

Interim Report

at 30 June 2021

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COMPANY OFFICERS

Board of Directors⁽¹⁾

Chairman	Renato Boero ⁽²⁾
Deputy Chairman	Moris Ferretti ⁽³⁾
Chief Executive Officer and General Manager	Gianni Vittorio Armani ⁽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⁾

Chairman	Michele Rutigliano
Statutory auditors	Cristina Chiantia Simone Caprari Ugo Ballerini Sonia Ferrero
Alternate auditors	Lucia Tacchino Fabrizio Riccardo Di Giusto

Financial Reporting Manager

Massimo Levrino

Independent Auditors

KPMG S.p.A. ⁽¹⁶⁾

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

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

⁽³⁾ Appointed Deputy Chairman at the Board of Directors meeting held on 22 May 2019.

⁽⁴⁾ Co-opted as Director pursuant to article 2386 of the Italian Civil Code and appointed Chief Executive Officer and General Manager at the meeting of the Board of Directors held on 29 May 2021, to replace Massimiliano Bianco, who resigned from these positions with effect from the same date.

⁽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 Chairman of the Remuneration and Appointments Committee at the Board of Directors meeting held on 30 May 2019.

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

⁽⁹⁾ Member of the Related Party Transactions Committee from 22 May to 30 May 2019, and member of the Remuneration and Appointments Committee as of 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 Related Party Transactions Committee, appointed on 30 May 2019.

⁽¹³⁾ Member of the Audit, Risk and Sustainability Committee, appointed on 22 May 2019 and member of the Related Party Transactions Committee, appointed on 30 May 2019. Mr Malmesi was also appointed Chairman of the Control, Risk and Sustainability Committee at the Board of Directors meeting held on 30 May 2019.

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

⁽¹⁵⁾ Appointed by the Shareholders' Meeting of 6 May 2021 for the 2021-2022-2023 three-year period.

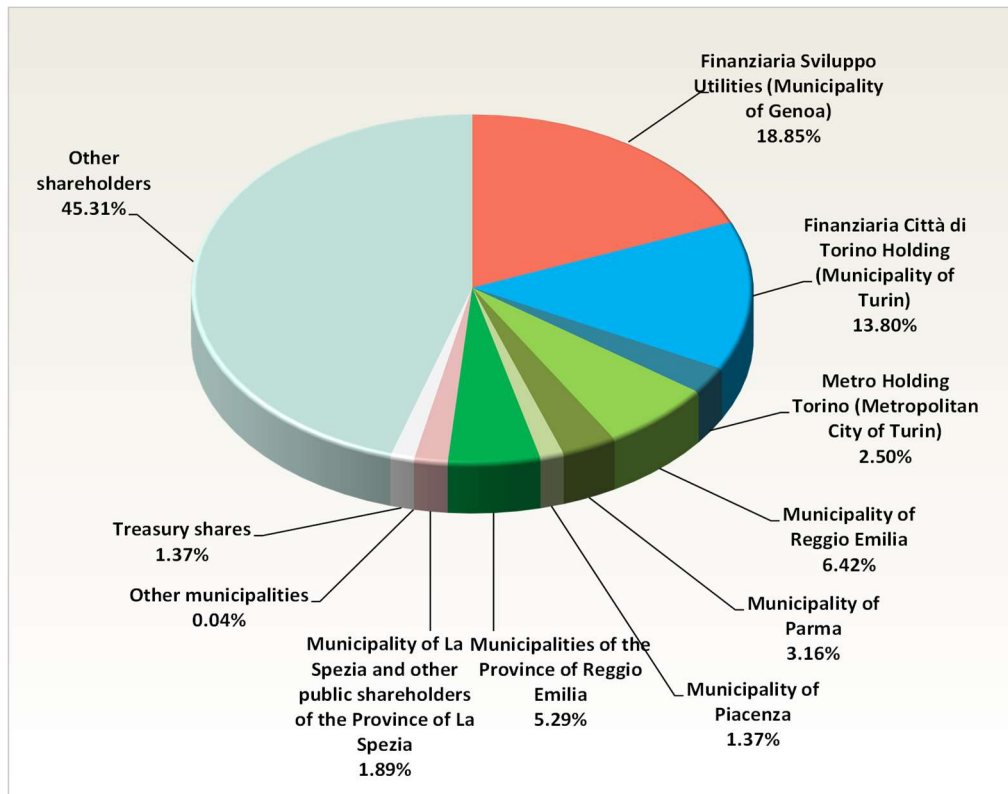
⁽¹⁶⁾ Appointed by the Shareholders' Meeting of 22 May 2019 for the 2021-2029 nine-year period.

SHAREHOLDING STRUCTURE

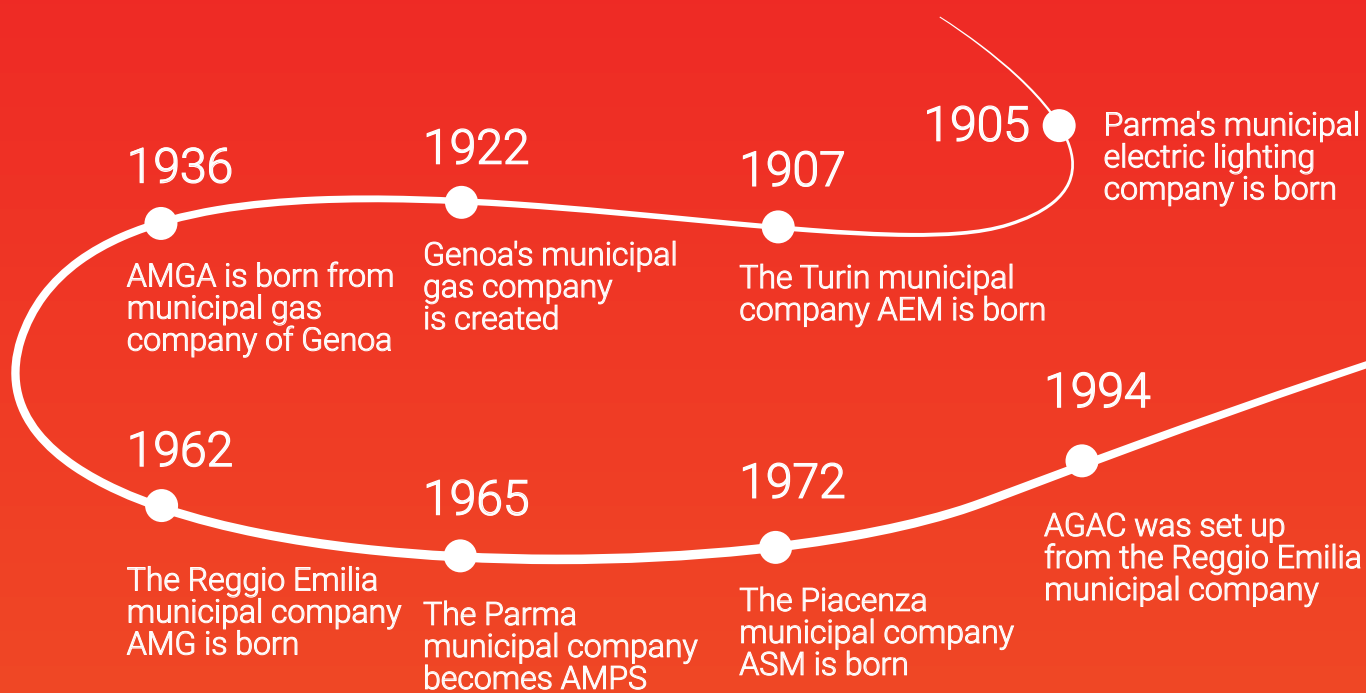
The Company's Share Capital amounts to € 1,300,931,377, fully paid up, and is made up of ordinary shares with a par value of € 1 each.

