requirements.

Transactions recognised in compliance with hedge accounting rules

These transactions may include:

- fair value hedging transactions: the derivative and the hedged item are recognised at fair value in the statement of financial position and the change in their fair values is recognised directly in the income statement;

- cash flow hedging transactions: the derivative is recognised at fair value with a contra entry in a specific equity reserve for the effective component of the hedge and in the income statement for the ineffective component; when the hedged item arises, the amount suspended in equity is reversed to the income statement.

Classification in the income statement of the ineffective component and the deferred amount transferred from equity is based on the nature of the underlying instrument; in the case of commodity derivatives, this amount is accounted for in the gross operating profit (EBITDA), while in the case of interest rate risk hedges in financial income and expenses.

Transactions not recognised in compliance with hedge accounting rules

The derivative is recognised at fair value in the statement of financial position.

The change in the fair value of the derivative is recognised in the income statement and is classified based on the type of underlying instrument:

- in the case of commodity derivatives, in the gross operating profit (EBITDA); specifically, the realised component is recognised to adjust the income or expense to which it refers, while the portion determined from measuring the derivative at the end of the period is classified under other operating expenses or other income;
- in the case of interest rate risk hedges, in financial income or expenses.

As regards the measurement of the derivative in the statement of financial position items, the fair value of the derivative is recognised in long term financial assets and liabilities if the related underlying item is a medium/long term item. Conversely, the derivative is recognised in current financial assets and liabilities if the underlying item is settled within the reference period.

FAIR VALUE

In addition to the carrying amount, the fair value, along with the methods and major assumptions used to determine it, must be disclosed for every asset and liability class shown in the financial statements.

Fair value is determined as the sum of estimated future cash flows in relation to assets or liabilities, including the related financial income or expense discounted at year end. The present value of future flows is determined by applying the curve of forward interest rates at the reporting date.

In order to provide a disclosure as complete as possible, the corresponding figure from the previous year is also indicated.

| | 30.06.2019 | | 31.12.2018 | |
|-------------------------------------|--------------------|--------------------|--------------------|--------------------|
| | Carrying amount | Fair Value | Carrying amount | Fair Value |
| Assets for hedging derivatives | - | - | 311 | 311 |
| Bonds due at more than 12 months | (2,187,355) | (2,311,051) | (2,185,550) | (2,174,032) |
| Bonds due within 12 months | - | - | (89,069) | (91,779) |
| Loans - non-current portion | (687,060) | (686,218) | (743,902) | (709,996) |
| Loans - current portion | (88,405) | (70,415) | (274,604) | (285,723) |
| Liabilities for hedging derivatives | (88,599) | (88,599) | (75,276) | (75,276) |
| Total | (3,051,419) | (3,156,283) | (3,368,090) | (3,336,494) |

thousands of euro

The amounts related to assets and liabilities for hedging derivatives in the table refer exclusively to derivatives hedging interest rate risk.

As regards financial asset and liability classes which are not included in the table above, the carrying amount is equal to fair value.

FAIR VALUE HIERARCHY

The following table shows financial instruments recognised at fair value, based on the measurement technique used and the method of accounting for them. The various levels were defined as shown below:

- Level 1: Prices listed (not adjusted) on active markets for identical assets or liabilities;
- Level 2: Input data other than Level 1 listed prices which are observable for assets or liabilities, either directly (as in the case of prices), or indirectly (i.e. derived from prices);
- Level 3: Input data related to assets or liabilities which are not based on observable market data (unobservable data).

| | thousands of euro | | | |
|--|-------------------|------------------|--------------|------------------|
| 30.06.2019 | Level 1 | Level 2 | Level 3 | Total |
| Financial assets measured at fair value through other comprehensive income | | | | |
| Financial assets measured at fair value through profit or loss | | | 7,226 | 7,226 |
| Derivative financial assets in Cash Flow Hedge accounting | | 12 | | 12 |
| Derivative financial assets in Fair Value Hedge accounting | | 169 | | 169 |
| Derivative financial assets outside hedge accounting | | | | |
| Total assets | | 181 | 7,226 | 7,407 |
| Derivative financial liabilities in Cash Flow Hedge accounting | | (145,887) | | (145,887) |
| Derivative financial liabilities in Fair Value Hedge accounting | | (148) | | (148) |
| Derivative financial liabilities outside hedge accounting | | (2,902) | | (2,902) |
| Total liabilities | | (148,937) | | (148,937) |
| Grand total | | (148,756) | 7,226 | (141,530) |

| | thousands of euro | | | |
|--|-------------------|-----------------|--------------|-----------------|
| 31.12.2018 | Level 1 | Level 2 | Level 3 | Total |
| Financial assets measured at fair value through other comprehensive income | | | | |
| Financial assets measured at fair value through profit or loss | | | 7,223 | 7,223 |
| Derivative financial assets in Cash Flow Hedge accounting | | 636 | | 636 |
| Derivative financial assets in Fair Value Hedge accounting | | 1,156 | | 1,156 |
| Derivative financial assets outside hedge accounting | | | | |
| Total assets | | 1,792 | 7,223 | 9,015 |
| Derivative financial liabilities in Cash Flow Hedge accounting | | (91,477) | | (91,477) |
| Derivative financial liabilities in Fair Value Hedge accounting | | (108) | | (108) |
| Derivative financial liabilities outside hedge accounting | | (3,188) | | (3,188) |
| Total liabilities | | (94,773) | | (94,773) |
| Grand total | | (92,981) | 7,223 | (85,758) |

All the Group's hedging instruments have a fair value which can be classified at level 2. This level is measured through valuation techniques, that take, as a reference, parameters that can be observed on the market (e.g. interest rates, commodity prices) and are different from the price of the financial instrument, or in any case that do not require a significant adjustment based on data which cannot be observed on the market. We can also note that no transfers occurred amongst the various Levels of the fair value hierarchy.

CAPITAL MANAGEMENT

The capital management policies of the Board of Directors involves maintaining a high level of capital to uphold relations of trust with investors, creditors and the market, and also allowing future business development.

The Board of Directors monitors the return on capital and the level of dividends for distribution to shareholders, and aims to maintain a balance between achieving extra yield by recourse to indebtedness and the benefits and security offered by a solid equity position.

V. INFORMATION ON TRANSACTIONS WITH RELATED PARTIES

As indicated in the Directors' Report the information on financial and economic transactions with related parties is provided below.

Transactions with related-party Shareholder Municipalities and with FSU S.r.l.

We present, for the Group's subsidiaries, the main transactions directly carried out with the Shareholder Municipalities which have been classified as related parties (Municipality of Turin, Municipality of Reggio Emilia, Municipality of Parma, Municipality of Piacenza and Municipality of Genoa) in the territory of which Iren operates through the aforesaid Companies.

The Group, through Iren Rinnovabili (which took over from Iren Energia from 1 October 2018), manages services awarded by the Municipality of Turin, namely public street lighting and traffic light services, management of heating and electrical systems of buildings used as administrative offices or to provide services to the community. The services rendered by Iren Rinnovabili are governed by specific long-term agreements.

In this regard we can note that an onerous current account contract is in place between the City of Turin and Iren Rinnovabili for management of the past-due receivables related to the above activities.

Over the last three years some important work on plant regeneration and energy efficiency has been carried out. This has involved municipal street lighting systems and heating plants in numerous publicly-owned buildings.

Through AMIAT, the Group also provides the Municipality of Turin with environmental hygiene and snow clearing services, and performs post-operative management of the "Basse di Stura" landfill site in accordance with the Service Contract in being. In this regard we can note that an onerous current account contract is in place between the City of Turin and AMIAT for management of the past-due receivables related to the above activities.

The Iren Group, through Iren Mercato, supplies the Municipalities of Genoa, Reggio Emilia, Parma and Piacenza with electricity and the Municipality of Turin with heat, at the conditions normally applied to all other customers.

Iren Acqua and IRETI provide water services respectively to the Municipality of Genoa and to the Municipalities of Reggio Emilia, Parma and Piacenza, based on supply contracts similar to those signed with all other customers.

Iren Ambiente provides the Municipalities of Reggio Emilia, Parma and Piacenza with urban waste collection and disposal services on the basis of the conditions provided for in the existing agreements.

Please see in addition the "*Disclosure pursuant to Art. 5.8 lett. a) and 5.9 CONSOB Regulation - Transactions of major significance*", below, as regards the agreement reached on transactions between the Group Companies and the Municipality of Turin.

Iren S.p.A. provides Finanziaria Sviluppo Utilities S.r.l., a special purpose company through which the Municipality of Genoa holds its equity investment in Iren S.p.A., with a series of corporate services, in accordance with a specific contract that provides for remuneration in this regard.

Transactions with joint ventures and associates

Among the main transactions carried out by the Iren Group with joint ventures and associates, we can note:

- the supply to Asti Energia e Calore of goods and services for work on regenerating and increasing the energy efficiency of public lighting plants in the City of Asti;
- the loan granted to OLT Offshore LNG Toscana in relation to the Livorno regasification plant;

- the commercial supplies of electricity, natural gas and district heating to the company Global Service Parma;
- the sales of water and the work related to the integrated water service provided to AMTER;
- the waste disposal service, covering also special waste, provided by Iren Ambiente and TRM in favour of GAIA and SETA, operating in the field of the collection sector;
- the procurement of natural gas from Sinergie Italiane;
- the services, including back office, call centre, reading, printing, postal and shipment services, provided by So.Sel to the Group.

Transactions with other related parties

On the basis of the TRP Procedure, companies controlled, directly or indirectly, by one of the following Provincial Capitals have been identified as related parties: Parma, Piacenza, Reggio Emilia, Turin and Genoa. In particular we can note that in order to supply the integrated water service in the provinces of Parma, Piacenza and Reggio Emilia, the company IRETI, with the payment of an annual lease, uses the assets of the companies Parma Infrastrutture, Piacenza Infrastrutture and AGAC Infrastrutture, controlled by the Municipalities involved.

The remaining relations with the companies controlled by the above Municipalities are mainly of a commercial nature and regard services provided to all other customers.

Quantitative information on financial and economic transactions with related parties is provided in paragraph “XI. Annexes to the Condensed Consolidated Interim Report”, considered an integral part of these notes.

Lastly and as regards the Directors and Statutory Auditors of IREN, with the exception of payment of the emoluments envisaged for the performance of duties in the administrative or auditing bodies of the Parent Company or of other Group companies, we can report that there were no transactions.

If the related conditions are fulfilled, transactions that consist of assigning remunerations and economic benefits, in any form, to members of the administration and control bodies of IREN and Key Management Personnel of the IREN Group are also subject to the provisions of the TRP Procedure.

Disclosure pursuant to Art. 5.8 lett. a) and 5.9 CONSOB Regulation

At the meeting on 14 February 2019 (the work of which continued on 18 February 2019), the CTRP in office at the time expressed, unanimously, its favourable opinion with reference to the transaction, classified as “of minor importance”, regarding the presentation, in a temporary association with other entities, to the Municipality of Genoa of a Project Financing proposal for increasing the energy efficiency of the public lighting systems of the said Municipality.

We can note that, during the first half of 2019, the CTRP received periodic information on the status of performance of the transaction, classified as of major importance, regarding the signing of an Agreement between the Municipality of Turin, as one party, and IREN, as principal of its subsidiaries AMIAT, Iren Energia (which, as mentioned above, was replaced by Iren Rinnovabili) and Iren Mercato, as the other party, to govern the relationships in being among the parties – an operation on which the CTRP had expressed a favourable opinion and for which please see the Disclosure Document published on 29 March 2018 and the supplementary Disclosure Document published on 9 July 2018, both documents available on the website www.grupporen.it.

On 2 July 2019, after an enquiry carried out by the Company’s Remuneration and Appointments Committee, also in performing the duties pursuant to the TRP Procedure, the Board of Directors approved the economic-contractual conditions of the new temporary employment relationship determined between the Company and Mr Massimiliano Bianco and the acceptance of the same, as Chief Executive Officer and General Manager of the Company, the 2019-2021 Long-Term Monetary Incentive Plan approved on 27 November 2018.

VI. OTHER INFORMATION

CONSOB COMMUNICATION NO. DEM/6064293 of 28 July 2006

Significant non-recurring events and transactions

During the first half of 2019 the Iren Group was not affected by “non-recurring” events and did not carry out significant transactions identified as such on the basis of the definitions contained in the Communication. In particular, it was not affected by events which do not reoccur frequently in the normal performance of the business.

Positions or transactions deriving from atypical and/or unusual operations

We can specify that during the first half of 2019 the Group did not engage in any atypical and/or unusual operations, as defined in the Communication. Atypical and/or unusual operations are operations which owing to their significance/relevance, nature of the counterparties, subject of the transaction, the method by which the sales price is calculated and the timescale of the event (nearness to reporting date) may give rise to doubts with regard to the correctness/completeness of the information given in the financial statements, conflict of interest and safeguarding of the company’s equity or protection of minority shareholders.

PUBLICATION OF THE FINANCIAL STATEMENTS

The Interim Report was approved for publication by Iren S.p.A.’s Board of Directors at its meeting of 31 July 2019.

VII. NOTES TO THE STATEMENT OF FINANCIAL POSITION

Unless otherwise stated, the following tables are in thousands of euro.

ASSETS

NON-CURRENT ASSETS

NOTE 1_PROPERTY, PLANT AND EQUIPMENT

The breakdown of property, plant and equipment, divided between historical cost, accumulated depreciation and carrying amount, is shown in the following table:

| | thousands of euro | | | | | |
|--|--------------------------|---|-------------------------------------|--------------------------|---|-------------------------------------|
| | Cost at 30/06/2019 | Accumulated depreciation at 30/06/2019 | Carrying amount at 30/06/2019 | Cost at 31/12/2018 | Accumulated depreciation at 31/12/2018 | Carrying amount at 31/12/2018 |
| Land | 116,978 | (3,423) | 113,555 | 110,732 | (2,648) | 108,084 |
| - of which for right of use | 6,307 | (304) | 6,003 | - | - | - |
| Buildings | 689,948 | (235,606) | 454,342 | 584,467 | (214,588) | 369,879 |
| - of which for right of use | 95,438 | (4,375) | 91,063 | - | - | - |
| Plant and machinery | 5,236,824 | (2,464,645) | 2,772,179 | 5,184,276 | (2,365,057) | 2,819,219 |
| - of which for right of use | - | - | - | - | - | - |
| Industrial and commercial equipment | 129,748 | (100,994) | 28,754 | 122,471 | (94,856) | 27,615 |
| - of which for right of use | 458 | (174) | 284 | - | - | - |
| Other assets | 243,478 | (164,335) | 79,143 | 184,384 | (128,292) | 56,092 |
| - of which for right of use | 11,796 | (1,795) | 10,001 | - | - | - |
| Assets under construction and payments on account | 98,135 | - | 98,135 | 91,069 | - | 91,069 |
| Total | 6,515,111 | (2,969,003) | 3,546,108 | 6,277,399 | (2,805,441) | 3,471,958 |
| - of which for right of use | 113,999 | (6,648) | 107,351 | - | - | - |

The variation in the historical cost of property, plant and equipment is shown in the following table:

| | thousands of euro | | | | | | |
|--|--------------------|---------------|----------------|--------------------------------------|-------------------|------------------|--------------------|
| | Opening balance | Increases | Decreases | Changes in consolidation scope | Reclassifications | Other changes | Closing balance |
| Land | 110,732 | 270 | (463) | 444 | - | 5,995 | 116,978 |
| - of which for right of use | - | 270 | (84) | 126 | - | 5,995 | 6,307 |
| Buildings | 584,467 | 1,505 | (561) | 15,654 | 934 | 87,949 | 689,948 |
| - of which for right of use | - | 217 | - | 2,174 | 5,098 | 87,949 | 95,438 |
| Plant and machinery | 5,184,276 | 30,914 | (1,816) | 3,825 | 19,625 | - | 5,236,824 |
| - of which for right of use | - | - | - | - | - | - | - |
| Industrial and commercial equipment | 122,471 | 2,949 | (1,761) | 5,581 | 105 | 403 | 129,748 |
| - of which for right of use | - | 55 | - | - | - | 403 | 458 |
| Other assets | 184,384 | 15,628 | (4,558) | 37,099 | 298 | 10,627 | 243,478 |
| - of which for right of use | - | 420 | (2,155) | 2,904 | - | 10,627 | 11,796 |
| Assets under construction and payments on account | 91,069 | 27,363 | (9) | 56 | (20,344) | - | 98,135 |
| Total | 6,277,399 | 78,629 | (9,168) | 62,659 | 618 | 104,974 | 6,515,111 |

The variation in accumulated depreciation is shown in the following table:

thousands of euro

| | Opening balance | Amortisation for the period | Decreases | Changes in consolidation scope | Reclassifications | Closing balance |
|--|--------------------|-----------------------------|--------------|--------------------------------|-------------------|--------------------|
| Accumulated depreciation, land | (2,648) | (775) | - | - | - | (3,423) |
| - of which for right of use | - | (304) | - | - | - | (304) |
| Accumulated depreciation, buildings | (214,588) | (14,077) | 428 | (7,297) | (72) | (235,606) |
| - of which for right of use | - | (3,395) | - | - | (980) | (4,375) |
| Accumulated depreciation, plant and machinery | (2,365,057) | (98,596) | 669 | (1,661) | - | (2,464,645) |
| - of which for right of use | - | - | - | - | - | - |
| Accumulated depreciation, ind. and comm. equipment | (94,856) | (3,482) | 1,743 | (4,399) | - | (100,994) |
| - of which for right of use | - | (174) | - | - | - | (174) |
| Accumulated depreciation of other assets | (128,292) | (10,645) | 2,830 | (28,228) | - | (164,335) |
| - of which for right of use | - | (1,809) | 14 | - | - | (1,795) |
| Total | (2,805,441) | (127,575) | 5,670 | (41,585) | (72) | (2,969,003) |

Starting from 1 January 2019 the accounting standard IFRS 16 – Leases is applied. This introduces a criterion based on control (right of use) of an assets to distinguish leasing contracts from contracts for services. On the lessee’s part, the new standard provides for recognition in the balance sheet of the assets and related financial liabilities for all leasing contracts with a duration of more than 12 months, unless the underlying asset is of little value. The contracts in which the Iren Group plays the role of lessee refer mainly to property leasing and long-term hires of cars and other motor vehicles. The effects of first application of IFRS 16, taking into account the practical expedients described in the paragraph “Accounting standards, amendments and interpretations applied from 1 January 2019”, entailed an increase in financial liabilities of 104,974 thousand euro and an equivalent increase in assets for property, plant and equipment, which is recognised in the column Other Changes.