In April 2021, Metro Holding Torino S.r.l., fully controlled by the Metropolitan City of Turin, purchased approximately 2.5% of Iren's capital through a Reverse Accelerated Bookbuilding procedure for qualified investors and foreign institutional investors.

As at 30 June 2021, on the basis of the information available to the company, Iren's ownership structure was as illustrated below. At that date, Iren S.p.A. held 17,855,645 treasury shares, equal to 1.37% of the share capital, and that there were no private shareholders holding more than 3% of the share capital.



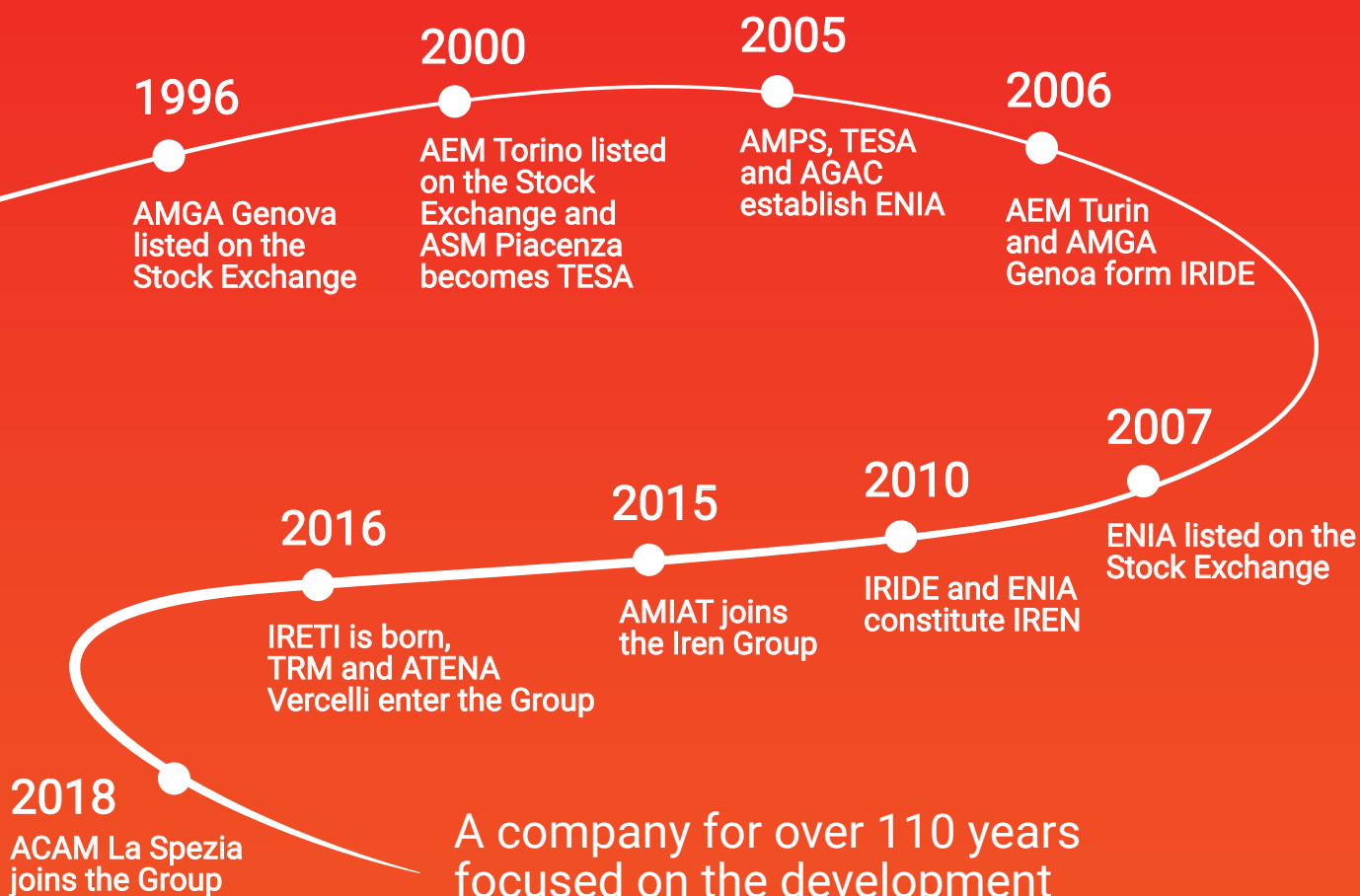
A century of history



Mission

To offer our customers and areas the best integrated management of energy, water and environmental resources, with innovative and sustainable solutions in order to create value over time.

For everyone, every day.



A company for over 110 years focused on the development of its territories and the needs of its customers.

Vision

Improving people's quality of life, making businesses more competitive. To look 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 build this future through innovative choices.

For everyone, every day.

KEY FIGURES OF THE IREN GROUP: HIGHLIGHTS FIRST HALF 2021

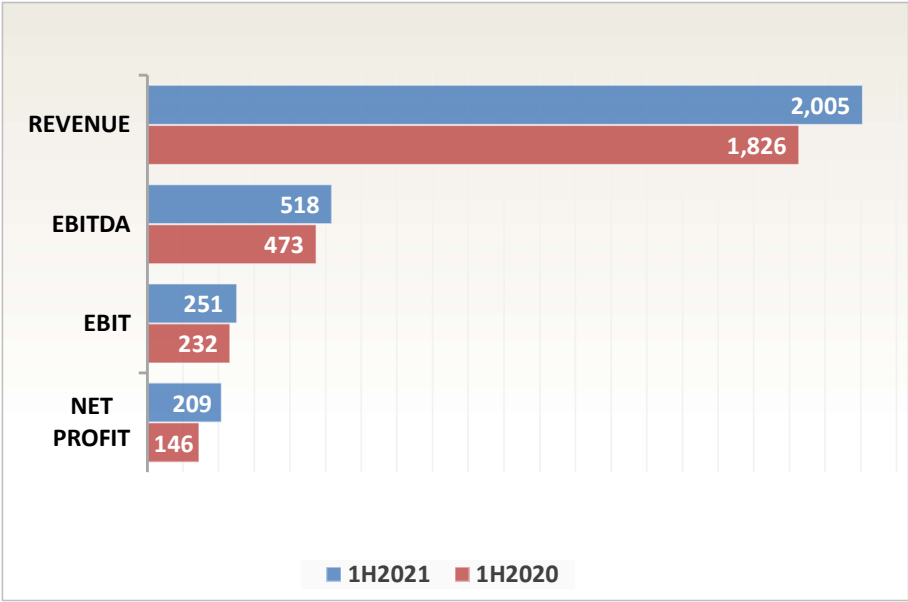
Economic data

millions of euro

	First half of 2021	First half of 2020 Restated	Changes %
Revenue	2,005.0	1,825.9	9.8
EBITDA	517.5	473.3	9.3
EBIT	251.1	231.9	8.3
Net Profit	208.5	145.6	43.2