The column Changes in consolidation scope refers to the balances acquired during the period relating to the companies Busseto Servizi Srl, San Germano and CMT.

The balance of the reclassification column refers mainly to net transfers from intangible assets to property, plant and equipment of items that do not come within the scope of application of IFRIC 12.

Land and buildings

This item primarily includes industrial buildings connected with Group plants and related land.

Plant and machinery

This item refers to costs for electricity production plants, heat production plants, electricity distribution networks, gas distribution networks, heat distribution networks and plants related to waste disposal services not operated under concessions as per IFRIC 12. Freely transferable assets are included in the assets of electricity production plants.

Industrial and commercial equipment

This item includes costs related to the purchase of supplementary or auxiliary assets for plants and machinery, such as rubbish bins, laboratory and other equipment.

Other assets

This item refers to costs for the purchase of office furniture and machines and vehicles.

Assets under construction and payments on account

The item assets under construction includes all expenses incurred for investments in progress and not yet in operation.

Increases

The increases in the period, of 78,629 thousand euro, mainly refer to:

- development of the district-heating network and new connections to the network, including heat exchange substations, meters and remote reading appliances, for 11,952 thousand euro;
- investments in the electricity distribution grids, including primary substations, of 17,398 thousand euro;
- investments in the gas networks not in a concession arrangement in accordance with the provisions of IFRIC 12 of 7,527 thousand euro;
- investments in thermoelectric and hydroelectric plants of 8,761 thousand euro;
- investments for collection and disposal in the waste management segment of 21,308 thousand euro.

Depreciation and amortisation

Ordinary depreciation for the first half of 2019, totalling 127,575 thousand euro, was calculated on the basis of the rates indicated in the 2018 annual financial statements and considered representative of the residual useful life of the assets.

It is worth noting that as regards large shunt concessions for hydroelectric purposes (“hydroelectric concessions”), the outgoing operator is paid an amount, calculated as follows:

- as regards “wet assets” (collection, regulation works, penstocks, drain pipes included in the business branch of the outgoing operator, the “transferable assets”), based on the revalued historical cost, net of public capital grants, revalued, received by the operator for the construction of these assets, less normal wear;
- as regards “dry assets” (property, plant and equipment included in the business unit of the outgoing operator and not included in the “wet assets” category, the so-called non-transferable assets), based on the reconstruction value, less normal wear.

As a result of this legislation, starting from 2012, for transferable assets related to expired hydroelectric concessions with a residual carrying amount lower than the estimated amount payable to the outgoing operator (calculated based on the above provisions), the related depreciation has been suspended.

Lastly, no assets are pledged against liabilities.

NOTE 2_INVESTMENT PROPERTY

The following table highlights the breakdown of the item:

thousands of euro

| | Cost at 30/06/2019 | Accumulated depreciation at 30/06/2019 | Carrying amount at 30/06/2019 | Cost at 31/12/2018 | Accumulated depreciation at 31/12/2018 | Carrying amount at 31/12/2018 |
|--------------|--------------------|--|-------------------------------|--------------------|--|-------------------------------|
| Land | 2,081 | - | 2,081 | 2,859 | - | 2,859 |
| Buildings | 13,663 | (3,345) | 10,318 | 13,133 | (3,172) | 9,961 |
| Total | 15,744 | (3,345) | 12,399 | 15,992 | (3,172) | 12,820 |

During the first half of 2019, in virtue of the purchase for 2,460 thousand euro of the residual portion, the Iren Group became the owner of the entire property complex located at Piazza Raggi in Genoa.

The results of the appraisal carried out by an independent expert aimed at determining the purchase price of this property portion, commensurate with the total value of the property area, entailed a downward adjustment of the cost of 2,708 thousand euro to the carrying amount of the portion already held by the Group.

NOTE 3_ INTANGIBLE ASSETS WITH A FINITE USEFUL LIFE

Intangible assets, broken down between historical cost and accumulated depreciation, are shown in the following table:

thousands of euro

| | Cost at 30/06/2019 | Accumulated depreciation at 30/06/2019 | Carrying amount at 30/06/2019 | Cost at 31/12/2018 | Accumulated depreciation at 31/12/2018 | Carrying amount at 31/12/2018 |
|---|--------------------|--|-------------------------------|--------------------|--|-------------------------------|
| Development costs | 4,641 | (1,512) | 3,129 | 3,755 | (1,176) | 2,579 |
| Industrial patents and intellectual property use rights | 109,547 | (69,000) | 40,547 | 106,274 | (60,678) | 45,596 |
| Concessions, licences, trademarks and similar rights | 2,751,377 | (1,095,482) | 1,655,895 | 2,692,758 | (1,057,536) | 1,635,222 |
| Other intangible assets | 291,033 | (124,014) | 167,019 | 285,801 | (112,249) | 173,552 |
| Investments in progress and payments on account | 183,543 | - | 183,543 | 153,037 | - | 153,037 |
| Total | 3,340,141 | (1,290,008) | 2,050,133 | 3,241,625 | (1,231,639) | 2,009,986 |

The variation in the historical cost of intangible assets is shown in the following table:

thousands of euro

| | Opening balance | Increases | Decreases | Changes in consolidation scope | Reclassifications | Closing balance |
|---|------------------|----------------|-----------------|--------------------------------|-------------------|------------------|
| Development costs | 3,755 | 241 | - | - | 645 | 4,641 |
| Industrial patents and intellectual property use rights | 106,274 | 1,933 | (48) | 93 | 1,295 | 109,547 |
| Concessions, licences, trademarks and similar rights | 2,692,758 | 39,915 | (9,060) | 402 | 27,362 | 2,751,377 |
| Other intangible assets | 285,801 | 44,185 | (39,650) | 688 | 9 | 291,033 |
| Investments in progress and payments on account | 153,037 | 60,438 | (3) | - | (29,929) | 183,543 |
| Total | 3,241,625 | 146,712 | (48,761) | 1,183 | (618) | 3,340,141 |

Changes in accumulated amortisation of intangible assets are shown in the following table:

| | thousands of euro | | | | | |
|---|--------------------|-----------------------------|--------------|--------------------------------|-------------------|--------------------|
| | Opening balance | Amortisation for the period | Decreases | Changes in consolidation scope | Reclassifications | Closing balance |
| Accumulated amortisation of development costs | (1,176) | (336) | - | - | - | (1,512) |
| Accumulated amortisation of ind. patents and intellectual property use rights | (60,678) | (8,314) | 9 | (89) | 72 | (69,000) |
| Accumulated amortisation of licences, trademarks and similar rights | (1,057,536) | (44,026) | 6,459 | (379) | - | (1,095,482) |
| Accumulated amortisation of other intangible assets | (112,249) | (11,086) | 6 | (685) | - | (124,014) |
| Total | (1,231,639) | (63,762) | 6,474 | (1,153) | 72 | (1,290,008) |

The column Changes in consolidation scope refers to the balances acquired during the period relating to the companies Busseto Servizi Srl, San Germano and CMT.

The balance of the reclassification column refers mainly to net transfers from intangible assets to property, plant and equipment of items that do not come within the scope of application of IFRIC 12.

Industrial patents and intellectual property use rights

This item mainly relates to the total costs borne for the purchase and internal production of corporate software and the acquisition of rights for the exclusive use of technical studies on the statistical trend of network losses, amortised over between three and five years.

Concessions, licences, trademarks and similar rights

This item is primarily composed of:

- assets recognised in application of IFRIC 12, related to the operating business segments of natural gas distribution, the Integrated Water Service and, marginally, district heating;
- the right of use of pipeline networks by virtue of the concessions granted by the Municipality of Genoa and other neighbouring municipalities;
- the right of use of penstocks, not owned, of hydroelectric plants;
- concessions for the operation and management of photovoltaic systems.

Other intangible assets

This item is primarily composed of:

- rights to use telecommunication infrastructure owned by third parties;
- emission trading quotas held for internal needs;
- costs for the commercial development of customers;
- measurement of the customer list made on allocation of the price for acquiring control over Atena Trading, Salerno Energia Vendite, Studio Alfa and Spezia Energy Trading.

Investments in progress and payments on account

This item mainly consists of investments for concession services governed by IFRIC 12, in addition to software licences and related implementation costs.

NOTE 4_GOODWILL

Goodwill, of 162,745 thousand euro (149,713 thousand at 31 December 2018), during the first half of 2019 showed an increase of 13,022 thousand euro following acquisitions (business combinations) carried out by the Group during the period, in which while awaiting the measurement to be carried out under the terms of IFRS 3 - Business Combinations, the positive difference, determined provisionally, between the purchase price and the provisional fair value, at the acquisition date, of the identifiable assets acquired and the

identifiable liabilities assumed, was allocated to goodwill. In particular, reference is made to the acquisition of control over the company San Germano S.r.l. and its full subsidiary CMT S.p.A. (2,352 thousand euro), of Busseto Servizi (1,641 thousand euro) and of a business unit related to the activity of managing waste treatment plants located in the province of La Spezia, which involved the subsidiary ReCos (9,039 thousand euro).

Goodwill is considered an intangible asset with an indefinite useful life. Therefore, it is not amortised, but annually tested for impairment to check whether the carrying amount is still recoverable. Since goodwill does not generate independent cash flows and cannot be sold on its own, the impairment test on the goodwill recognised in the financial statements is carried out making reference to the Cash Generating Unit to which the same can be allocated. The Cash Generating Units are identified with the single Business Units and correspond to the business segments presented in the foreword to these notes. They are based on the Group's management structure and internal reporting system.

This method allows for a more effective disclosure of goodwill and future investment plans and supplies a homogeneous analysis of information communicated to the market.

The table below shows the allocation of the item goodwill to the Cash Generating Units.

| | thousands of euro |
|------------------|-------------------|
| | 30/06/2019 |
| Waste Management | 15,459 |
| Energy | 4,686 |
| Market | 32,460 |
| Networks | 110,140 |
| Total | 162,745 |

Waste Management Cash Generating Unit

The value of goodwill, of 15,459 thousand euro, refers mainly:

- to acquisition of control over the business unit related to the activity of managing waste treatment plants located in the province of La Spezia which occurred in January 2019 (9,039 thousand euro);
- to acquisition of control over ACAM Ambiente (ACAM group) in April 2018 (2,572 thousand euro);
- to acquisition of control over San Germano S.r.l. and its full subsidiary CMT S.p.A. in January 2019 (2,352 thousand euro);
- to acquisition of control over a business unit from SMC S.p.A. consisting of a 48.85% stake in the share capital of Società Ecologica Territorio Ambiente (SETA) S.p.A. and the activities of closure and post-closure management of the Chivasso 0 landfill site in October 2018 (894 thousand euro);
- to acquisition of control over ReCos S.p.A. in April 2018 (597 thousand euro).

Energy Cash Generating Unit

The value of goodwill, of 4,686 thousand euro, refers mainly:

- to acquisition of control over Iren Rinnovabili at the end of December 2017 following the expiry of the governance agreements entered into with the other shareholder CCPL S.p.A. which made Iren Rinnovabili a jointly-controlled company. The goodwill of 3,544 thousand euro was recognised as the surplus between the fair value of the price paid for acquisition of control and the fair value of the identifiable assets acquired and the identifiable liabilities assumed at the acquisition date.
- the Heat Service Management business unit transferred in 2017 from the Market Cash Generating Unit to the Energy Cash Generating Unit (948 thousand euro).

Market Cash Generating Unit

The value of goodwill, of 32,460 thousand euro, refers mainly:

- to the equity interest in Enia Energia (now merged into Iren Mercato), acquired from Sat Finanziaria S.p.A. and Edison in 2008, for an amount of 16,761 thousand euro;

- to the business unit acquired from ENEL in 2000 and referred to electricity users of the city of Parma, for an amount of 7,421 thousand euro;
- to acquisition in 2012 of the business unit from ERG Power & Gas related to the marketing and sale of electricity for an amount of 3,401 thousand euro;
- to acquisition of control over Spezia Energy Trading S.r.l. in September 2018 (2,694 thousand euro).

Networks Cash Generating Unit

The value of goodwill, of 110,140 thousand euro, refers mainly:

- to acquisition in 2000 from ENEL of the business unit related to the distribution and sale of electrical energy to non-eligible customers in the Municipality of Turin, in which the positive difference between the purchase cost and the fair value of acquired and identifiable assets and liabilities was recognised as goodwill for 64,608 thousand euro;
- to acquisition in 2005 of control over Acqua Italia S.p.A. (now Iren Acqua S.p.A.), where the positive difference between the purchase cost and the fair value of acquired and identifiable assets and liabilities was recognised as goodwill of 23,202 thousand euro;
- to acquisition of control over ACAM Acque (ACAM group) in April 2018 (15,442 thousand euro);
- to the business unit acquired from ENEL in 2000 and referred to electricity users of the city of Parma, for an amount of 3,023 thousand euro;
- to acquisition of control over Busseto Servizi in April 2019 (1,641 thousand euro).

As stated above in paragraph I “Content and structure of the condensed consolidated interim report” of the present document, in the first half of 2019, in accordance with IAS 36, the Group checked the non-existence of specific impairment triggers with particular reference to goodwill.

NOTE 5_INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

Equity investments accounted for using the equity method are shareholdings in companies in which the Group has joint control or exercises a significant influence. We must specify that measurement at equity is carried out on the basis of the latest available financial statements (consolidated if prepared) of the investees.

The Group companies measured using the equity method at 30 June 2019 are shown in an annex.

Changes in the six-month period are shown in the tables below.

Equity investments in joint ventures

| | 31/12/2018 | Valuations at equity (profit/loss) | 30/06/2019 |
|----------------|---------------|---------------------------------------|---------------|
| Acque Potabili | 10,714 | (497) | 10,217 |
| TOTAL | 10,714 | (497) | 10,217 |

thousands of euro

The company Acque Potabili, during the financial year 2018, disposed the last water service management concession that it held and, at 30 June 2019, had no direct operating activities.