EBITDA Margin (EBITDA/Revenue)	25.8%	25.9%
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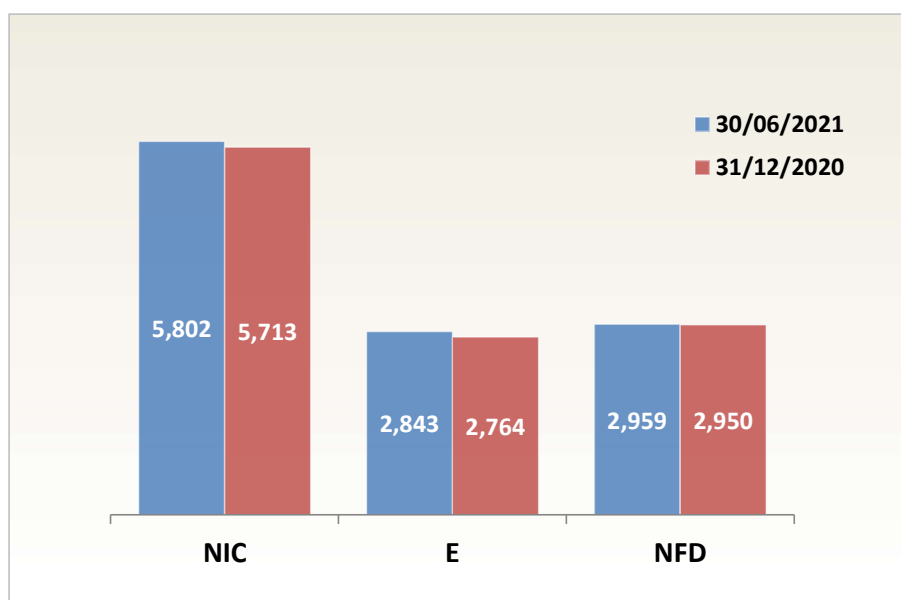
As required by IFRS 3, the income statement balances for the first half of 2020 have been restated to take into account, at the acquisition date, the effects arising from the completion, at the end of the 2020, of the purchase price allocation to the final fair value of the acquired assets and liabilities of the company Territorio e Risorse. For further information, please refer to the paragraph "Restatement of amounts" in the section "Content and form of the condensed consolidated interim report".



Financial position data

	millions of euro		
	30.06.2021	31.12.2020 Restated	Changes %
Net Invested Capital (NIC)	5,801.9	5,713.1	1.6
Equity (E)	2,843.3	2,763.5	2.9
Net Financial Debt (NFD)	2,958.6	2,949.6	0.3
Debt/Equity (Net Financial Debt/Equity)	1.04	1.07	

As required by IFRS 3, the financial position as at 31 December 2020 has been restated to take into account, at the acquisition date, the effects of updating the provisional fair value of the net assets of the Unieco Waste Management Division and the completion of the purchase price allocation to the final fair value of the acquired assets and liabilities of the district heating business unit of SEI Energia. For further information, please refer to the paragraph "Restatement of amounts" in the section "Content and structure of the condensed consolidated interim report".

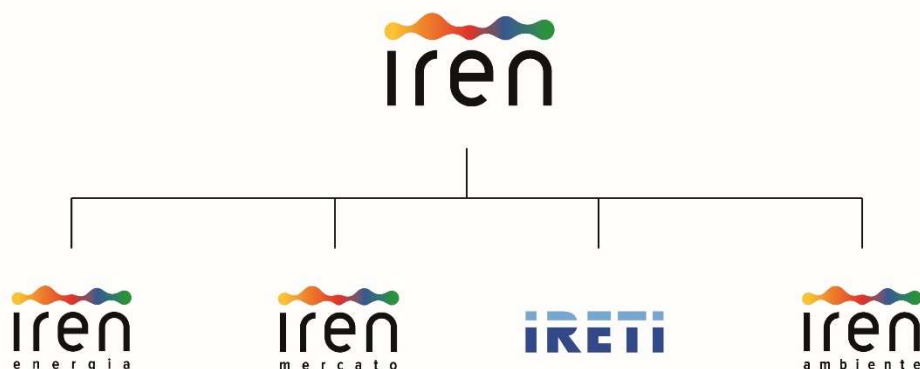


Technical and commercial figures

	First half of 2021	First half of 2020	Changes %
Electricity produced (GWh)	4,883.5	4,844.2	0.8
Thermal energy produced (GWht)	1,868.1	1,617.6	15.5
Electricity distributed (GWh)	1,807.8	1,745.5	3.6
Gas distributed (mln m ³)	777.3	679.3	14.4
Water sold (mln m ³)	86.1	87.5	(1.6)
Electricity sold (GWh)	8,511.3	8,640.4	(1.5)
Gas sold (mln m ³) (*)	1,424.9	1,462.8	(2.6)
District heating volume (mln m ³)	96.8	94.4	2.5
Waste treated (tonnes)	1,752,139	1,330,152	31.7

* of which for internal use: 839.7 mln m³ in the first half of 2021 (818.1 mln m³ in the first half of 2020, +2.6%)

THE CORPORATE STRUCTURE OF THE IREN GROUP



The Group is structured according to a model that envisages an industrial holding company (Iren S.p.A., with registered office in Reggio Emilia) and four companies responsible for the individual business lines, located in the main operating sites of Genoa, Parma, Piacenza, Reggio Emilia, Turin, Vercelli and La Spezia.

Iren S.p.A. is responsible for strategic, development, coordination and control activities, while the four Business Units (BUs) have been entrusted with the coordination and direction of the companies operating in their respective sectors:

- Networks, which works in the areas of integrated water cycle, gas distribution and electricity distribution;
- Waste Management, which carries out waste collection, urban hygiene, treatment and disposal activities;
- Energy, operating in the sectors of electric and thermal energy production, district heating, energy efficiency and technological services, public lighting and traffic light networks;
- Market, active in the sale of electricity, gas, heat for district heating and products and services in the field of home automation, energy saving and electric mobility for customers.