Equity investments in associates

thousands of euro

| | 31/12/2018 | Increases | Valuations at equity (profit/loss) | Distribution of dividends | Changes with effect on equity | 30/06/2019 |
|--------------------------------|----------------|------------|------------------------------------|---------------------------|-------------------------------|----------------|
| A2A Alfa | - | - | - | - | - | - |
| Acos | 10,928 | - | 827 | - | - | 11,755 |
| Acos Energia | 957 | - | 288 | - | - | 1,245 |
| Acquaenna | 3,219 | 100 | 534 | - | (132) | 3,721 |
| Aguas de San Pedro | 10,561 | - | 1,665 | (433) | (705) | 11,088 |
| Aiga | - | - | - | - | - | - |
| Amat | - | - | - | - | - | - |
| Amter | 913 | - | 136 | (68) | - | 981 |
| Asa | 34,184 | - | 316 | - | 1,914 | 36,414 |
| Astea | 23,424 | - | 852 | (319) | 17 | 23,974 |
| Asti Energia Calore | 127 | - | 39 | - | - | 166 |
| BI Energia | 1,009 | - | (35) | - | - | 974 |
| Campo Base | 9 | - | - | - | - | 9 |
| CSP Innovazione nelle ICT | 109 | - | 2 | - | - | 111 |
| Domus Acqua | 55 | - | (6) | - | - | 49 |
| Fingas | - | - | - | - | - | - |
| Fratello Sole Energie Solidali | 300 | - | (8) | - | - | 292 |
| G.A.I.A. | 14,705 | - | 360 | (342) | - | 14,723 |
| Global Service Parma | 6 | - | - | - | - | 6 |
| Iniziative Ambientali | 459 | - | 6 | - | - | 465 |
| Mondo Acqua | 649 | - | 15 | - | - | 664 |
| Nord Ovest Servizi | 4,375 | - | - | - | - | 4,375 |
| Rio Riazzone | 146 | - | - | - | - | 146 |
| SETA | 10,800 | - | - | - | - | 10,800 |
| Sinergie Italiane | - | - | - | - | - | - |
| Sosel | 1,056 | - | 11 | - | - | 1,067 |
| STU Reggiane | 3,890 | - | 356 | - | 1,159 | 5,405 |
| Tirana Acque | - | - | - | - | - | - |
| Valle Dora Energia | 1,999 | - | (109) | (121) | - | 1,769 |
| TOTAL | 123,880 | 100 | 5,249 | (1,283) | 2,253 | 130,199 |

As regards the equity investment in the company Acquaenna we can note that during the period the stake was increased from 46% to 48.5% with an investment of 100,000 euro.

As regards the equity investment in Sinergie Italiane, the carrying amount of which is zero, the provisions for risks set aside to cover the risk of losses related to this investee amounted to 10,000 thousand euro.

The amounts related to the column Changes with effect on Shareholders' Equity are due mainly to payments made as capital grants by the Municipality of Reggio Emilia in the investee STU Reggiane, to the exchange difference (Aguas de San Pedro) and to changes in the cash flow hedging reserves and in those connected to actuarial gains (losses) on employee benefits.

NOTE 6_OTHER EQUITY INVESTMENTS

This item relates to equity investments in companies over which the Group has neither control, nor joint control, nor significant influence. These equity investments are measured at fair value but, as the most recent information available for measuring the fair value is insufficient and the cost represents the best estimate of the fair value, they are carried at cost.

The list of other Group investments at 30 June 2019 is shown in an annex.

Changes in the six-month period are shown in the tables below:

| | 31/12/2018 | Increases | 30/06/2019 |
|------------------------------|--------------|-----------|--------------|
| A2A Scarl | 7 | | 7 |
| Acque Potabili Siciliane | - | | - |
| Aeroporto di Reggio Emilia | 2 | | 2 |
| Alpen 2.0 | 100 | | 100 |
| ASQ Network | 6 | | 6 |
| Aurora srl | 3 | | 3 |
| Autostrade Centro Padane | 1,248 | | 1,248 |
| BT Enia | 2,110 | | 2,110 |
| C.R.P.A. | 52 | | 52 |
| CIDIU | 2,305 | | 2,305 |
| Consorzio C.I.M 4.0 | - | 3 | 3 |
| Consorzio Leap | 10 | | 10 |
| Consorzio Topix | 5 | | 5 |
| Credito cooperativo reggiano | 5 | | 5 |
| Emilbanca BCC | 1 | | 1 |
| Environment Park | 1,243 | | 1,243 |
| Fondo Core MultiUtilities | 100 | | 100 |
| RE Innovazione | 12 | | 12 |
| SDB Società di biotecnologie | 10 | | 10 |
| Stadio di Albaro | - | | - |
| T.I.C.A.S.S. | 4 | | 4 |
| TOTAL | 7,223 | 3 | 7,226 |

NOTE 7_NON-CURRENT TRADE RECEIVABLES

The item amounted to 87,122 thousand euro (69,068 thousand at 31 December 2018) and refers mainly to:

- receivables of the integrated water service for tariff adjustments and for lower volumes supplied with respect to the constraint of revenue due to the operator; the current tariff method provides generally (unless the tariff growth limit is reached) for their recovery through fees after two years (43,133 thousand euro at 30 June 2019, 43,323 thousand at 31 December 2018);
- receivables of the electricity transmission, distribution, and metering services deriving from the rules issued in AEEGSI Resolution no. 654/2015 on the subject of tariff regulation for the period 2016-2023 which entailed the recognition of revenue from electricity transport and of the related receivables (14,452 thousand euro at 30 June 2019, 13,801 thousand at 31 December 2018);
- receivables from the Municipality of Turin for the environmental hygiene service and for technological renewal and increased efficiency of heating systems in a number of municipal buildings (25,617 thousand euro at 30 June 2019, 10,286 thousand 31 December 2018). For more information on the overall receivable position of the Iren Group in relation to the Municipality of Turin please see Note 8 "Non-current financial assets".

NOTE 8_NON-CURRENT FINANCIAL ASSETS

The item of 145,154 thousand euro (147,867 thousand euro at 31 December 2018) is made up of financial receivables, the measurement of derivatives with positive fair value and securities other than equity investments. These are detailed in the following table

| | thousands of euro | |
|---|-------------------|----------------|
| | 30/06/2019 | 31/12/2018 |
| Non-current financial receivables from associates | 10,199 | 9,882 |
| Non-current financial receivables from related-party shareholders | 122,092 | 127,447 |
| Non-current financial receivables from others | 12,833 | 10,187 |
| Fair value of derivatives – non-current portion | 9 | 315 |
| Securities other than equity investments | 21 | 36 |
| Total | 145,154 | 147,867 |

Non-current financial receivables from associates

These refer to receivables from the companies Acos (5,266 thousand euro), Acquaenna (3,832 thousand euro), Asti Energia Calore (1,080 thousand euro) and Campo Base (60 thousand euro). Also present is a receivable of 429,000 euro from the associate AIGA which was completely written off.

Non-current financial receivables from related-party shareholders

Receivables from related-party shareholders, of 122,092 thousand euro (127,447 thousand at 31 December 2018), regard receivables from the Municipality of Turin and relate to:

- the medium/long-term portion of receivables related to the current account which governs transactions between the subsidiaries AMIAT S.p.A., Iren Rinnovabili S.p.A. and the Municipality of Turin (104,029 thousand euro);
- application of the financial asset model provided for in IFRIC 12 to the efficiency project ("Turin LED") associated with the Public Lighting service performed under concession by Iren Rinnovabili S.p.A. in the city of Turin, for the long-term portion (18,063 thousand euro). Recognition of the financial asset is a result of maturation of the current unconditional right to receive the cash flows contractually recognised, which occurred with completion of the installation of the related LED devices.

The accounting treatment of the aforementioned current account agreement determines a reduction of trade receivables presented in the statement of cash flows as a generation of operating cash flows, and a corresponding increase in financial receivables, presented as a cash absorption in cash flows from financing activities.

These receivables form part of an overall position, totalling 205,791 thousand euro, and are divided among various accounting items according to their classification by type and maturity: Non-current trade receivables (Note 7), Non-current financial assets (Note 8), Trade receivables (Note 12) and Current financial assets (Note 15), as shown in the table presented below.

Receivables were divided by the directors between current portion and non-current portion on the basis of a forecast of their collection times determined also following the results of the agreement signed by the Municipality of Turin and the Iren Group during financial year 2018.

| | thousands of euro | |
|---|-------------------|----------------|
| | 30/06/2019 | 31/12/2018 |
| Non-current trade receivables | 25,617 | 10,286 |
| Trade receivables for services on invoices issued | 22,258 | 59,841 |
| Trade receivables for services on invoices to be issued | 28,388 | 6,938 |
| Trade receivables for electricity and other supplies | 4,578 | 2,086 |
| Provisions for impairment of trade receivables | (69) | (62) |
| Total current trade receivables | 55,155 | 68,803 |
| Non-current portion of financial receivables in current account | 100,132 | 108,726 |
| Non-current portion of financial receivables for interest | 3,897 | 658 |
| Non-current portion of financial receivables for services in concession | 18,063 | 18,063 |
| Total non-current financial receivables | 122,092 | 127,447 |
| Current portion of financial receivables in current account | - | 18,353 |
| Current portion of financial receivables for interest | 2,927 | 4,403 |
| Total current financial receivables | 2,927 | 22,756 |
| Total | 205,791 | 229,292 |

Non-current financial receivables from others

Non-current financial receivables from others includes the long-term portion of the receivable deriving from the sale of the business unit made up of the telecommunication (TLC) network present in Emilia Romagna during 2016 and the business unit related to management of the integrated water service of two municipalities of the Catchment Area of the Verona ATO during 2019.

Fair value of derivatives – non-current portion

The fair value of derivatives refers to instruments in the portfolio for hedging the risk of changes in commodity prices.

Securities other than equity investments

These amounted to 21,000 euro (36,000 at 31 December 2018) and refer to securities given as collateral which are measured at amortised cost because the business model provides for the financial asset being held to collect the related cash flows which correspond to solely payment of principal and interest.

NOTE 9_OTHER NON-CURRENT ASSETS

These are detailed in the following table:

| | thousands of euro | |
|---|-------------------|---------------|
| | 30/06/2019 | 31/12/2018 |
| Guarantee deposits | 10,015 | 9,580 |
| Tax assets after 12 months | 13,985 | 12,995 |
| Other non-current assets | 13,790 | 15,770 |
| Non-current accrued income and prepaid expenses | 3,921 | 4,785 |
| Total | 41,711 | 43,130 |

Receivables for guarantee deposits refer mainly to amounts paid by Iren Mercato to the investee Sinergie Italiane in relation to the natural gas supply contract signed by the parties.

Tax assets after 12 months are related mainly to credits accrued following the application for deduction of IRAP from the IRES taxable base (art. 2, paragraph 1-*quater* of Italian Law Decree no. 201 of 6 December 2011).

Other non-current assets include receivables from CSEA (10,116 thousand euro) as repayment for the remodulation of the variable fee covering the costs of procuring natural gas incurred by the operators to serve final customers under protection in thermal years 2010-2011 and 2011-2012.

Prepayments mainly include the long-term prepaid portion, relating to energy service contracts signed by the subsidiary Iren Rinnovabili S.p.A..

NOTE 10_DEFERRED TAX ASSETS

These totalled 382,212 thousand euro (360,298 thousand at 31 December 2018) and refer to deferred tax assets deriving from revenue elements deductible in future years. They also include the tax effect on adjustments made on IFRS first-time adoption.

CURRENT ASSETS

NOTE 11_INVENTORIES

Inventories, measured at weighted average cost, primarily comprise natural gas and consumables intended for maintenance and construction of the Group plants.

Construction Contracts refers mainly to activities performed for the Municipality of Turin.

The summary of changes occurring over the period is as follows:

| | thousands of euro | |
|--------------------------------|-------------------|-------------------|
| | 30/06/2019 | 31/12/2018 |
| Raw materials | 68,896 | 78,397 |
| Inventory write-down provision | (4,500) | (5,390) |
| Net | 64,396 | 73,007 |
| Construction Contracts | 783 | 792 |
| Total | 65,179 | 73,799 |

The change in inventories of raw materials in the period was essentially due to the reduction in gas storage. The inventory write-down provision was set aside and is used to take into consideration inventories that are technically obsolete and slow-moving.

At 30 June 2019 no inventories were pledged against liabilities.

NOTE 12_TRADE RECEIVABLES

These are detailed in the following table:

| | thousands of euro | |
|--|-------------------|-------------------|
| | 30/06/2019 | 31/12/2018 |
| Receivables from customers | 992,939 | 1,061,471 |
| Provisions for impairment of receivables | (191,411) | (190,152) |
| Net receivables from customers | 801,528 | 871,319 |
| Trade receivables from joint ventures | 463 | 932 |
| Trade receivables from associates | 15,526 | 12,810 |
| Trade receivables from related-party shareholders | 90,302 | 90,452 |
| Trade receivables from other related parties | 5,051 | 8,385 |
| Provisions for impairment of receivables from related-party shareholders | (69) | (62) |
| Total | 912,801 | 983,836 |

We can note that at 30 June 2019 factoring transactions had been completed with derecognition of the receivables for a total of 22,851 thousand euro (19,683 thousand at 31 December 2018).

Trade receivables, gross of provisions for impairment of receivables, are broken down by maturity as follows:

| | thousands of euro | |
|----------------------------------|-------------------|-------------------|
| | 30/06/2019 | 31/12/2018 |
| Not past due | 770,098 | 877,269 |
| Past due from 0 to 3 months | 128,160 | 90,415 |
| Past due from 3 to 12 months | 70,877 | 68,708 |
| Past due for more than 12 months | 135,146 | 137,658 |
| Total | 1,104,281 | 1,174,050 |

Receivables not past due include receivables for invoices to be issued of 489,407 thousand euro (481,081 thousand at 31 December 2018) which include the estimate of revenue earned for services supplied between the date of the last reading of effective consumption and the year-end date.

Receivables from customers

These mainly relate to receivables due for electricity, gas, water and heat supplies, environmental services and sundry services. The net balance takes into account the provisions for impairment of receivables, illustrated below, of 191,411 thousand euro (190,152 thousand at 31 December 2018).

Receivables from joint ventures

This item includes receivables from the Group joint ventures, consolidated with the equity method. These relate to normal trade transactions performed at arm's length. For further details, please see the table of related-party transactions shown in the annex.

Receivables from associates

These relate to normal trade transactions performed at arm's length. For further details, please see the table of related-party transactions shown in the annex.

Receivables from related-party shareholders

Receivables from related-party shareholders refer to trading transactions performed at arm's length with territorial authorities classified as related parties (Municipalities of Genoa, Parma, Piacenza, Reggio Emilia

and Turin) and, marginally, with the company FSU. The balance takes into account provisions for impairment of receivables of 69 thousand euro (62 thousand at 31 December 2018). For further details, please see the table of related-party transactions shown in the annex.

Receivables from other related parties

These regard receivables from the companies controlled by the territorial body owners (Municipalities of Genoa, Parma, Piacenza, Reggio Emilia and Turin) and refer to normal commercial transactions carried out at arm's length.

Provisions for impairment of receivables

The provisions for impairment feature the movements shown in the following table:

| | thousands of euro | | | | | |
|--|-------------------|--------------------------------|--------------------------|-----------------|-------------------|----------------|
| | 31/12/2018 | Changes in consolidation scope | Provisions in the period | Decreases | Reclassifications | 30/06/2019 |
| Provisions for impairment of receivables | 190,152 | 1,911 | 16,845 | (17,490) | (7) | 191,411 |
| Provisions for impairment of receivables from related-party shareholders | 62 | - | - | - | 7 | 69 |
| Total | 190,214 | 1,911 | 16,845 | (17,490) | - | 191,480 |

The column Changes in consolidation scope refers to the balances acquired during the period relating to the companies San Germano, CMT and Busseto Servizi. The provisions in the period were set aside to adjust the amount of provisions for impairment of receivables to the amount of expected losses on the basis of the simplified model provided for in the standard IFRS 9, where "loss" means the present value of all future lost revenue, opportunely integrated to take into account future expectations ("forward looking information"). The item "decreases" refers to utilisations for losses on receivables.

NOTE 13_ CURRENT TAX ASSETS

These amounted to 7,209 thousand euro (11,445 thousand at 31 December 2018) and include receivables from the tax authority for IRES and IRAP.

NOTE 14_ OTHER RECEIVABLES AND OTHER CURRENT ASSETS

These are detailed in the following table:

| | thousands of euro | |
|---|-------------------|----------------|
| | 30/06/2019 | 31/12/2018 |
| Receivables for revenue tax/UTIF | 889 | 3,640 |
| VAT credit | 37,739 | 73,546 |
| Other tax assets | 16,763 | 17,977 |
| Tax assets due within 12 months | 55,391 | 95,163 |
| Receivables from Cassa Servizi Energetici e Ambientali (CSEA) | 75,495 | 49,965 |
| Receivables for former green certificate incentive | 36,939 | 46,558 |
| Advances to suppliers | 22,700 | 19,797 |
| Other current assets | 31,657 | 21,917 |
| Other current assets | 166,791 | 138,237 |
| Accruals and deferrals | 29,071 | 8,479 |
| Total | 251,253 | 241,879 |

We can note that at 30 June 2019 factoring transactions had been completed with derecognition of receivables for former green certificate incentive and energy efficiency certificates for a total of 19,115 thousand euro (46,077 thousand at 31 December 2018).

In terms of procedures, for financial year 2019, the payment of Group VAT involved the transfer to the parent Iren S.p.A. of all obligations regarding VAT settlements and periodic payments. The companies that take part in the Group settlement procedure, besides the Parent Company Iren S.p.A., are the following: Iren Energia, IRETI, Iren Mercato, Iren Ambiente, AMIAT, Iren Rinnovabili, Enia Solaris (incorporated into Iren Energia), Iren Acqua Tigullio, Iren Acqua, Greensource (incorporated into Iren Energia), Varsi Fotovoltaico (incorporated into Iren energia), Immobiliare delle Fabbriche, Iren Laboratori, Bonifica Autocisterne, REI (incorporated into Iren Ambiente), ASM Vercelli, Atena Trading, ACAM Ambiente, ACAM Acque, ReCos, Studio Alfa and Coin Consultech.

In relation to receivables from the Cassa Servizi Energetici e Ambientali (CSEA) a portion of the amounts shown may not be collectable within the next 12 months.

NOTE 15_ CURRENT FINANCIAL ASSETS

These are detailed in the following table:

| | thousands of euro | |
|---|-------------------|---------------|
| | 30/06/2019 | 31/12/2018 |
| Financial receivables from associates | 5,092 | 4,130 |
| Financial receivables from related-party shareholder Municipalities | 2,927 | 22,756 |
| Other financial receivables | 47,511 | 50,411 |
| Derivative receivables - current | 172 | 1,478 |
| Total | 55,702 | 78,775 |

All financial receivables recognised in this item are due within 12 months. The carrying amount of these receivables approximates their fair value as the impact of discounting is negligible.

Financial receivables from associates

The item refers mainly to loans to Acquaenna (1,491 thousand euro), BI Energia (739 thousand euro), STU Reggiane (487 thousand euro) and to the centralised treasury relationship with Valle Dora Energia (397 thousand euro). The remainder regards essentially receivables for dividends to be received.

For further details please see the schedule of related-party transactions shown in the annex.

Financial receivables from related-party shareholders

These regard receivables for interest from the Municipality of Turin in favour of the Group, and amounted to 2,927 thousand euro (22,756 thousand at 31 December 2018) and are related to relationships between the subsidiaries AMIAT S.p.A. and Iren Rinnovabili the Municipality of Turin.

For details of the overall receivable position of the Iren Group in relation to the Municipality of Turin please see Note 8 "Non-current financial assets".

Other financial receivables

These refer for 39,333 thousand euro to tied bank deposits of the subsidiary TRM S.p.A. deriving from the loan contract which specifies that amounts serving the instalment due, the costs regarding environmental offsets and extraordinary maintenance of the waste-to-energy plant are tied. The remainder refers to guarantee deposits paid to operate on the commodity futures markets, accrued income and prepaid expenses of a financial nature and sundry financial receivables.

Derivative receivables - current

These relate to the positive fair value of derivative contracts on commodities.

NOTE 16_CASH AND CASH EQUIVALENTS

The item "Cash and cash equivalents" is made up as follows:

| | thousands of euro | |
|----------------------------|-------------------|-------------------|
| | 30/06/2019 | 31/12/2018 |
| Bank and postal deposits | 143,459 | 369,153 |
| Cash and valuables in hand | 1,163 | 165 |
| Total | 144,622 | 369,318 |

Cash and cash equivalents are represented by existing liquidity on bank and postal deposits. The Group does not hold cash equivalents, intended as short-term and highly liquid investments that are readily convertible into known amounts of cash and subject to an insignificant risk of changes in value.

NOTE 17_ASSETS HELD FOR SALE

Assets held for sale are measured at the lower of their carrying amount and fair value less costs to sell. They amounted to 372,424 thousand euro (402,424 thousand at 31 December 2018). This item relates to:

- for 371,900 thousand euro (401,900 thousand at 31 December 2018) to the loan granted to the joint venture OLT Offshore LNG Toscana. Starting from 31 December 2018 the equity investment in OLT Offshore LNG Toscana and the related shareholder's loan were classified among assets held for sale, as an asset disposal group, because their carrying amount will be recovered mainly with a sale transaction instead of with their continuing use. During financial year 2018 the Board of Directors began work on a programme, still in progress, for the disposal of the assets, working to identify a buyer, and considers the sale highly probable. The value of the equity investment was written off during financial year 2018 because, on the basis of a fairness opinion prepared by independent experts, the fair value of the interest is believed to be zero.

As specifically indicated in IFRS 5, the financial receivable, although it is classified among assets held for sale, continues to be measured according to the rules of IFRS 9 and in particular at amortised cost since the company's business model provides for the financial asset being held to collect the cash flows exclusively related to principal and interest. The amount of the shareholder's loan decreased compared to 31 December 2018 following the repayments made by the investee.

- for 226 thousand euro (unchanged compared to 31 December 2018) to the net assets related to the concession, which expired on 31 March 2017, of the integrated water service of the Municipality of Saint Vincent (AO) for which the takeover by the new operator is being defined;
- for 140 thousand euro (unchanged compared to 31 December 2018), to the equity investment in Plurigas in liquidation. The equity investment was classified among assets held for sale because during 2014 the company ceased to operate;
- for 158 thousand euro (unchanged from 31 December 2018) to the associate Piana Ambiente.

In addition, assets held for sale include the equity investment in Fata Morgana, already completely written down in previous periods.

LIABILITIES

NOTE 18_EQUITY

Equity may be analysed as follows:

| | thousands of euro | |
|--|-------------------|------------------|
| | 30/06/2019 | 31/12/2018 |
| Share capital | 1,300,931 | 1,300,931 |
| Reserves and retained earnings (losses) | 738,815 | 642,396 |
| Net profit (loss) for the period | 150,638 | 242,116 |
| Total equity attributable to shareholders | 2,190,384 | 2,185,443 |
| Capital and reserves attributable to non-controlling interests | 334,501 | 345,807 |
| Profit/(loss) attributable to non-controlling interests | 13,598 | 31,121 |
| Total consolidated equity | 2,538,483 | 2,562,371 |

Share capital

The share capital, unchanged compared to 31 December 2018 amounts to 1,300,931,377 euro, which is fully paid-up and comprises 1,300,931,377 ordinary shares with a face value of 1 euro each.

On 5 April 2019 the Shareholders' Meeting of Iren S.p.A. Authorised the Board of Directors to carry out a purchase programme involving the Company's treasury shares aimed at purchasing a maximum number of shares of 26,000,000, such as, however, not to exceed 2% of the share capital. The programme was launched on 14 May and up to 30 June 3,567,507 shares were purchased for a total price of 7,959 thousand EURO recognised as a reduction of shareholders' equity in the item "Reserves and Profits (Losses) carried forward".

For further details on the operation, please see the disclosures in "Significant events of the period" in the Director's Report.

Reserves and retained earnings (losses)

The breakdown of this item is provided in the following table:

| | thousands of euro | |
|---|-------------------|----------------|
| | 30/06/2019 | 31/12/2018 |
| Treasury shares | (7,959) | - |
| Share premium reserve | 133,019 | 133,019 |
| Legal reserve | 64,642 | 58,346 |
| Cash flow hedging reserve | (46,658) | (17,353) |
| Other reserves and retained earnings (losses) | 595,771 | 468,384 |
| Total reserves | 738,815 | 642,396 |

Hedging reserve

Changes in the fair value of effective hedging derivatives are recognised with a contra-entry directly in equity under the cash-flow hedging reserve. These contracts were entered in to hedge exposure to the risk of interest rate fluctuations on floating rate loans and to the risk of price changes in electricity and gas purchase contracts.

Other reserves and retained earnings (losses)

These mainly comprise the surplus generated from the merger of AMGA into AEM Torino and the later merger of Enia into Irìde, retained earnings and losses, and the reserve comprising actuarial gains and losses resulting from the measurement of post-employment benefits to employees.

During the first half of 2019 they changed owing mainly to the carrying forward of the profits of financial year 2018 not distributed (+126,825 thousand euro).

For further details, reference should be made to the statement of changes in equity.

NON-CURRENT LIABILITIES

NOTE 19_NON-CURRENT FINANCIAL LIABILITIES

These amounted to a total of 3,065,955 thousand euro (3,013,303 thousand at 31 December 2018):

Bonds

These amounted to 2,187,355 thousand euro (2,185,550 thousand at 31 December 2018). The item consisted entirely of positions of the Parent Company referred to Private Placement and Public Bond issues, accounted for at amortised cost, against a total nominal amount in issue at 30 June 2019 of 2,209,340 thousand euro (2,209,340 thousand also at 31 December 2018).

- Private Placement: Notes maturity 2020, coupon 4.37%, issue amount 260 million euro, in issue at 30 June 2019 for 167,870 thousand euro following repurchases (Tender Offers) carried out in 2015, 2016 and 2017 (amount at amortised cost 167,806 thousand).
- Public Bonds: a) Notes maturity 2021, coupon 3%, issue amount 300 million euro, in issue at 30 June 2019 for 181,836 thousand euro following the repurchase operations described above (amount at amortised cost 181,053 thousand); b) Notes maturity 2022, coupon 2.75%, issue amount 500 million euro, in issue at 30 June 2019 for 359,634 thousand euro following the tender offers of 2016 and 2017 (amount at amortised cost 357,684 thousand); c) Notes maturity 2024, coupon 0.875%, amount 500 million euro, in issue for the same amount (amount at amortised cost 495,171 thousand euro); d) Green Bonds maturity 2027, coupon 1.5%, amount 500 million euro, in issue for the same amount (amount at amortised cost 491,465 thousand euro); e) Green Bonds maturity 2025, coupon 1.95%, amount 500 million euro, in issue for the same amount (amount at amortised cost 494,175 thousand euro).

The bond loans were subscribed by Italian and foreign institutional investors and are listed on the Irish Stock Exchange; the Public Bonds were given a Fitch rating.

The change in the total carrying amount compared to 31 December 2018 was due to the recognition of financial expenses accruing calculated on the basis of the amortised cost method according to the IAS/IFRS standards.

Non-current bank loans

Medium/long term loans relate exclusively to the non-current portion of loans/credit lines due at more than 12 months, granted by banks and amounted to 687,060 thousand euro (743,902 thousand at 31 December 2018).

Medium/long term loans can be analysed by interest rate type (with respective indications of minimum and maximum rates applied) and maturity date, as shown in the following table:

| | fixed rate | floating rate | TOTAL |
|--|----------------|----------------|----------------|
| min/max interest rate | 2.79% - 5.151% | 0.00% - 0.529% | |
| maturity | 2020-2027 | 2020-2032 | |
| 1.1.2020 – 31.12.2020 | 18,966 | 43,226 | 62,192 |
| 1.1.2021 – 31.12.2021 | 19,580 | 51,158 | 70,738 |
| 1.1.2022 – 31.12.2022 | 19,954 | 82,936 | 102,890 |
| 1.1.2023 – 31.12.2023 | 20,551 | 50,186 | 70,736 |
| subsequent | 67,237 | 313,266 | 380,504 |
| Total payables beyond 12 months at 30/06/2019 | 146,288 | 540,772 | 687,060 |
| Total payables beyond 12 months at 31/12/2018 | 157,093 | 586,809 | 743,902 |

All loans are denominated in euro.

The changes in medium/long term loans during the year are summarised below:

| | 31/12/2018 Total payables beyond 12 months | Increases | Changes in consolidation scope | Repayments | Change to amortised cost | 30/06/2019 Total payables beyond 12 months |
|-----------------|---|------------|--------------------------------------|-----------------|--------------------------------|--|
| - fixed rate | 157,093 | 750 | 0 | (11,592) | 37 | 146,288 |
| - floating-rate | 586,809 | 0 | 0 | (46,125) | 88 | 540,772 |
| TOTAL | 743,902 | 750 | 0 | (57,717) | 125 | 687,060 |

Total medium/long term payables at 30 June 2019 decreased overall compared to 31 December 2018, as a result of:

- disbursement of a loan to the consolidated company Studio Alfa of 750 thousand euro;
- a decrease of 57,717 thousand euro owing to the classification as short-term of the portion of loans due within the next 12 months;
- an increase of 125 thousand euro due to recognition of the loans at amortised cost.

Other financial liabilities

These amounted to 191,540 thousand euro (31 December 2018: 83,851 thousand), and refer:

- for 94,879 thousand euro (1,867 thousand at 31 December 2018) to payables for leasing contracts, up following the application of IFRS 16;
- for 89,314 thousand euro (75,500 thousand at 31 December 2018) to the fair value of derivative contracts entered into as hedges against the interest rate fluctuation risk on floating rate loans and commodity prices (please see the paragraph "Group Financial Risk Management" for comments);
- for 5,364 thousand euro (6,228 thousand at 31 December 2018) to the long-term portion of the debt resulting from the operation to acquire the right to use 25% of the total capacity of the TLC network sold to BT Enia;
- for 1,983 thousand euro (31 December 2018: 256 thousand) to sundry financial payables.

NOTE 20_EMPLOYEE BENEFITS

In the first half of 2019 post-employment benefits underwent the following changes:

| | thousands of euro |
|--------------------------------|-------------------|
| Amount at 31/12/2018 | 108,109 |
| Current service costs | 819 |
| Financial expense | 1,088 |
| Disbursements of the period | (6,911) |
| Changes in consolidation scope | 2,318 |
| Amount at 30/06/2019 | 105,423 |

The line changes in consolidation scope refers to the balances acquired during the period related to the companies San Germano, CMT and Busseto Servizi and to the business unit related to the activity of managing waste treatment plants located in the province of La Spezia which involved the subsidiary ReCos.

Liabilities for employee benefits consist of:

Post-employment benefits

In the first half of 2019 post-employment benefits underwent the following changes:

| | thousands of euro |
|--------------------------------|-------------------|
| Amount at 31/12/2018 | 91,534 |
| Current service costs | 732 |
| Financial expense | 954 |
| Disbursements of the period | (3,266) |
| Changes in consolidation scope | 2,318 |
| Amount at 30/06/2019 | 92,272 |

Other benefits

The composition and changes over the period of defined benefit plans, other than the post-employment benefits described above, are presented below.

Additional months' salaries (long-service bonus)

| | thousands of euro |
|-----------------------------|-------------------|
| Amount at 31/12/2018 | 2,544 |
| Current service costs | 45 |
| Financial expense | 25 |
| Amount at 30/06/2019 | 2,614 |

Loyalty bonus

| | thousands of euro |
|-----------------------------|-------------------|
| Amount at 31/12/2018 | 3,270 |
| Current service costs | 42 |
| Financial expense | 20 |
| Disbursements of the period | (66) |
| Amount at 30/06/2019 | 3,266 |

Tariff discounts

| | thousands of euro |
|-----------------------------|-------------------|
| Amount at 31/12/2018 | 4,828 |
| Financial expense | 55 |
| Disbursements of the period | (180) |
| Amount at 30/06/2019 | 4,703 |

The tariff discounts include benefits related to the supply of natural gas for domestic use. Following the signing of specific agreements with the trade unions, the “Energy discount” awarded up to 30 September 2017 to employees in service was converted into other forms of employee benefits. The “Energy discount” awarded up to 30 September 2017 to retired employees was revoked unilaterally and replaced with lump sums included in provisions for former employee benefits.

Premungas Provisions

| | thousands of euro |
|-----------------------------|-------------------|
| Amount at 31/12/2018 | 2,643 |
| Financial expense | 34 |
| Disbursements of the period | (250) |
| Amount at 30/06/2019 | 2,427 |

Provisions for ex-employee benefits

The provisions amounted to 141 thousand euro (3,290 thousand at 31 December 2018) and contain the lump-sum amounts that will be paid to retired employees to replace the energy discount no longer paid starting from 1 October 2017.

Actuarial assumptions

The assessment of the liabilities presented above was made by independent actuaries on the occasion of preparing the 2018 year-end consolidated financial statements.

The liability relating to the defined benefit plans is calculated in accordance with actuarial assumptions and is recognised on an accrual basis in line with the service necessary to obtain benefits.