NETWORKS BU

Integrated water services

IRETI, head of the Business Unit, directly and through its operating subsidiaries Iren Acqua, Iren Acqua Tigullio, ASM Vercelli and ACAM Acque operates in the water supply, sewerage and waste-water treatment sectors in the provinces of Genoa, Savona, Piacenza, Parma, Reggio Emilia, Vercelli, La Spezia and in some other municipalities located in Piedmont and Lombardy. Overall, in the Ambiti Territoriali Ottimali (ATO, Optimal Territorial Areas) managed, the service is provided in 241 municipalities through a distribution network of 20,258 kilometres, serving almost 2.8 million residents. As regards waste water, the Networks BU manages a sewerage network spanning a total of 11,189 kilometres.

Gas distribution

IRETI distributes natural gas in 70 municipalities of the Provinces of Reggio Emilia, Parma and Piacenza, in the Municipality of Genoa and in 20 other municipalities nearby. In addition, through ASM Vercelli it distributes gas in the city of Vercelli, in 10 municipalities of the same province and in 3 other municipalities in Piedmont and Lombardy. The distribution network, made up of 8,115 kilometres of high, medium and low-pressure pipes, serves a catchment area of approximately 743 thousand redelivery points.

Electricity distribution

IRETI provides the electricity distribution service in the cities of Turin, Parma and, through ASM Vercelli, in the city of Vercelli with 7,795 kilometres of network in medium and low voltage, and a total of more than 724 thousand connected users.

WASTE MANAGEMENT BU

Iren Ambiente, the head of this Business Unit, operates in particular in the sectors of waste collection, treatment and disposal in the historic Emilia catchment area, as well as managing a number of treatment and disposal plants in the provinces of Turin and Savona.

In addition, the Waste Management BU operates along the waste chain through companies located across other regions: AMIAT, ASM Vercelli (controlled by IRETI), TRM and Territorio e Risorse in Piedmont and ACAM Ambiente, ReCos and Rigenera Materiali in Liguria. San Germano instead carries out its main activity as waste collector in several regions, including Sardinia, Lombardy, Piedmont and Emilia-Romagna.

Again with reference to the territories in which the Group operates, the companies in the “Unieco Waste Management Division” (Unieco Holding Ambiente “UHA” and other recently acquired subsidiaries and associates), located in several Italian regions (Emilia Romagna, Piedmont, Tuscany, Marche and Puglia), are active in all stages of the waste chain: from intermediation to treatment and disposal of both municipal and special waste and, through the associate SEI Toscana, also in the collection of municipal waste.

Finally, I.Blu is active in the sorting of plastic waste for recovery and recycling and in the treatment of plastic waste for the production of Blupolymer (polymer for civil uses) and Bluir (reducing agent for steel plants).

The Business Unit therefore carries out all the activities of the municipal waste management cycle (collection, sorting, recovery and disposal), with particular attention to sustainable development and environmental protection confirmed by increasing levels of separate waste collection; it also manages an important portfolio of customers to whom it provides all services for the disposal of special waste.

The Waste Management BU serves a total of 307 municipalities with more than 3.0 million residents in its operational areas. The integrated waste cycle is mainly made up of 3 waste-to-energy plants (TRM, owned by the company of the same name, in Turin, Polo Ambientale Integrato (PAI), in Parma, and Tecnoborgo, in Piacenza, these latter owned by Iren Ambiente, which heads the BU), 4 active landfills, 197 equipped technological stations and 46 treatment, selection, storage, recovery, biodigestion and composting plants.

As for the current year, as part of the streamlining of the Unieco Waste Management Division, Iren Ambiente acquired control of the associate Futura S.p.A., which has a mechanical biological treatment plant, was also finalised on 30 March 2021.

ENERGY BU

Production of electricity and heat

The Energy BU's installed capacity totals 2,858 MW of electricity and approximately 2,373 MW of heat. Specifically, it has 30 electricity production plants directly available to it: 22 hydroelectric (including 3 mini-hydro) plants, 7 thermoelectric cogeneration plants, and 1 conventional thermoelectric plant. The Business Unit has 85 photovoltaic production plants with an installed capacity of 20 MW.

With respect to thermoelectricity, at group level, more than 34% of the total thermal power serving district heating comes from the cogeneration plants owned by Iren Energia, the company that heads this BU and produces 80% of the heat for district heating. The share of thermal power related to conventional heat generators is 58%, with district heating production at 16%. The remainder is produced by group plants not belonging to the Business Unit (waste-to-energy plants).

Electricity produced by plants fuelled by environmentally-friendly sources (renewable or high-efficiency cogeneration), which account for 70% of the Group's plant portfolio, generate more than 73% of all output. 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.

In 2020, a contract was signed with Ansaldo for the expansion of the Turbigio thermoelectric power plant through the design, supply and construction of a new gas-fired combined-cycle power generation plant, which will increase the site's total installed capacity from the current 850 MW to about 1,280 MW. Iren Energia also oversees the scheduling and dispatching of the Group's electricity production, as well as operations on the electricity exchange.

District heating

Iren Energia has the most extensive district heating network in Italy (1,064 kilometres of double pipe network), with 701 kilometres in the Turin area, of which 76 kilometres in the municipalities of Grugliasco, Rivoli and Collegno (Metropolitan City of Turin), 10 in the Municipality of Genoa, 221 in the Municipality of Reggio Emilia, 103 in the Municipality of Parma and 29 in the Municipality of Piacenza; the total volume heated amounts to 96.8 million cubic metres.

Energy efficiency services

Through its subsidiary Iren Smart Solutions, the Energy BU operates in the energy efficiency sector, designing, implementing and managing measures to reduce energy consumption; it provides energy services and global services for residential buildings, private and public facilities as well as industrial and commercial complexes, guaranteeing the maintenance and management of heating, air-conditioning, plumbing, sanitary, refrigeration, electrical and solar panel systems, as well as their design and installation. Iren Smart Solutions also handles the development and management of public lighting and traffic lights and similar services.

MARKET BU

Sale of electricity

Iren Mercato operates, in the context of the free market, all over the country, with a higher concentration of customers in Central and Northern Italy, and handles the sale of the energy provided by the Group's various sources on the market of final customers and wholesalers. The main Group energy sources available for its activities are the thermoelectric and hydroelectric plants of Iren Energia. The company also operates as the operator of the "greater protection" service for retail customers on the electricity market in the city of Turin, the territory of Parma and the catchment area of the municipality of Sanremo (IM). The retail and small business electricity customers managed are over one million, distributed mainly in the traditionally served basin of Turin and Parma and in the other areas commercially covered by Iren Mercato and ATENA Trading.

Sale of natural gas

Retail gas customers managed by the Market Business Unit amounted to more than 907 thousand, mainly throughout the traditional Genoa, Turin and Emilia Romagna catchment area and surrounding development areas, Vercelli, the Campania region (through ATENA Trading and Salerno Energia Vendite, respectively), and La Spezia. 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.