For the purpose of defining the present value of the obligations, the future service is estimated based on assumptions related to changes in both the total number of employees and employee remuneration. Future service represents the amount that would be liquidated to each employee in the event of continuing working activity with another company, retirement, death, resignation or a request for an advance.

The following factors were considered in deciding which discount rate to adopt in the measurement approach provided by IAS 19:

- stock market of reference;
- the date the measurement is made;
- expected average term of the liabilities.

The average residual term of liabilities was obtained as the weighted average residual term of liabilities related to all benefits and all Group companies.

The economic and financial assumptions adopted in the calculations are the following:

| | |
|--|---------------|
| Annual discount rate | 1.20% - 1.60% |
| Annual inflation rate | 1.50% |
| Annual increase rate of post-employment benefits | 2.50% |

NOTE 21_ PROVISIONS FOR RISKS AND CHARGES

These are detailed in the following table, and refer both to the current and non-current portions:

| | | thousands of euro | | | | | |
|--|-----------------|--------------------------------|---------------|-----------------|-----------------------------------|-----------------|-----------------|
| | Opening balance | Changes in consolidation scope | Increases | Decreases | (Income) expense from discounting | Closing balance | Current portion |
| Provisions for restoration of third-party assets | 165,529 | - | 5,832 | (451) | (533) | 170,377 | 2,072 |
| “Post mortem” provisions | 45,152 | - | - | (1,484) | 666 | 44,334 | 7,667 |
| Provisions for dismantling and reclaiming sites | 29,932 | - | 4,217 | (26) | 559 | 34,682 | 214 |
| Provisions for early retirement expenses | 42,602 | - | - | (10,862) | - | 31,740 | 676 |
| Provisions for risks on equity investments | 10,065 | - | - | - | - | 10,065 | 10,065 |
| Other provisions for risks and charges | 236,104 | 6,041 | 39,887 | (53,082) | - | 228,950 | 69,202 |
| Total | 529,384 | 6,041 | 49,936 | (65,905) | 692 | 520,148 | 89,896 |

If the effect of discounting the value of money is significant, the provisions are discounted using a pre-tax discount rate which, on the basis of the time period envisaged for the future cash flows, does not exceed 3.76%.

The column Changes in consolidation scope refers to the balances acquired during the period relating to the companies San Germano and CMT.

Provisions for restoration of third-party assets

These provisions refer to liabilities which, if the water service concessions for the Parma, Piacenza and Reggio Emilia ATOs are reassigned to third parties, will be deducted from the fee to be paid to the Group by the incoming operator. These liabilities are estimated according to the depreciation of the pool of assets and equipment relating to the aforementioned integrated water cycle which, as a result of the spin-offs completed in 2005 by the three companies AGAC, Tesa and AMPS (later merged into Enìa), were transferred to the financial statements of three full publicly-held companies as envisaged in Art. 113, paragraph 13 of the Consolidated Law on Local Entities. This pool of assets is used to perform the water service against the payment of a rental fee and with a contractual commitment to set aside the aforementioned provisions. The provisions for the restoration of transferable works represent an estimate of the expense necessary to return assets in concession in the hydroelectric sector in perfect working order.

“Post mortem” provisions

These are mainly provisions for future expense for environmental recovery of controlled landfill plants which also include costs for post-operating management until the sites involved have been completely converted to green areas. These provisions are supported by specific appraisals periodically updated in order to adjust the existing provisions to the estimate of the future costs to be incurred. The decreases refer in particular to the utilisation of the provision to cover costs incurred in the post-operating phase until the mineralisation of waste and the conversion of landfills into green areas are completed.

Provisions for dismantling and reclaiming sites

The “Provision for dismantling and reclaiming sites” represents the estimate of expense associated with the future dismantling of the Group’s waste-to-energy plants and the estimate of charges to be incurred in relation to the future reclamation of former AMNU land on which an incinerator was located.

Provisions for early retirement expenses

The provisions refer to expenses associated with early retirement of some employees and arises from the results of agreements between the Iren Group and the Trade Unions that provide for retirement incentives for some employees, on a voluntary basis among the Group’s personnel who are potentially involved.

The operation must be seen in the wider context of professional and demographic rebalancing of the Iren Group's personnel, in view of a plan to recruit young people.

The incentive, completely chargeable to the Iren Group (in application of Art. 4 of Italian Law 92/2012), will enable the personnel in possession of the legal requisites to retire in advance with respect to the date of eligibility, making up in part for the delay in terminating the employment determined after the reform of the pensions system.

The provisions represent the estimated payment to the employees involved in the Plan, through the Pensions Agency, of a benefit of an amount equal to the pension that would be payable on the basis of the current rules (isopension) with payment to the Pensions Agency of the contribution until the minimum requirements for retirement are reached (in accordance with the aforementioned Law 92/2012), and a sum, for each of the employees involved, as a one-off payment as an incentive.

Provisions for risks on equity investments

This item mainly refers to risks relating to future charges deriving from management of the investee Sinergie Italiane.

Other provisions for risks and charges

The amount of the provisions mainly refers to the probable risk of higher charges for the construction of plants which are completed or yet to be finished, the estimated IMU/ICI tax to be paid based on the value of plant systems as envisaged in Art. 1-*quinquies* of Italian Law Decree no. 44 of 31 March 2005, the estimate of charges related to the return of emissions quotas, charges for environmental offsets, risks of a regulatory nature and probable charges for various disputes.

The current portion referring to the provisions described above was presented under "provisions, current portion" (Note 28).

NOTE 22_DEFERRED TAX LIABILITIES

Deferred tax liabilities of 218,410 thousand euro (211,553 thousand at 31 December 2018) are due to the temporary difference between the carrying amount and tax value of assets and liabilities recognised in the financial statements.

Deferred taxation is calculated with reference to the expected tax rates applicable at the time the differences will reverse.

NOTE 23_OTHER PAYABLES AND OTHER NON-CURRENT LIABILITIES

This item can be broken down as follows:

| | thousands of euro | |
|--|-------------------|-------------------|
| | 30/06/2019 | 31/12/2018 |
| Payables after 12 months | 50,280 | 49,872 |
| Deferred income for grants related to plants – non current | 423,179 | 421,090 |
| Non-current accrued expenses and deferred income | 3,028 | 3,816 |
| Total | 476,487 | 474,778 |

The item "Payables after 12 months" refers to advances paid by users to guarantee water supply, to amounts related to previous years to be paid for the redundancy fund (CIG), for the extraordinary redundancy fund (CIGS) and for mobility and to tax payables for substitutive taxes to be paid at more than 12 months from the reporting date.

Deferred income for grants related to plants includes the amounts related to connection contributions for an amount of 192,919 thousand euro and to the Fo.N.I. (Fondo Nuovi Investimenti - New Investments Fund) component, for an amount of 50,237 thousand euro, provided for in the tariff method of the Integrated Water Service which will be recognised in the income statement at more than 12 months from the reporting date. The portion that will be booked to the income statement in the 12 months following the reporting

date amounts respectively to 8,413 and 2,497 thousand euro and is included in the item "Other payables and other current liabilities among deferred income" for grants related to plants.

CURRENT LIABILITIES

NOTE 24_ CURRENT FINANCIAL LIABILITIES

All financial liabilities recognised in this item are due within 12 months. The carrying amount of these payables approximates their fair value as the impact of discounting is negligible.

Short-term financial liabilities can be analysed as follows:

| | thousands of euro | |
|--|-------------------|----------------|
| | 30/06/2019 | 31/12/2018 |
| Bonds | - | 89,069 |
| Bank loans | 121,774 | 288,556 |
| Financial payables to associates | - | 2,734 |
| Financial payables to related-party shareholders | 3,867 | 3,308 |
| Financial payables for leases | 11,028 | 344 |
| Financial payables to others | 24,970 | 34,079 |
| Current liabilities for derivatives | 59,622 | 19,273 |
| Total | 221,261 | 437,363 |

Bonds

Not present at 30 June 2019, while the amount at 31 December 2018 referred to a Private Placement redeemed at the contractual maturity of February 2019.

Bank loans

Short-term bank loans may be broken down as follows:

| | thousands of euro | |
|--|-------------------|----------------|
| | 30/06/2019 | 31/12/2018 |
| Loans - current portion | 88,405 | 274,604 |
| Other current payables to banks | 240 | 44 |
| Accrued financial expenses and deferred financial income | 33,129 | 13,908 |
| Total | 121,774 | 288,556 |

Financial payables to associates

Not present at 30 June 2019, while at 31 December 2018 this item referred to amounts due to the company Valle Dora Energia for the centralised treasury relationship with Iren S.p.A.

Financial payables to related-party shareholders

This item relates to dividends of the company TRM still to be paid to the shareholder Municipality of Turin.

Financial payables to others

These regard payables to factoring companies for the portions collected from customers and to be paid to the factor (19,724 thousand euro) payables for dividends to shareholders (4,831 thousand euro) and amounts that are individually less significant.

Current liabilities for derivatives

These relate to the fair value of derivative contracts entered into to hedge the exposure to the risk of oscillating commodity prices.

NOTE 25_TRADE PAYABLES

All trade payables are due within 12 months. The carrying amount of these payables approximates their fair value as the impact of discounting is negligible.

| | thousands of euro | |
|--|-------------------|----------------|
| | 30/06/2019 | 31/12/2018 |
| Trade payables | 761,523 | 860,574 |
| Trade payables to joint ventures | 306 | 349 |
| Trade payables to associates | 7,198 | 14,237 |
| Trade payables to related-party shareholders | 16,288 | 13,054 |
| Trade payables to other related parties | 4,106 | 4,426 |
| Advances due within 12 months | 6,339 | 5,506 |
| Guarantee deposits due within 12 months | 15,902 | 16,782 |
| Charges to be reimbursed within 12 months | 10 | 10 |
| Total | 811,672 | 914,938 |

The decrease in trade payables compared to 31 December 2018 was mainly due to the decrease in payables to suppliers resulting from the trend in thermal seasonality.

NOTE 26_OTHER PAYABLES AND OTHER CURRENT LIABILITIES

All payables recognised in this item are due within 12 months. The carrying amount of these payables approximates their fair value as the impact of discounting is negligible.

| | thousands of euro | |
|---|-------------------|----------------|
| | 30/06/2019 | 31/12/2018 |
| VAT payable | 2,335 | 4,242 |
| Revenue tax/UTIF payable | 23,922 | 6,355 |
| IRPEF payable | 1,527 | 1,230 |
| Other tax liabilities | 28,451 | 28,945 |
| Tax liabilities due within 12 months | 56,235 | 40,772 |
| Payables to employees | 50,697 | 42,620 |
| Payables to Cassa Servizi Energetici e Ambientali (CSEA) | 92,160 | 51,964 |
| Accounts payable to social security institutions within 12 months | 26,132 | 22,072 |
| Other current liabilities | 83,080 | 105,985 |
| Other payables due within 12 months | 252,069 | 222,641 |
| Accrued expenses and deferred income | 19,295 | 20,872 |
| Total | 327,599 | 284,285 |

The increase in payables for income taxes is due to pre-payments and settlement payments which are influenced by invoicing volumes for the current year and the previous year.

The increase in payables to Cassa per i Servizi Energetici e Ambientali (the Energy and Environmental Services Fund) of the period is related to the estimates of negative equalisation of electricity and gas.

Other current liabilities refer mainly to cost estimates for the obligations related to energy efficiency certificates, to payables for purification fees and to payables for the TV licence fee collected in bills.

NOTE 27_CURRENT TAX LIABILITIES

Current tax liabilities amounting to 98,978 thousand euro (32,049 thousand euro at 31 December 2018) consist of IRES and IRAP payables which include the estimate of taxes for the current period.

NOTE 28_PROVISIONS FOR RISKS AND CHARGES - CURRENT PORTION

This item amounted to 89,896 thousand euro (89,887 thousand at 31 December 2018) and refers to the short-term portion of the provisions, divided as follows:

- provisions for environmental offset charges of 15,421 thousand euro;
- provisions for charges related to the obligation to return emission quotas of 35,718 thousand euro;
- provisions for equity investment risks of 10,000 thousand euro, related to the associate Sinergie Italiane;
- provisions for restoration of transferable works of 2,072 thousand euro;
- provisions for dismantling and reclaiming sites and post-closure provisions of 7,881 thousand euro, which are expected to be used within the next 12 months;
- other provisions for risks of 18,804 thousand euro.

For further details on the breakdown of and changes in provisions for risks and charges see Note 21.

NOTE 29_LIABILITIES RELATED TO ASSETS HELD FOR SALE

There were liabilities related to assets held for sale at 30 June 2019.

FINANCIAL POSITION

The net financial debt, calculated as the difference between short/medium/long-term financial liabilities and short/medium/long-term financial assets, can be broken down as indicated in the following table:

| | thousands of euro | |
|---------------------------------------|-------------------|-------------------|
| | 30/06/2019 | 31/12/2018 |
| Non-current financial assets | (145,154) | (147,867) |
| Non-current financial debt | 3,065,955 | 3,013,303 |
| Non-current net financial debt | 2,920,801 | 2,865,436 |
| Current financial assets | (572,224) | (849,993) |
| Current financial debt | 221,261 | 437,363 |
| Current net financial debt | (350,963) | (412,630) |
| Net financial debt | 2,569,838 | 2,452,806 |

Detail of Net Financial Position regarding related parties

Non-current financial assets relate for 122,092 thousand euro to receivables from the Municipality of Turin and for 10,198 thousand euro to receivables from associates.

Current financial assets relate for 2,927 thousand euro to receivables from the Municipality of Turin, for 371,900 thousand euro to receivables from the joint venture OLT Offshore and for 4,592 thousand to receivables from associates.

Current financial liabilities relate for 3,867 thousand euro to payables to the Municipality of Turin.

Below is the net financial position in the format proposed by the ESMA recommendation of 10 February 2005 transposed with CONSOB Communication of 28 July 2006, which does not include non-current financial assets.

| | thousands of euro | |
|--|-------------------|------------------|
| | 30/06/2019 | 31/12/2018 |
| A. Cash in hand | (144,622) | (369,318) |
| B. Other cash and cash equivalents (details) | - | - |
| C. Securities held for trading | - | - |
| D. Cash and cash equivalents (A) + (B) + (C) | (144,622) | (369,318) |
| E. Current financial receivables | (427,602) | (480,675) |
| F. Current bank debt | 33,369 | 13,952 |
| G. Current portion of non-current debt | 88,405 | 363,673 |
| H. Other current financial debt | 99,487 | 59,738 |
| I. Current financial debt (F)+(G)+(H) | 221,261 | 437,363 |
| J. Net current financial debt (I) – (E) – (D) | (350,963) | (412,630) |
| K. Non-current bank debt | 687,060 | 743,902 |
| L. Bonds issued | 2,187,355 | 2,185,550 |
| M. Other non-current debt | 191,540 | 83,851 |
| N. Non-current financial debt (K) + (L) + (M) | 3,065,955 | 3,013,303 |
| O. Net financial debt (J) + (N) | 2,714,992 | 2,600,673 |

The table below shows the changes in the period in current and non-current financial liabilities.

| | thousands of euro |
|---|-------------------|
| Current and non-current financial liabilities 31.12.2018 | 3,450,666 |
| Repayment of medium/long-term loans | (331,451) |
| Liabilities acquired following change in consolidation scope | 7,290 |
| Change in payables for leases | 104,109 |
| Fair value changes on derivatives | 54,163 |
| Other changes | 2,439 |
| Current and non-current financial liabilities 30.06.2019 | 3,287,216 |

VIII. NOTES TO THE INCOME STATEMENT

Unless otherwise stated, the following tables are in thousands of euro.

Starting from 1 January 2019 the Group's consolidated income statement includes the economic amounts of the companies San Germano, CMT and Busseto Servizi. The economic results of the first half of 2019 are therefore affected by the inclusion of these amounts in the consolidation scope.

We can also note that the income statement items include, over the entire time period in question, the results of the ACAM Group companies, of ReCos S.p.A., of Maira, of Formaira and of Spezia Energia Trading. In the first half of 2018 the income statement items of the ACAM Group and of ReCos S.p.A. Were included starting from 1 April, while those of Maira, Formaira and Spezia Energia Trading were not present because they were consolidated starting from September 2018.

REVENUE

NOTE 30_REVENUE FROM GOODS AND SERVICES

This item amounted to 2,153,312 thousand euro (1,771,999 thousand in the first half of 2018). For further details on the trend in revenue by business segment see the tables in paragraph X "Segment Reporting".