Sale of heat through the district heating network

Iren Mercato manages the sale of heat, purchased from Iren Energia, to district heating customers in the municipalities of Turin, Nichelino, Beinasco (Turin area), Genoa, Reggio Emilia, Piacenza and Parma and the commercial development in the areas of new district heating installations.

Commercial offers complementary to the sale of commodities include the “New downstream” business line, for the marketing to retail customers of innovative products in the area of domotics, energy savings and the maintenance of domestic systems, and “IrenGO zero emissions”, the innovative offer for electric mobility aimed at private customers, companies and public bodies with the objective of reducing the environmental impact of travel. In this respect, the Group has also experimented with the potential and benefits of e-mobility by launching a series of internal initiatives such as the installation of charging infrastructures and the gradual introduction of electric vehicles. All the IrenGO internal and external electric mobility initiatives benefit from 100% green energy supply deriving from the Group’s hydroelectric plants.

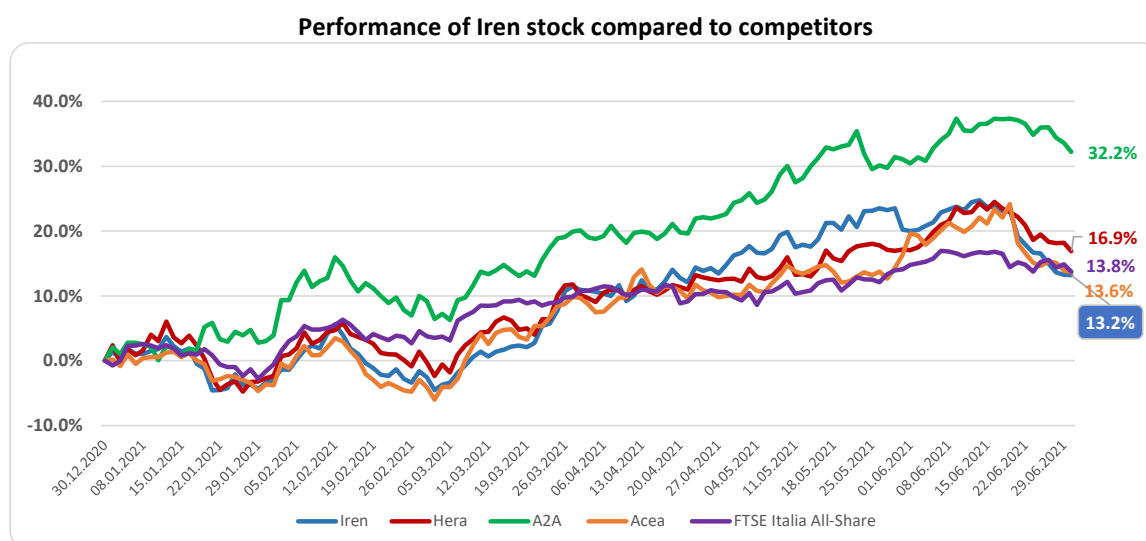
INFORMATION ON THE IREN STOCK IN THE FIRST HALF OF 2021

Iren stock performance on the stock exchange

In the first half of 2021, the main world stock exchange indices reported an upward trend, thanks above all to the launch of the vaccination campaign to combat the spread of Covid-19 and the resulting expectations of an economic recovery, supported in Europe by the Next Generation EU plan as well as by the expansionary monetary policies of the major central banks.

During the first half of 2021, the FTSE Italia All-Share (the main index of the Italian stock exchange) increased by 13.8%, driven by expectations of a recovery in the national economy.

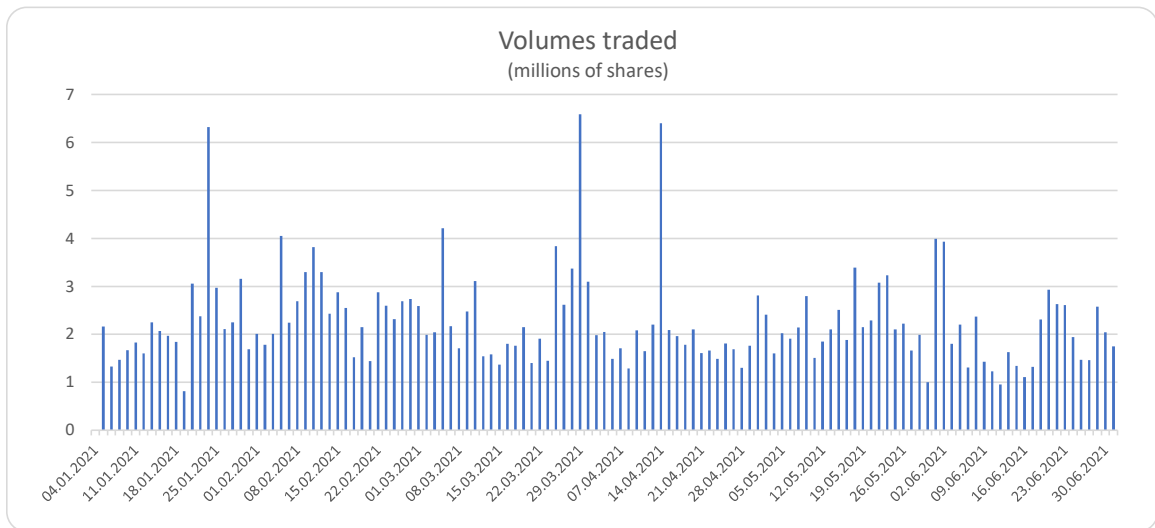
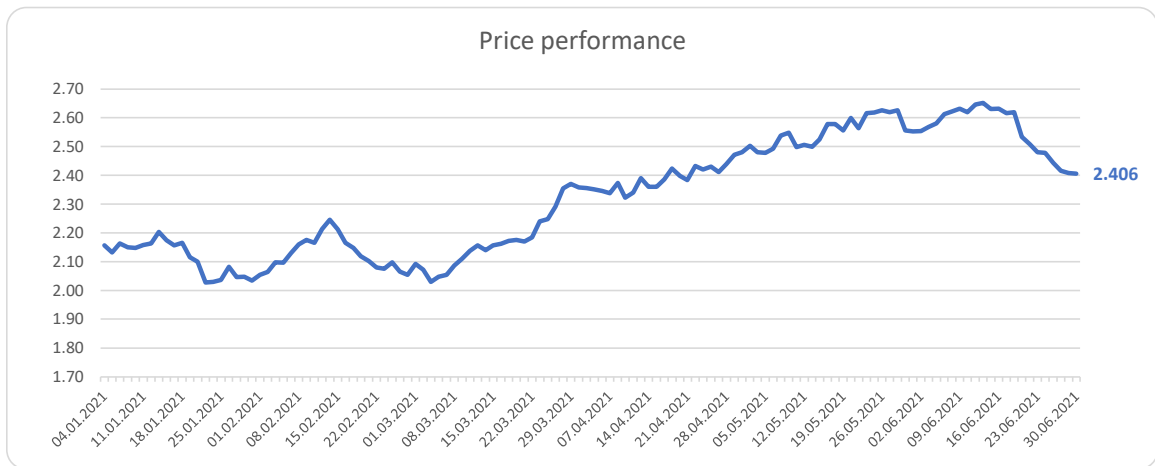
In this context, the shares of the four multi-utility companies performed in line with, if not better than, the FTSE Italia All-Share index, benefiting from the expected positive impact of European and national plans for economic recovery and infrastructure development, in the context of the great importance of environmental sustainability.



At 30 June 2021, the last trading day in the period, the price of IREN share stood at € 2.406 /share, up by 13.2% compared to the price at the beginning of the year, with average trading volumes during the period amounting to approximately 2.25 million units. The average price during the first half of 2021 was € 2.32 per share.

The high for the period was recorded on 14 June at € 2.652 per share, the low for the period, amounting to € 2.028 per share, was recorded on 21 January.

The two charts below show the Iren share price performance and volumes traded in the first half of 2021.



Share coverage

During the period the Iren Group was followed by eight brokers: Banca Akros, Banca IMI, Equita, Exane (sponsored research), Intermonte, Kepler Cheuvreux, Mediobanca and Stifel.

MARKET CONTEXT

THE MACROECONOMIC SCENARIO

The success of vaccination campaigns in advanced economies and the subsequent easing of containment measures have driven an upward revision of the short-term recovery outlook by leading macroeconomic forecasters. In its June report, the World Bank estimates a rebound for the world economy of 5.6% in 2021, 1.5 percentage points higher than last January's forecast. The recovery seems to be heterogeneous, also because of the lower accessibility to vaccines for less developed countries. The main risks are related to the response of vaccines to new variants of the virus and the ability of advanced countries to coordinate and cope with the needs of developing countries.

In the Eurozone, the recovery in GDP, more contained than in the United States and China, is expected to stop at +4.2% in 2021. The results for the first quarter of 2021 show signs of resilience for the countries in the Area.

The Italian GDP closed with a quarterly growth of 0.1%, thanks to the boost of added value from the construction sector (+4.8%) and the signs of recovery in industry (+1%)¹. Qualitative indicators for the second quarter confirm industry's positive contribution to the Italian economy, with industrial energy consumption in April and May at 2019 levels. According to ISTAT expectations, Italian GDP is expected to close 2021 with an increase of 4.7% compared to the previous year.

Household spending

The new restrictive measures have had a limited impact on the labour market, which is still protected by the layoff freeze and the availability of the redundancy fund. In the first quarter of 2021, the number of employed persons fell by 1.0% compared to the previous quarter, but the May data already show a realignment of the number of employed persons to end-2020 levels, although the recovery in recent months mainly concerned fixed-term contracts.

The unemployment rate ticked up to 10.5% in May, up 0.6 percentage points from December due to an increase in the labour force and roughly stable employment.

ISTAT data for the first quarter of 2021 report a quarterly decline in household consumption expenditure of 0.6% against a 2% increase in disposable income, with an increase in the propensity to save expected to continue in the short term.

Investments

In the first quarter of 2021, investment increased 3.7% from the previous quarter, taking it above 2019 levels. The recovery involved all sectors except for cultivated biological resources. The gradual removal of uncertainty on the recovery of demand, the favourable conditions of access to credit and the support of European funds under the PNRR support expectations on the dynamics of investment as a driving force for economic recovery.

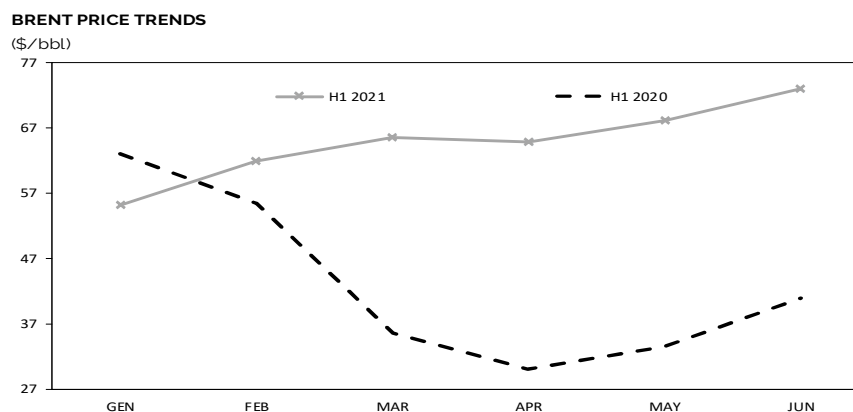
Exports

In the first three months of this year, imports and exports increased by 5% and 3%, respectively, compared to the previous quarter, leading to an 11% decline in the trade balance. The increase in exports in the first months of the year was sustained more by EU countries (+23%) than by non-EU countries (+18%). The recovery in foreign demand is expected to continue, driven by trade in goods.

¹ Source: ISTAT, June 2021 Edition.

THE OIL MARKET

Brent closed the first half of 2021 at an average price of \$64.6/bbl, up 50.5% from the first half of 2020. June's average price crossed the \$70/bbl mark, the highest level reached since late 2018, almost 50% above the December 2020 average value (\$49.7/bbl). The sharp rise in oil prices was driven by the combined effect of strengthening oil demand and continued production cuts by OPEC+ countries, resulting in a gradual decline in OECD reserves.



Source: REF-E processing

THE ELECTRICITY MARKET

Supply and demand

In the first half of 2021, net electricity production in Italy amounted to 133.7 TWh, an increase of 2.0% compared to the same period in 2020. At 154.8 TWh, 86.4% of demand for electricity was met by domestic production. At the national level, thermoelectric production amounted to 81.7 TWh, up 0.6% compared with the same period of 2020, and accounted for 61.1% of Italy's net production; production from hydroelectric sources was equal to 25.9 TWh (+11.2% on a trend basis), accounting for 19.4% of national production, while geothermal, wind and photovoltaic sources produced 26.1 TWh (-1.6% compared with 2020), 19.5% of total supply.

Consumption in the first half of 2021 was 7.9% higher than in the first half of last year. The recovery was mainly driven by the recovery of electricity demand in the North (+12.9%).