NOTE 31_CHANGE IN WORK IN PROGRESS

This item amounted to a positive 9,000 euro (+27,000 in the first half of 2018) and refers mainly to the accounting for the progress of work done for the Municipality of Turin.

NOTE 32_OTHER INCOME

Other income totalled 84,954 thousand euro (164,930 thousand in the first half of 2018) and refers to contributions, revenue for energy certificates and sundry income. The tables below show the details of the single items.

Contributions

| | thousands of euro | |
|--------------------------|-------------------|-----------------|
| | First half 2019 | First half 2018 |
| Grants related to plant | 5,566 | 4,917 |
| Connection contributions | 4,405 | 3,417 |
| Other grants | 1,385 | 354 |
| Total | 11,356 | 8,688 |

The grants for plant facilities and connection contributions represent the pertaining portion of grants calculated in proportion to the depreciation rates of the plants to which they refer.

The connection contributions include amounts received for connection to the Group's electricity, water, gas and heat distribution networks.

Revenue from energy efficiency certificates

| | thousands of euro | |
|--|-------------------|-----------------|
| | First half 2019 | First half 2018 |
| Revenue from ETS certificates | - | 1,276 |
| Revenue from ex-Green Certificates incentive | 31,049 | 46,580 |
| Revenue from Energy Efficiency Certificates (White Certificates) | 24,842 | 96,452 |
| Total | 55,891 | 144,308 |

We can note that in the first half of 2018 there were revenues from White Certificates of 59,735 thousand euro deriving from energy efficiency certificates for earlier periods.

Other income

| | thousands of euro | |
|---------------------------------------|-------------------|-----------------|
| | First half 2019 | First half 2018 |
| Revenue from service contracts | 1,177 | 2,828 |
| Revenue from rental income and leases | 766 | 635 |
| Capital gains on goods disposal | 952 | 814 |
| Insurance reimbursement | 342 | 156 |
| Sundry repayments | 3,128 | 2,944 |
| Other revenue and income | 11,342 | 4,557 |
| Total | 17,707 | 11,934 |

COSTS

NOTE 33_RAW MATERIALS, CONSUMABLES, SUPPLIES AND GOODS

This item is broken down as follows:

| | thousands of euro | |
|---|-------------------|-----------------|
| | First half 2019 | First half 2018 |
| Purchase of electricity | 286,065 | 164,390 |
| Purchase of gas | 410,545 | 391,625 |
| Purchase of heat | 120 | 105 |
| Purchase of other fuels | - | 41 |
| Purchase of water | 1,899 | 1,508 |
| Other raw materials and inventory materials | 44,356 | 35,449 |
| ETS certificates | 35,718 | 15,404 |
| White certificates | 5,342 | 22,525 |
| Change in inventories | 9,297 | (5,312) |
| Total | 793,342 | 625,735 |

Costs for raw materials, consumables, supplies and goods increased by approximately 167,607 thousand euro. The increase in electricity purchase costs was due mainly to an increase in volumes.

The change in costs for Emission Trading compared to the previous period was the result of the increase in the prices of these certificates.

The change on the costs for White Certificates was due both to the reduction in the quantities purchased, and to the reduction in the prices of these certificates.

The change in inventories was partly due to a reduction in gas storage.

NOTE 34 SERVICES AND USE OF THIRD-PARTY ASSETS

Costs for services amounted to 705,752 thousand euro (576,619 thousand in the first half of 2018) and are detailed in the table below.

| | thousands of euro | |
|--|-------------------|-----------------|
| | First half 2019 | First half 2018 |
| Electricity transport and electricity system expenses | 377,166 | 286,158 |
| Gas carriage | 40,197 | 41,482 |
| Third-party works, maintenance and industrial services | 100,898 | 91,906 |
| Collection and disposal, snow clearing, public parks | 96,447 | 82,976 |
| Expenses related to personnel (canteen, training, travel) | 5,566 | 4,978 |
| Technical, administrative and commercial consulting and advertising expenses | 25,748 | 18,472 |
| Legal and notary fees | 922 | 1,388 |
| Insurance | 7,223 | 7,186 |
| Banking costs | 3,876 | 3,784 |
| Telephone costs | 3,619 | 3,084 |
| IT expenses | 17,615 | 14,989 |
| Reading and invoicing services | 6,865 | 5,640 |
| Fees of the Board of Statutory Auditors | 416 | 387 |
| Other costs for services | 19,194 | 14,189 |
| Total costs for services | 705,752 | 576,619 |

Costs for third-party works mainly relate to operating and maintenance costs of plants and networks.

“Other costs for services” consist of the remaining costs for internal consumption, back office, transport and other services.

Costs for the use of third-party assets amounted to 17,597 thousand euro (down compared to 21,571 thousand in the first half of 2018). In the period in question the item included mainly fees paid to the single operator of the Genoa Area, fees paid to the companies that own the assets of the integrated water service of the Municipalities of Parma, Piacenza and Reggio Emilia.

In the first half of 2018 the item also included fees for property leases (including the rent of the buildings from the “Core Multiutilities” fund), long-term hire (including that referred to motor vehicles) and various rents. These expenses, starting from 1 January 2019, and no restated in the comparative period, are no longer recognised in the income statement and, in application of IFRS 16, the liabilities and rights of use inherent in the assets to which they refer are recognised in the balance sheet.

Residually, there are also costs present for short-term hire or hire in which the underlying asset is of modest value, which the group has decided to exclude from the scope of application of IFRS 16.

NOTE 35_OTHER OPERATING EXPENSES

Other operating expenses amounted to 34,831 thousand euro (25,344 thousand in the first half of 2018) and are detailed in the table below:

| | thousands of euro | |
|---|-------------------|-----------------|
| | First half 2019 | First half 2018 |
| General expenses | 7,089 | 7,360 |
| Fees and additional fees for water shunting | 8,881 | 8,024 |
| Taxes and duties | 11,265 | 9,867 |
| Capital losses on goods disposal | 29 | 20 |
| Other sundry operating expenses | 7,567 | 73 |
| Total | 34,831 | 25,344 |

General expenses include among other things contributions to the running costs of various entities and penalties from service providers. The item "taxes and duties" relates mainly to expenses for IMU (Council Tax) on the Group's plants and buildings and expenses for occupying and reclaiming public land. The significant change in other sundry operating expenses derived mainly from allocation to the current period of costs accruing to previous periods.

NOTE 36_CAPITALISED EXPENSES FOR INTERNAL WORK

Capitalised expenses for internal work amounted to 14,255 thousand euro (13,804 thousand in the first half of 2018), and regard an increase in capital assets created with internal resources and production factors.

| | thousands of euro | |
|---------------------------------|-------------------|-----------------|
| | First half 2019 | First half 2018 |
| Capitalised labour costs | (11,633) | (10,999) |
| Capitalised inventory materials | (2,622) | (2,805) |
| Total | (14,255) | (13,804) |

NOTE 37_PERSONNEL EXPENSE

Personnel costs amounted to 222,930 thousand euro (195,644 thousand in the first half of 2018) and are detailed in the table below:

| | thousands of euro | |
|-----------------------------------|-------------------|-----------------|
| | First half 2019 | First half 2018 |
| Gross remuneration | 157,531 | 137,715 |
| Social security contributions | 51,551 | 44,934 |
| Post-employment benefits | 732 | 576 |
| Other long-term employee benefits | 87 | 171 |
| Other personnel expense | 12,416 | 11,551 |
| Directors' fees | 613 | 697 |
| Total | 222,930 | 195,644 |

As described in Note 36, 11,633 thousand euro of costs related to employees were capitalised.

Other personnel expenses also include the social security and recreational contributions, the contribution paid to the supplementary health care fund, insurance for accidents occurring outside working hours, the portion of post-employment benefits and contributions to be paid by the employer to supplementary pension funds.

The personnel composition is shown in the following table.

| | 30.06.2019 | 31.12.2018 | Average for the period |
|-----------------|--------------|--------------|------------------------|
| Senior managers | 97 | 93 | 96 |
| Junior managers | 308 | 296 | 301 |
| White collar | 3,445 | 3,304 | 3,400 |
| Blue collar | 4,177 | 3,349 | 4,097 |
| Total | 8,027 | 7,042 | 7,894 |

The increase in the number of employees was due mainly to the consolidation, starting from January 2019, of the companies San Germano and CMT, for a total of 770 employees, and to the continuation of the generational turnover plan involving the Group's human resources.

NOTE 38_ DEPRECIATION AND AMORTISATION

Amortisation/Depreciation for the period amounted to 191,510 thousand euro (169,237 thousand in the first half of 2018).

| | thousands of euro | |
|---|-------------------|-----------------|
| | First half 2019 | First half 2018 |
| Property, plant and equipment and investment property | 127,748 | 113,364 |
| Intangible assets | 63,762 | 55,873 |
| Total | 191,510 | 169,237 |

For further details on depreciation/amortisation, reference should be made to the tables of changes in property, plant and equipment and intangible assets.

NOTE 39_ PROVISIONS AND IMPAIRMENT LOSSES

This item amounted to a total of 28,898 thousand euro (21,590 thousand in the first half of 2018) and is detailed in the table below:

| | thousands of euro | |
|--|-------------------|-----------------|
| | First half 2019 | First half 2018 |
| Provisions for impairment of receivables | 16,845 | 16,436 |
| Provisions set aside for risks and restoration of third-party assets | 10,619 | 7,756 |
| Write-backs | (1,274) | (4,012) |
| Write-downs | 2,708 | 1,410 |
| Total net other provisions and impairment losses | 12,053 | 5,154 |
| Total | 28,898 | 21,590 |

The provisions in the period were set aside to adjust the amount of provisions for impairment of receivables to the amount of expected losses on the basis of the simplified model provided for in the standard IFRS 9,

where “loss” means the present value of all future lost revenue, opportunely integrated to take into account future expectations (“forward looking information”).

The trend of provisions set aside for risks and restoration of third-party assets is referable to the assessment of risks of liabilities in the electrical and water fields, as well as to emerging costs in the waste management segment, while write-backs in the period refer to the revision of estimates of expenses set aside in previous years.

Details of changes in provisions are given in the comment on the Balance Sheet item “Provisions for risks and charges”.

The impairment of the period refers to the write-down of the book value of the property complex situated at Piazza Raggi in Genoa, made to align it to the fair value emerged from the appraisal carried out by an independent expert.

NOTE 40_ FINANCIAL INCOME AND EXPENSE

Financial income

Financial income for the period amounted to 17,872 thousand euro (19,305 thousand in the first half of 2018). The details are shown in the following table:

| | thousands of euro | |
|--|-------------------|-----------------|
| | First half 2019 | First half 2018 |
| Dividends | 68 | 604 |
| Bank interest income | 300 | 174 |
| Interest income from receivables/loans | 9,560 | 10,097 |
| Interest income from customers | 2,326 | 1,487 |
| Fair value gains on derivatives | 3,896 | 5,522 |
| Gains made on derivatives | - | 862 |
| Exchange rate gains | 4 | 10 |
| Other financial income | 1,718 | 549 |
| Total | 17,872 | 19,305 |

Interest income from receivables/loans refers mainly to interest receivable from the joint venture OLT Offshore (6,752 thousand euro) and interest accrued on current accounts between the Group and the Municipality of Turin (2,419 thousand euro).

Income from fair value on derivative contracts refers to the non-effective portion of hedging instruments and to the fair value changes of hedging instruments that do not meet the formal requirements for the application of hedge accounting.

Other financial income mainly includes financial income for the discounting of provisions.

Financial expense

This item amounted to 45,843 thousand euro (49,952 thousand in the first half of 2018). The breakdown of financial expenses is provided in the following table:

| | thousands of euro | |
|--|-------------------|-----------------|
| | First half 2019 | First half 2018 |
| Interest expense on loans | 7,344 | 16,657 |
| Interest expense on bonds | 24,114 | 19,930 |
| Interest expense on bank current accounts | 69 | 14 |
| Other interest expense | 414 | 459 |
| Derivative fair value charges | 368 | 357 |
| Expenses paid on derivatives | 8,749 | 9,840 |
| Capital loss on disposal of financial assets | - | 219 |
| Interest cost – Employee benefits | 1,088 | 833 |
| Financial expense on leasing liabilities | 1,637 | 22 |
| Other financial expenses | 2,060 | 1,621 |
| Total | 45,843 | 49,952 |

Interest on loans and bonds includes the expenses relating to the measurement at amortised cost.

Derivative fair value expenses consist of the reversal of a portion of the cash flow hedging reserve to the income statement, relating to certain hedging positions that do not meet the formal requirements for the application of hedge accounting.

Reference should be made to the note to the statement of financial position on the item “Employee benefits” for details of financial expenses on employee benefits.

Other financial expenses mainly includes financial expenses for the discounting of provisions.

NOTE 41_ SHARE OF PROFIT (LOSS) OF ASSOCIATES ACCOUNTED FOR USING THE EQUITY METHOD

The profit of companies accounted for using the equity method amounted to 4,752 thousand (a profit of 825,000 in the first half of 2018). For more details please see Note 5 “Investments accounted for using the equity method”.

NOTE 42_ VALUE ADJUSTMENTS ON EQUITY INVESTMENTS

Not present in the first half of 2019, while in the first half of 2018 it was a negative 329 thousand euro and referred:

- to the write-back of Acquaenna in the light of cessation of the conditions for a write-down made in previous years (+1,380 thousand euro);
- to the restatement at fair value, at the date the controlling stake was acquired, of the minority interest held at 31 March 2018, in ReCos. (-1,706 thousand euro);
- to the write-down of the equity investment in Consorzio Italiano Compostatori (-3 thousand euro).

NOTE 43_ INCOME TAX EXPENSE

Income taxes for the first half of 2019 are estimated at 70,197 thousand euro (88,239 thousand in the first half of 2018) and are the result of the best estimate of the average tax rate expected for the entire year.

We can note that, starting from 2010, Iren S.p.A. adopted the domestic tax consolidation scheme pursuant to Arts 117 et seq. of the new Consolidated Income Tax Act (TUIR). Under this approach, IRES is calculated on the taxable income of the Group, calculated as the total taxable profits and losses recognised by the individual consolidated companies, properly adjusted for the consolidation changes.

The tax consolidation scope for 2019 includes the following companies, in addition to the consolidating company Iren S.p.A.: Ireti, Iren Mercato, Iren Energia, Iren Acqua, Immobiliare delle Fabbriche, Iren Ambiente (incorporator of TRM V and TRM Holding), Iren Rinnovabili, Greensource (incorporated into Iren Energia), Enìa Solaris (incorporated into Iren Energia), Varsi Fotovoltaico (incorporated into Iren Energia), AMIAT, AMIAT V, ACAM Acque, ACAM Ambiente, Maira, Formaira, Studio Alfa, Coin Consultech and Recos.

NOTE 44_ NET PROFIT/(LOSS) FROM DISCONTINUED OPERATIONS

This is not present in either the first half of 2019 or in the comparative period.

NOTE 45_ PROFIT/(LOSS) FOR THE PERIOD ATTRIBUTABLE TO MINORITIES

Profit of non-controlling interests, of 13,598 thousand euro (11,980 thousand in the first half of 2018), refers to the portion attributable to non-controlling interests in companies fully consolidated but not wholly owned by the Group.

NOTE 46_ EARNINGS PER SHARE

In order to calculate the basic and diluted earnings per share, the number of shares of the first half of 2019 is the weighted average of shares outstanding over the reference period based on the provisions of paragraph 20, IAS 33. The company has not issued financial instruments that have the potential to dilute ordinary and savings shares, therefore diluted earnings per share is equal to basic earnings per share.

| | 1st half 2019 | 1st half 2018 |
|--|----------------------|----------------------|
| Net profit (loss) for the period (thousands of euro) | 150,638 | 184,650 |
| Weighted average number of shares outstanding over the year (thousand) | 1,300,258 | 1,283,187 |
| Basic earnings/(loss) per share (euro) | 0.12 | 0.14 |

NOTE 47_ OTHER COMPREHENSIVE INCOME

Other comprehensive income was a negative 30,590 thousand euro (+215 thousand in the first half of 2018) and refers to the other comprehensive income that will subsequently be reclassified to the Income Statement. In particular it includes the following elements:

- the effective portion of changes in the fair value of cash flow hedging instruments, a negative 44,055 thousand euro, which refers to derivatives hedging changes in interest rates and derivatives hedging changes in commodity prices (for the Group this is gas).
- the share of other profits/(losses) of companies accounted for using the equity method, a positive 1,719 thousand euro, which refers to changes in the fair value of cash flow hedging instruments of associates.
- the tax effect of other comprehensive income for +11,746 thousand euro.