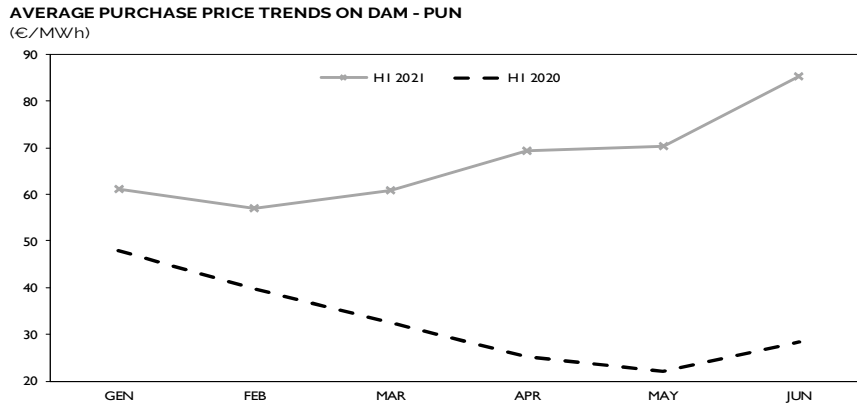
Cumulative electricity supply and demand (GWh and trend changes)

	up to 30/06/2021	up to 30/06/2020	Change %
Demand	154,832	143,482	7.9%
<i>North</i>	76,356	67,792	12.6%
<i>Central Italy</i>	43,993	41,948	4.9%
<i>South</i>	20,969	21,040	-0.3%
<i>Islands</i>	13,515	12,702	6.4%
Net production	133,712	131,026	2.0%
<i>Hydroelectric</i>	25,884	23,273	11.2%
<i>Thermoelectric</i>	81,713	81,210	0.6%
<i>Geothermoelectric</i>	2,746	2,845	-3.5%
<i>Wind and photovoltaic</i>	23,368	23,698	-1.4%
Pumping consumption	-1,353	-1,353	0.0%
Foreign balance	22,474	13,809	62.7%

Source: Terna

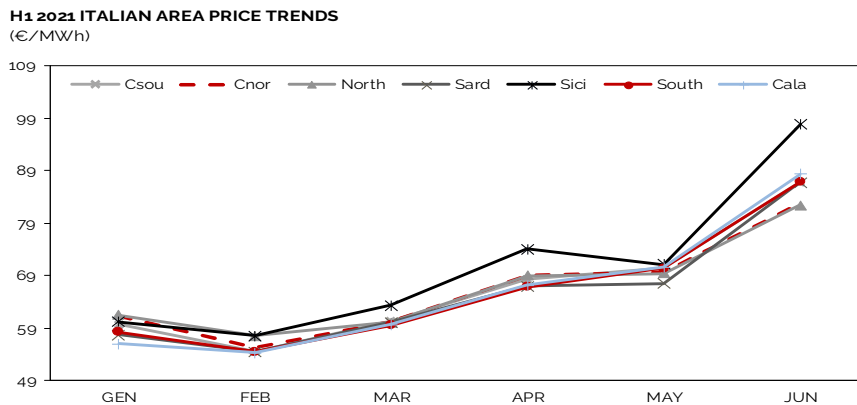
Day-Ahead Market (DAM) prices

In the first half of 2021, the national single price (PUN – “Prezzo Unico Nazionale”) rose by 107.6% compared with the same period in 2020 to an average of 66.90 €/MWh. The progressive growth brought the PUN to an average monthly value of 84.80 €/MWh in June (+207% compared to June 2020).



Source: REF-E processing on GME data

In the first half of 2021, zonal prices averaged 104% higher than the same period in 2020. The highest increase was recorded in the North (+112%), while the lowest was in Sicily (+96%). In absolute terms, zone prices averaged 65.63 €/MWh for Sardinia, 66.07 €/MWh for Calabria, 66.11 €/MWh for the South, 66.44 €/MWh for Central Italy, 66.69 €/MWh for the North and 66.77 €/MWh for Central and South Italy, with the highest price of 70.70 €/MWh in Sicily. The rebound in prices is in line with upward trends in the commodities and CO2 markets and in comparison with the lows reached in 2020 due to the first pandemic restrictions.

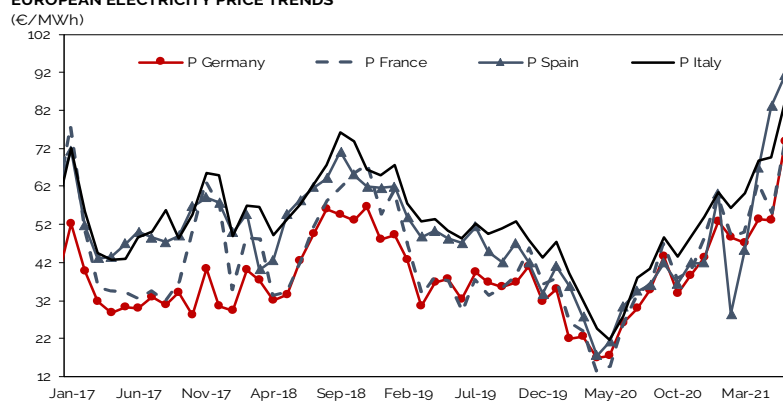


Source: REF-E processing on GME data

Trends in the main European power exchanges

In the first six months of 2021, the main European electricity exchanges recorded an average price of 58.68 €/MWh, up sharply on the previous year (+131%), with an average differential compared with the national single price (PUN) of 8.22 €/MWh (the differential recorded in the same period of 2020 was 6.85 €/MWh).

EUROPEAN ELECTRICITY PRICE TRENDS



Source: REF-E processing on European Power Exchange data

National single price (PUN) Baseload futures on EEX

The following table shows the comparison between the average futures prices of the products available for the first half of 2021 referred to the national single price (PUN). During the first half of the year, the trend in futures prices for the months of March to July was positive (with the only exception of the April product price contraction between January and February 2021). Futures prices for Q3 and Q4 2021 also gradually recovered, with an overall increase of 29.69 €/MWh and 29.32 €/MWh respectively. Calendar-22 followed the same positive trend as the quarterly products, reporting an increase of 17.69 €/MWh between the average quotations in January and June 2021.

Apr-21 Futures		May-21 Futures		June-21 Futures	
Monthly	€/MWh	Monthly	€/MWh	Monthly	€/MWh
May-21	65.6	Jun-21	69.5	Jul-21	81.4
Jun-21	64.0	Jun-21	75.2	Aug-21	89.3
Jul-21	66.5	Aug-21	82.7	Sep-21	86.8
Quarterly		Quarterly		Quarterly	
Q3 21	71.0	Q3 21	81.0	Q3 21	88.2
Q4 21	72.0	Q4 21	82.6	Q4 21	89.7
Q1 22	71.5	Q1 22	81.6	Q1 22	85.0
yearly		yearly		yearly	
Y1 22	63.7	Y1 22	70.8	Y1 22	73.7

Source: Reuters on EEX data

THE NATURAL GAS MARKET

Supply and demand

In the first half of 2021, gas consumption showed an important increase compared to the first half of 2020 (+11.2%). The increase in withdrawals affected all sectors: industrial and residential (+9.7% and +12.4%, respectively) and thermoelectric (+9.2%).