IX. GUARANTEES AND CONTINGENT LIABILITIES

Guarantees relate to:

- a) Sureties for own commitments of 491,519 thousand euro (403,780 thousand at 31 December 2018); the most significant items refer to sureties issued in favour of:
- the Turin Provincial/Metropolitan City Governments, for 99,744 thousand euro for waste conferment and post-closure management of plants subject to I.E.A.;
 - ARPAE for 78,140 thousand euro for waste conferment and operating and post-closure management of plants subject to Integrated Environmental Authorisation (hereinafter I.E.A.);
 - the GME [*Gestore dei Mercati Energetici*, Electric Markets Operator] for 48,590 thousand euro to guarantee the market participation contract;
 - ATO-R, for 44,335 thousand euro, as definitive guarantees in the Amiat/TRM tender procedure;
 - CONSIP for 31,519 thousand euro for electricity supply contracts;
 - the City of Turin for 27,478 thousand euro as definitive guarantees in the AMIAT/TRM tender procedure;
 - SEI Energia for 21,500 thousand euro as expenses for the Assumptor for the related arrangement procedure;
 - the Customs Authority, for 20,352 thousand euro to guarantee the regular payment of revenue tax and additional local and provincial duties on electricity consumption and gas excise;
 - SNAM Reti Gas for 17,000 thousand euro to guarantee contracts and network codes;
 - ATERSIR for 14,306 thousand euro for integrated water service and urban waste management agreements and tenders in progress;
 - INPS for 13,040 thousand euro for the planned redundancy procedure for group employees;
 - the Ministry of the Environment, for 12,187 thousand euro;
 - the Tax Authority for 9,039 thousand euro annual VAT rebate procedures;
 - SETA S.p.A. for 5,850 thousand euro to guarantee regular execution of post-closure activities at the Chivasso 0 landfill site;
 - Province of La Spezia for 5,322 thousand euro for contributions and management of plants;
 - Terna, for 4,772 thousand euro to guarantee injection and withdrawal dispatching contracts and to guarantee the electricity transport service contract;
 - the Municipality of Parma for 3,678 thousand euro to guarantee the Cornocchio plant and for maintenance contracts;
 - FCT Holding, for 2,000 thousand euro, as definitive guarantee in the AMIAT/TRM tender procedure;
 - REAM Sgr S.p.A., for 1,931 thousand euro, to guarantee lease payments of properties transferred to the real estate fund called Fondo Core MultiUtilities;
- b) Guarantees provided on behalf of subsidiaries and associates for 354,824 thousand euro, primarily to guarantee credit facilities and sales/Parent Company Guarantee contracts on behalf of Iren Mercato S.p.A..

The most significant amounts, regarding the guarantees given on behalf of associates, refer to the associate Sinergie Italiane in liquidation (namely guarantees for credit facilities and letters of patronage for 25,332 thousand euro, unchanged compared to 31 December 2018). The liquidators concluded the main procurement contracts and since 1 October 2012 the Company's operating activity therefore includes only the purchase of gas from the Russian Gazprom supplier and the sale of gas to shareholders or their subsidiaries, including Iren Mercato.

COMMITMENTS

In relation to the subsidiary Iren Acqua (formerly *Mediterranea delle Acque*), we can note the existence of a commitment within the framework Agreement with the Shareholder F2i rete idrica S.p.A.. Article 15 of this agreement envisages that Ireti is bound to pay damages in the event of liabilities, losses or damage suffered by F2i or Iren Acqua or its investees, resulting from incorrect or unfair statements included in the agreement.

X. SEGMENT REPORTING

Segment reporting, based on the Group's management and internal reporting structure, is given below in accordance with IFRS 8.

Given the nature of the activity performed by Group companies, a geographical segment analysis is not relevant.

OPERATING BUSINESS SEGMENTS

The business segments in which the Group operates are:

- Networks (Electricity Distribution Networks, Gas Distribution Networks, Integrated Water Service)
- Waste Management (Waste collection and disposal)
- Energy (Hydroelectric Production and production from other renewable sources, Combined Heat and Power, District Heating Networks, Thermoelectric Production, Public Street Lighting, Global services, Energy efficiency services)
- Market (Sale of electricity, gas, heat)
- Other services (Laboratories, Telecommunications and other minor services).

For a more uniform presentation of the assets included in Group's operating segments, we can note that the "Smart solutions" business line (energy efficiency, heat management and public lighting) was reallocated from the "Services and other" segment to the "Energy" segment.

These operating segments are disclosed pursuant to IFRS 8. Under this standard, the disclosure about operating segments should be based on the elements which management uses in making operational and strategic decisions.

For a proper interpretation of the economic results relating to individual businesses, revenue and expense referring to joint activities were fully allocated to the businesses based on actual usage of the services provided or according to technical and economic drivers.

Given the fact that the Group mainly operates in one area, the following segment information does not include a breakdown by geographical area.

The financial and economic amounts presented below, for the comparative periods of 2018, were restated in keeping with the segment structure explained above.

Net invested capital by business segment compared to the figures at 31 December 2018 and income statements (up to the operating profit) by business segment are presented below, and include a comparison with the figures for the first half of 2018.

Statement of financial position by business segment at 30 June 2019

| | millions of euro | | | | | | |
|--|------------------|------------------|--------------|------------|----------------|---------------|--------------|
| | Networks | Waste Management | Energy | Market | Other services | Non-allocable | Total |
| Non-current assets | 2,699 | 983 | 1,881 | 169 | 39 | 148 | 5,919 |
| Net Working Capital | (9) | 127 | (25) | (25) | 2 | - | 70 |
| Other non-current assets and liabilities | (605) | (164) | (118) | 6 | (0) | - | (881) |
| Net invested capital (NIC) | 2,085 | 946 | 1,738 | 150 | 41 | 148 | 5,108 |
| Shareholders' equity | | | | | | | 2,538 |
| Net financial position | | | | | | | 2,570 |
| Own funds and net financial debt | | | | | | | 5,108 |

Statement of financial position by business segment at 31 December 2018

millions of euro

| | Networks | Waste Management | Energy | Market | Other services | Non-allocable | Total |
|--|--------------|------------------|--------------|------------|----------------|---------------|--------------|
| Non-current assets | 2,609 | 946 | 1,884 | 146 | 59 | 142 | 5,786 |
| Net Working Capital | (21) | 70 | 66 | 41 | (24) | | 132 |
| Other non-current assets and liabilities | (610) | (156) | (124) | (7) | (6) | | (903) |
| Net invested capital (NIC) | 1,978 | 860 | 1,826 | 180 | 29 | 142 | 5,015 |
| Shareholders' equity | | | | | | | 2,562 |
| Net financial position | | | | | | | 2,453 |
| Own funds and net financial debt | | | | | | | 5,015 |

Income Statement by business segment for the first half of 2019

millions of euro

| | Networks | Waste Management | Energy | Market | Other services | Netting and adjustments | Total |
|---|------------|------------------|------------|-----------|----------------|-------------------------|------------|
| Total revenue and income | 482 | 352 | 785 | 1,512 | 10 | (903) | 2,238 |
| Total operating expenses | (310) | (268) | (619) | (1,457) | (9) | 903 | (1,760) |
| Gross Operating Profit (EBITDA) | 172 | 84 | 166 | 55 | 1 | - | 478 |
| Net am./depr., provisions and impairment losses | (82) | (47) | (64) | (26) | (1) | | (220) |
| Operating profit (EBIT) | 90 | 37 | 102 | 29 | 0 | - | 258 |

Income Statement by business segment for the first half of 2018

millions of euro

| | Networks | Waste Management | Energy | Market | Other services | Netting and adjustments | Total |
|---|------------|------------------|------------|-----------|----------------|-------------------------|------------|
| Total revenue and income | 443 | 294 | 644 | 1,241 | 18 | (703) | 1,937 |
| Total operating expenses | (283) | (220) | (438) | (1,178) | (15) | 703 | (1,431) |
| Gross Operating Profit (EBITDA) | 160 | 74 | 206 | 63 | 3 | - | 506 |
| Net am./depr., provisions and impairment losses | (72) | (38) | (60) | (20) | (1) | | (191) |
| Operating profit (EBIT) | 88 | 36 | 146 | 43 | 2 | - | 315 |

XI. ANNEXES TO THE CONDENSED CONSOLIDATED INTERIM REPORT

FULLY CONSOLIDATED COMPANIES

COMPANIES ACCOUNTED FOR USING THE EQUITY METHOD

OTHER EQUITY INVESTMENTS

RECONCILIATION OF IAS/IFRS FINANCIAL STATEMENTS WITH RECLASSIFIED FINANCIAL STATEMENTS (CONSOB Communication no. 6064293 dated 26 July 2006)

TRANSACTIONS WITH RELATED PARTIES

FULLY CONSOLIDATED COMPANIES

| Company | Registered office | Currency | Share capital | % interest | Shareholder company |
|------------------------------------|------------------------|----------|---------------|------------|---------------------|
| Iren Ambiente S.p.A. | Piacenza | Euro | 63,622,002 | 100.00 | Iren |
| Iren Energia S.p.A. | Turin | Euro | 918,767,148 | 100.00 | Iren |
| Iren Mercato S.p.A. | Genoa | Euro | 61,356,220 | 100.00 | Iren |
| Ireti S.p.A. | Genoa | Euro | 196,832,103 | 100.00 | Iren |
| Acam Acque S.p.A. | La Spezia | Euro | 24,260,050 | 100.00 | IRETI |
| Acam Ambiente S.p.A. | La Spezia | Euro | 6,313,620 | 100.00 | Iren Ambiente |
| AMIAT S.p.A. | Turin | Euro | 46,326,462 | 80.00 | AMIAT V |
| AMIAT V. S.p.A. | Turin | Euro | 1,000,000 | 93.06 | Iren Ambiente |
| ASM Vercelli S.p.A. | Vercelli | Euro | 120,812,720 | 59.97 | IRETI |
| Atena Trading S.r.l. | Vercelli | Euro | 556,000 | 100.00 | ASM Vercelli |
| Bonifica Autocisterne S.r.l. | Piacenza | Euro | 595,000 | 51.00 | Iren Ambiente |
| Busseto Servizi S.r.l. | Parma | Euro | 3,990,000 | 100.00 | IRETI |
| CMT S.p.A. | Turin | Euro | 500,000 | 100.00 | Iren Ambiente |
| Coin Consultech S.r.l. | Reggio Emilia | Euro | 10,000 | 72.87 | Studio Alfa |
| Consorzio GPO | Reggio Emilia | Euro | 20,197,260 | 62.35 | IRETI |
| Formaira S.r.l. | San Damiano Macra (CN) | Euro | 10,000 | 100.00 | Maira |
| Immobiliare delle Fabbriche S.r.l. | Genoa | Euro | 90,000 | 100.00 | Iren Acqua |
| Iren Acqua S.p.A. | Genoa | Euro | 19,203,420 | 60.00 | IRETI |
| Iren Acqua Tigullio S.p.A. | Chiavari (Genoa) | Euro | 979,000 | 66.55 | Iren Acqua |
| Iren Laboratori S.p.A. | Genoa | Euro | 2,000,000 | 90.89 | IRETI |
| Iren Rinnovabili S.p.A. | Reggio Emilia | Euro | 2,596,721 | 60.00 | Iren Energia |
| | | | | 20.00 | Iren Ambiente |
| | | | | 20.00 | Iren Mercato |
| Maira S.p.A. | San Damiano Macra (CN) | Euro | 596,442 | 66.23 | Iren Energia |
| Monte Querce S.c.a.r.l. | Reggio Emilia | Euro | 100,000 | 60.00 | Iren Ambiente |
| ReCos S.p.A. | La Spezia | Euro | 12,466,000 | 98.60 | Iren Ambiente |
| Salerno Energia Vendite S.p.A. | Salerno | Euro | 3,312,060 | 50.00 | Iren Mercato |
| San Germano S.p.A. | Turin | Euro | 1,425,000 | 100.00 | Iren Ambiente |
| Spezia Energy Trading S.r.l. | La Spezia | Euro | 60,000 | 100.00 | Iren Mercato |
| Studio Alfa S.p.A. | Reggio Emilia | Euro | 100,000 | 86.00 | Iren Rinnovabili |
| TRM S.p.A. | Turin | Euro | 86,794,220 | 80.00 | Iren Ambiente |

JOINT VENTURES

| Company | Registered office | Currency | Share capital | % interest | Shareholder company |
|-------------------------------------|-------------------|----------|---------------|------------|---------------------|
| Acque Potabili S.p.A. | Turin | Euro | 7,633,096 | 44.92 | IRETI |
| Olt Offshore Toscana LNG S.p.A. (1) | Milan | Euro | 40,489,544 | 46.79 | Iren Mercato |

(1) Company classified among assets held for sale

ASSOCIATES

| Company | Registered office | Currency | Share capital | % interest | Shareholder company |
|--|------------------------------|----------|---------------|------------|---------------------|
| A2A Alfa S.r.l. | Milan | Euro | 100,000 | 30.00 | Iren Mercato |
| Acos Energia S.p.A. | Novi Ligure | Euro | 150,000 | 25.00 | Iren Mercato |
| Acos S.p.A. | Novi Ligure | Euro | 17,075,864 | 25.00 | IRETI |
| Acquaenna S.c.p.a. | Enna | Euro | 3,000,000 | 48.50 | IRETI |
| Aguas de San Pedro | S.Pedro Sula (Honduras) | Lempiras | 159,900 | 39.34 | IRETI |
| Aiga S.p.A. in arrangement | Ventimiglia | Euro | 104,000 | 49.00 | IRETI |
| Amat S.p.A. | Imperia | Euro | 5,435,372 | 48.00 | IRETI |
| Amter S.p.A. | Cogoleto (Genoa) | Euro | 404,263 | 49.00 | Iren Acqua |
| ASA S.p.A. | Livorno | Euro | 28,613,406 | 40.00 | IRETI |
| ASTEA S.p.A. | Recanati | Euro | 76,115,676 | 21.32 | Consorzio GPO |
| Asti Energia e Calore S.p.A. | Asti | Euro | 120,000 | 34.00 | Iren Energia |
| BI Energia S.r.l. | Reggio Emilia | Euro | 100,000 | 47.50 | Iren Energia |
| Campo Base S.r.l. | Cuneo | Euro | 20,000 | 49.00 | Maira |
| CSP Innovazione nelle ICT S.c.r.l. | Turin | Euro | 600,000 | 25.00 | Iren Energia |
| Domus Acqua S.r.l. | Domusnovas | Euro | 96,000 | 29.00 | IRETI |
| Fata Morgana S.p.A. (2) | Reggio Calabria | Euro | 2,225,694 | 25.00 | IRETI |
| Fin Gas S.r.l. | Milan | Euro | 10,000 | 50.00 | Iren Mercato |
| Fratello Sole Energie Solidali Impresa Sociale S.r.l. | Genoa | Euro | 350,000 | 40.00 | Iren Energia |
| G.A.I.A. S.p.A. | Asti | Euro | 5,539,700 | 45.00 | Iren Ambiente |
| Global Service Parma S.c.a r.l. | Parma | Euro | 20,000 | 30.00 | IRETI |
| Iniziative Ambientali S.r.l. | Novellara (Reggio Emilia) | Euro | 100,000 | 40.00 | Iren Ambiente |
| Mondo Acqua S.p.A. | Mondovi (Cuneo) | Euro | 1,100,000 | 38.50 | IRETI |
| Nord Ovest Servizi S.p.A. | Turin | Euro | 7,800,000 | 10.00 | IRETI |
| | | | | 15.00 | AMIAT |
| Piana Ambiente S.p.A. (2) | Gioia Tauro | Euro | 1,719,322 | 25.00 | IRETI |
| Plurigas S.p.A. (2) | Milan | Euro | 800,000 | 30.00 | Iren |
| Rio Riazzone S.p.A. (1) | Castellarano (Reggio Emilia) | Euro | 103,292 | 44.00 | Iren Ambiente |
| Seta S.p.A. | Turin | Euro | 12,378,237 | 48.85 | Iren Ambiente |
| Sinergie Italiane S.r.l. (1) | Milan | Euro | 1,000,000 | 30.94 | Iren Mercato |
| So. Sel. S.p.A. | Modena | Euro | 240,240 | 24.00 | IRETI |
| STU Reggiane S.p.A. | Reggio Emilia | Euro | 6,587,558 | 30.00 | Iren Rinnovabili |
| Tirana Acque S.c. a r.l. (1) | Genoa | Euro | 95,000 | 50.00 | IRETI |
| Valle Dora Energia S.r.l. | Turin | Euro | 537,582 | 49.00 | Iren Energia |

(1) Company in liquidation

(2) Company in liquidation classified among assets held for sale

OTHER EQUITY INVESTMENTS

| Company | Registered office | Currency | Share capital | % interest | Shareholder company |
|--|------------------------------|----------|---------------|------------|---------------------|
| Acque Potabili Siciliane in bankruptcy | Palermo | Euro | 5,000,000 | 9.83 | Iren Acqua |
| Aeroporto di Reggio Emilia | Reggio Emilia | Euro | 2,177,871 | 0.11 | Studio Alfa |
| Alpen 2.0 | Turin | Euro | 70,000 | 14.29 | Maira |
| ASQ Network | Rome | Euro | 75,000 | 6.00 | Studio Alfa |
| ATO2ACQUE S.c.a.r.l. | Biella | Euro | 48,000 | 16.67 | ASM Vercelli |
| Aurora S.r.l. | S. Martino in Rio (RE) | Euro | 514,176 | 0.10 | Studio Alfa |
| Autostrade Centro Padane | Cremona | Euro | 30,000,000 | 1.46 | IRETI |
| BT ENIA Telecomunicazioni | Parma | Euro | 4,226,000 | 12.01 | IRETI |
| C.R.P.A. | Reggio Emilia | Euro | 2,201,350 | 2.27 | IRETI |
| CIDIU SPA | Collegno (TO) | Euro | 4,335,314 | 4.82 | AMIAT |
| CNA Servizi Scrl | Reggio Emilia | Euro | | | Studio Alfa |
| Consorzio CIM 4.0 | Turin | Euro | 75,000 | 4.00 | Iren |
| Consorzio L.E.A.P. | Piacenza | Euro | 150,000 | 8.57 | Iren Ambiente |
| Consorzio Topix | Turin | Euro | 1,600,000 | 0.30 | Iren Energia |
| Credito Cooperativo Reggiano | S.Giovanni di Querciola (RE) | Euro | | | Studio Alfa |
| Enerbrain s.r.l. | Turin | Euro | 21,851 | 1.00 | Iren Rinnovabili |
| Emilbanca BCC | Bologna | Euro | | | Studio Alfa |
| Environment Park S.p.A. | Turin | Euro | 11,406,780 | 3.39 | Iren Energia |
| | | | | 7.41 | AMIAT |
| Reggio Emilia Innovazione (1) | Reggio Emilia | Euro | 871,956 | 0.99 | Iren Ambiente |
| Società di Biotecnologie S.p.A. | Turin | Euro | 536,000 | 1.00 | Iren Rinnovabili |
| Stadio Albaro (1) | Genoa | Euro | 1,230,000 | 2.00 | Iren Mercato |
| T.I.C.A.S.S. | Genoa | Euro | 176,000 | 3.13 | IRETI |

(1) Company in liquidation

RECONCILIATION OF IAS/IFRS FINANCIAL STATEMENTS WITH RECLASSIFIED FINANCIAL STATEMENTS (CONSOB Communication no. 6064293 dated 26 July 2006)

thousands of euro

| IAS/IFRS STATEMENT OF FINANCIAL POSITION | | RECLASSIFIED STATEMENT OF FINANCIAL POSITION | |
|---|------------------|---|------------------|
| Property, plant and equipment | 3,546,108 | Property, plant and equipment | 3,546,108 |
| Investment property | 12,399 | Investment property | 12,399 |
| Intangible assets | 2,050,133 | Intangible assets | 2,050,133 |
| Goodwill | 162,745 | Goodwill | 162,745 |
| Investments accounted for using the equity method | 140,416 | Investments accounted for using the equity method | 140,416 |
| Other equity investments | 7,226 | Other equity investments | 7,226 |
| Total (A) | 5,919,027 | Non-Current Assets (A) | 5,919,027 |
| Other non-current assets | 41,711 | Other non-current assets | 41,711 |
| Other payables and other non-current liabilities | (476,487) | Other payables and other non-current liabilities | (476,487) |
| Total (B) | (434,776) | Other non-current assets (liabilities) (B) | (434,776) |
| Inventories | 65,179 | Inventories | 65,179 |
| Non-current trade receivables | 87,122 | Non-current trade receivables | 87,122 |
| Trade receivables | 912,801 | Trade receivables | 912,801 |
| Current tax assets | 7,209 | Current tax assets | 7,209 |
| Other receivables and other current assets | 251,253 | Other receivables and other current assets | 251,253 |
| Trade payables | (811,672) | Trade payables | (811,672) |
| Other payables and other current liabilities | (327,599) | Other payables and other current liabilities | (343,020) |
| Current tax liabilities | (98,978) | Current tax liabilities | (98,978) |
| Total (C) | 85,315 | Net working capital (C) | 69,894 |
| Deferred tax assets | 382,212 | Deferred tax assets | 382,212 |
| Deferred tax liabilities | (218,410) | Deferred tax liabilities | (218,410) |
| Total (D) | 163,802 | Deferred tax assets (liabilities) (D) | 163,802 |
| Employee benefits | (105,423) | Employee benefits | (105,423) |
| Provisions for risks and charges | (430,252) | Provisions for risks and charges | (430,252) |
| Provisions for risks and charges - current portion | (89,896) | Provisions for risks and charges - current portion | (74,475) |
| Total (E) | (625,571) | Provisions and employee benefits (E) | (610,150) |
| Assets held for sale | 372,424 | Assets held for sale | 524 |
| <i>of which financial receivables from OLT Offshore</i> | <i>371,900</i> | | |
| Liabilities related to assets held for sale | - | Liabilities related to assets held for sale | - |
| Total (F) | 372,424 | Assets (Liabilities) held for sale (F) | 524 |
| | | Net invested capital (G=A+B+C+D+E+F) | 5,108,321 |
| Equity (H) | 2,538,483 | Equity (H) | 2,538,483 |
| Non-current financial assets | (145,154) | Non-current financial assets | (145,154) |
| Non-current financial liabilities | 3,065,955 | Non-current financial liabilities | 3,065,955 |
| Total (I) | 2,920,801 | Medium/long term financial debt (I) | 2,920,801 |
| Current financial assets | (55,702) | Current financial assets | (457,602) |
| | | <i>of which financial receivables from OLT Offshore</i> | <i>(371,900)</i> |
| Cash and cash equivalents | (144,622) | Cash and cash equivalents | (144,622) |
| Current financial liabilities | 221,261 | Current financial liabilities | 221,261 |
| Total (L) | 20,937 | Short-term financial debt (L) | (350,963) |
| | | Net financial debt (M=I+L) | 2,569,838 |
| | | Own funds and net financial debt (H+M) | 5,108,321 |

TRANSACTIONS WITH RELATED PARTIES

thousands of euro

| | Trade Receivables | Financial Receivables | Other receivables | Trade Payables | Financial payables |
|---|-------------------|-----------------------|-------------------|----------------|--------------------|
| RELATED-PARTY SHAREHOLDERS | | | | | |
| Municipality of Genoa | 996 | - | - | 8,833 | - |
| Municipality of Parma | 26,143 | - | - | 987 | - |
| Municipality of Piacenza | 2,016 | - | - | 2,631 | - |
| Municipality of Reggio Emilia | 5,886 | - | 38 | 1,300 | - |
| Municipality of Turin | 80,773 | 125,019 | 248 | 2,537 | 3,867 |
| Finanziaria Sviluppo Utilities | 31 | - | 41 | - | - |
| Finanziaria Città di Torino Holding | 4 | - | - | - | - |
| JOINT VENTURES | | | | | |
| OLT Offshore LNG | 177 | 371,900 | - | - | - |
| Acque Potabili | 286 | - | - | 306 | - |
| ASSOCIATES | | | | | |
| A2A Alfa | 2 | - | - | - | - |
| ACOS | 76 | 5,554 | - | 17 | - |
| ACOS Energia | 4 | - | - | 18 | - |
| Acquaenna | 418 | 5,323 | - | 384 | - |
| Aguas de San Pedro | 2 | 856 | - | - | - |
| AIGA | 562 | - | - | 47 | - |
| AMAT | 43 | - | - | 18 | - |
| AMTER | 5,705 | 68 | - | 341 | - |
| ASA | 915 | - | - | 1 | - |
| ASTEA | 7 | 640 | - | - | - |
| Asti Energia e Calore | 554 | 1,167 | - | - | - |
| BI Energia | 32 | 742 | - | - | - |
| Campo Base | 8 | 60 | - | - | - |
| CSP - Innovazione nelle ICT | - | - | - | 28 | - |
| Domus Acqua | 72 | - | - | - | - |
| Fratello Sole Energie Solidali | 73 | - | 50 | - | - |
| GAIA | 650 | - | - | 1,400 | - |
| Global Service Parma | 3,248 | - | - | 1,963 | - |
| Iniziative Ambientali | 6 | - | - | - | - |
| Mondo Acqua | 748 | - | - | - | - |
| Nord Ovest Servizi | - | 66 | - | - | - |
| Piana Ambiente in liquidation | 70 | - | - | - | - |
| Plurigas in liquidation | 6 | - | - | (259) | - |
| Rio Riazzone in liquidation | - | - | - | 2 | - |
| SETA | 2,183 | - | - | 181 | - |
| Sinergie Italiane in liquidation | 26 | - | 6,901 | 71 | - |
| So. Sel. | 7 | - | - | 2,771 | - |
| STU Reggiane | 74 | 487 | 525 | - | - |
| Valle Dora Energia | 102 | 397 | - | 215 | - |
| OTHER RELATED PARTIES | | | | | |
| Subsidiaries of Municipality of Turin | 1,307 | - | 95 | 1,731 | - |
| Subsidiaries of Municipality of Genoa | 1,513 | - | - | 963 | 3 |
| Subsidiaries of Municipality of Parma | 2,078 | - | 76 | 1,333 | - |
| Subsidiaries of Municipality of Piacenza | 18 | - | - | 1 | - |
| Subsidiaries of Municipality of Reggio Emilia | 68 | - | - | 78 | - |
| Others | - | - | - | - | - |
| TOTAL | 136,889 | 512,279 | 7,974 | 27,898 | 3,870 |

thousands of euro

| | Other payables | Revenue and income | Costs and other charges | Financial income | Financial expense |
|---|----------------|--------------------|-------------------------|------------------|-------------------|
| RELATED-PARTY SHAREHOLDERS | | | | | |
| Municipality of Genoa | 1 | 671 | 3,574 | - | - |
| Municipality of Parma | - | 18,230 | 851 | 2 | - |
| Municipality of Piacenza | - | 9,256 | 1,005 | - | - |
| Municipality of Reggio Emilia | - | 17,510 | 307 | 1 | - |
| Municipality of Turin | - | 108,613 | 1,347 | 2,419 | - |
| Finanziaria Sviluppo Utilities | - | 16 | - | - | - |
| Finanziaria Città di Torino Holding | - | 4 | - | - | - |
| JOINT VENTURES | | | | | |
| OLT Offshore LNG | - | 38 | - | 6,725 | - |
| Acque Potabili | - | 39 | (8) | - | - |
| ASSOCIATES | | | | | |
| A2A Alfa | - | 2 | - | - | - |
| ACOS | - | 35 | - | - | - |
| ACOS Energia | 2 | 6 | 2 | - | - |
| Acquaenna | - | 35 | - | 39 | - |
| Aguas de San Pedro | - | - | - | - | - |
| AIGA | - | 6 | - | 9 | - |
| AMAT | - | 14 | - | - | - |
| AMTER | - | 1,592 | 168 | - | - |
| ASA | - | 172 | 52 | 193 | - |
| ASTEA | - | 7 | 1 | - | - |
| Asti Energia e Calore | - | 40 | - | 11 | - |
| BI Energia | - | 2 | - | 7 | - |
| Campo Base | - | 1 | 1 | 1 | - |
| CSP - Innovazione nelle ICT | - | - | 108 | - | - |
| Domus Acqua | - | - | - | - | - |
| Fratello Sole Energie Solidali | - | 148 | - | - | - |
| GAIA | - | 807 | 1,229 | - | - |
| Global Service Parma | - | 812 | - | - | - |
| Iniziative Ambientali | - | 2 | - | - | - |
| Mondo Acqua | - | 129 | - | - | - |
| Nord Ovest Servizi | - | - | - | 66 | - |
| Piana Ambiente in liquidation | - | - | - | - | - |
| Plurigas in liquidation | - | - | - | - | - |
| Rio Riazzozone in liquidation | - | - | 33 | - | - |
| SETA | - | 3,753 | 244 | - | - |
| Sinergie Italiane in liquidation | - | 43 | 27,536 | - | - |
| So. Sel. | 6 | 14 | 3,586 | - | - |
| STU Reggiane | 25 | 36 | - | 7 | - |
| Valle Dora Energia | - | 159 | 44 | - | - |
| OTHER RELATED PARTIES | | | | | |
| Subsidiaries of Municipality of Turin | - | 1,813 | 3,177 | - | 2 |
| Subsidiaries of Municipality of Genoa | - | 3,369 | 1,399 | 2 | - |
| Subsidiaries of Municipality of Parma | 118 | 1,320 | 1,798 | - | - |
| Subsidiaries of Municipality of Piacenza | 4 | 154 | 572 | - | - |
| Subsidiaries of Municipality of Reggio Emilia | - | 614 | 3,450 | - | - |
| Others | - | - | - | - | - |
| TOTAL | 156 | 169,462 | 50,476 | 9,482 | 2 |

Statement regarding the Condensed Interim Report pursuant to Art. 154-bis of Italian Legislative Decree 58/1998

1. The undersigned Massimiliano Bianco, Chief Executive Officer, and Massimo Levrino, Administration, Finance, Control and M&A Manager and Corporate Financial Reporting Manager of Iren S.p.A., hereby certify, also in view of the provisions of Art. 154-bis, paragraphs 3 and 4 of Italian Legislative Decree no. 58 of 24 February 1998:
 - the adequacy in respect of the company's characteristics and
 - the effective application of the administrative and accounting procedures for preparation of the condensed interim financial statements during the first half of 2019.
2. It is also certified that:
 - 2.1 the condensed interim financial statements:
 - a) have been drawn up according to the international accounting standards applicable and recognised in the European Union pursuant to Regulation (EC) no. 1606/2002 of the European Parliament and of the Council of 19 July 2002;
 - B) are in agreement with the figures in the accounting books and documents;
 - c) are capable of giving a true and fair view of the financial position and results of operations of the issuer and the group companies included in the consolidation scope.
 - 2.2 the interim directors' report includes a reliable analysis of references to significant events that occurred in the first six months of the year and their impact on the condensed consolidated interim financial statements, together with a description of the main risks and uncertainties for the remaining six months of the year. The interim directors' report also includes a reliable analysis of information on significant transactions with related parties.

31 July 2019

The Chief Executive Officer

Massimiliano Bianco

Administration, Finance, Control and M&A
Manager
and Financial Reporting Manager appointed
under Law 262/05

Massimo Levrino



REVIEW REPORT ON CONDENSED CONSOLIDATED INTERIM FINANCIAL STATEMENTS

To the Shareholders of
Iren SpA

Foreword

We have reviewed the accompanying condensed consolidated interim financial statements of Iren SpA and its subsidiaries (the “Iren Group”) as of 30 June 2019, comprising the statement of financial position, the income statement, the statement of other comprehensive income, the statement of changes in shareholders’ equity, the statement of cash flows and the related notes. The directors of Iren SpA are responsible for the preparation of the condensed consolidated interim financial statements in accordance with International Accounting Standard 34 applicable to interim financial reporting (IAS 34) as adopted by the European Union. Our responsibility is to express a conclusion on these condensed consolidated interim financial statements based on our review.

Scope of review

We conducted our work in accordance with the criteria for a review recommended by Consob in Resolution No. 10867 of 31 July 1997. A review of condensed consolidated interim financial statements consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than a full-scope audit conducted in accordance with International Standards on Auditing (ISA Italia) and, consequently, does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion on the condensed consolidated interim financial statements.

Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the accompanying condensed consolidated interim financial statements of the Iren Group as of 30 June 2019 are not prepared, in all material respects, in accordance with International Accounting Standard 34 applicable to interim financial reporting (IAS 34) as adopted by the European Union.

Genoa, 1 August 2019

PricewaterhouseCoopers SpA

Signed by

Andrea Manchelli
(Partner)

This report has been translated into English from the Italian original solely for the convenience of international readers

PricewaterhouseCoopers SpA

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