The increase in residential demand (+2.2 billion cubic meters compared with the first half of 2020) is attributable to the continuation of temperatures lower than the seasonal average, particularly in the spring months. The recovery in industrial consumption (+0.6 billion cubic meters) and thermoelectric consumption (+1.0 billion cubic meters), compared with the first half of 2020, was due to the easing of the restrictive measures imposed to counter the spread of the pandemic and the related economic recovery of production activities.

Uses and sources of natural gas in the first half of 2021 and comparison with previous years

GAS WITHDRAWN (Bln cm)*	2021	2020	2019	Change % 2021 vs 2020	Change % 2020 vs 2019
Industrial use	7.1	6.5	7.3	9.7%	-11.7%
Thermoelectric use	11.9	10.9	12.4	9.2%	-12.2%
Distribution plants	19.8	17.6	19.1	12.4%	-8.0%
Third party network and system consumption / line pack	1.0	0.8	1.3	24.4%	-36.8%
Total withdrawn	39.8	35.8	40.2	11.2%	-10.9%

*Cumulative values as at 30 June 2021, Source: REF-E elaborations on SRG data

GAS INPUT (bln cm)*	2021	2020	2019	Change % 2021 vs 2020	Change % 2020 vs 2019
Imports	36.7	33.6	37.4	9.1%	-10.0%
Domestic production	1.6	2.0	2.3	-18.6%	-16.3%
Storage	1.5	0.2	0.4	(**)	-56.1%
Total input (incl. storage)	39.8	35.8	40.2	11.2%	-10.9%
Maximum capacity	90.4	71.9	67.4		
Load Factor	41.0%	46.8%	55.5%		

*Cumulative values as at 30 June 2021, Source: REF-E elaborations on SRG data

**Change of more than 100%

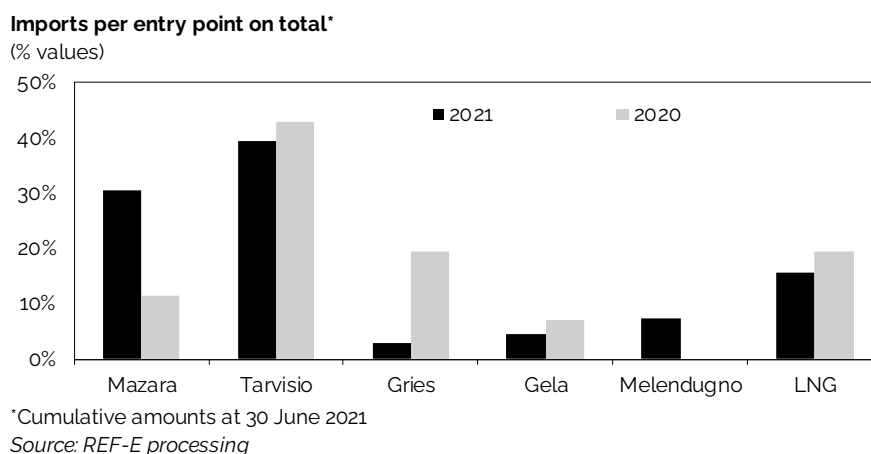
The value of stockpiles indicates net movement

As a result, imports from abroad increased compared to the same period last year (+9.1%). Natural gas flows from Algeria that flowed into Mazara del Vallo were up sharply (+190%), as the price of natural gas was made more attractive by the indexing of contracts to crude oil prices, which have a time lag of about six months (reflecting the low prices recorded in 2020). On the other hand, imports from Russia at Tarvisio were substantially stable (+1%). The strong recovery of Algerian gas more than offset reductions in imports at other entry points: -83% for arrivals from Northern Europe at Passo Gries and -30% for imports from Libya at Gela.

Since the beginning of the year, the new Trans Adriatic Pipeline (TAP) pipeline for the arrival of gas from Azerbaijan at the new entry point of Melendugno (Lecce) has been in operation, with average daily imports of 14 million sm³ and a total of approximately 2660 million sm³ during the first half of 2021.

There was also a decrease in the supply of LNG (-13% compared with the first half of 2020): the boom in spot demand by major importers in Asia at the beginning of the year (driven by colder-than-normal winter temperatures and production cutbacks caused mainly by the closure of strategic plants in the Pacific area)

channelled U.S. supply toward the Asian continent, limiting its availability throughout Europe and, consequently, in Italy.



Moreover, the downward trend in domestic production continued in the first half of 2021 (-18.6%), while, compared with the first half of 2020, there was a significant contribution from gas injected into the network through storage systems, the balance of which (supply +/- injections -) increased by about 1.3 billion cubic meters. The latter result is attributable to a very intense use of infrastructures compared with the same period last year, due mainly to the low level of LNG arrivals, high demand caused by prolonged cold weather and, consequently, high prices that favoured deliveries by storage operators after additions were made with prices at historic lows. As a result, the import mix for the first half of 2021 was characterised by a preponderance of Russian gas arriving in Tarvisio (39% of the total), followed by imports from Algeria (30%) and LNG (16%).

Wholesale gas prices

In the first half of 2021, wholesale natural gas prices showed increases on all major European hubs, both compared to the last quarter of 2020 and to the same period last year. This is mainly explained by a combination of the following factors:

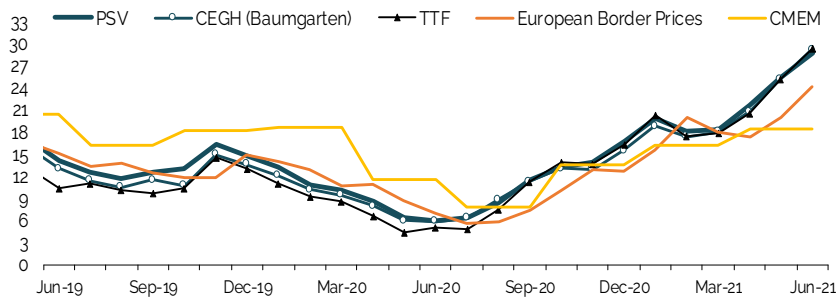
- strong recovery of Asian demand, and Chinese demand in particular, supported by the recovery of Asian economies and cold winter temperatures in the first quarter of 2021 and conversely by above-normal summer temperatures in the second quarter;
- limited availability of supply in the Pacific areas, due to the temporary closure of some strategic plants due to maintenance and breakdowns;
- spot LNG price spikes in Asia (driver of gas prices at major hubs) that reverberated on European markets;
- natural gas storage below the record levels recorded in 2020 whose injection rate is proceeding slowly, at 2018 levels.

The average price at the FTT was 21.8 €/MWh, an increase of 190% compared to the first half of 2020. The CEGH, the Austrian gas market, produced an average value of 21.6 €/MWh, corresponding to an increase of approximately 150% compared to the first half of 2020. The Italian PSV hub also gained around 140% of its value compared to the same period in 2020, registering an average price of 22 €/MWh and remaining at a premium to those in Northern Europe.

The spread between PSV and TTF decreased by approximately 1.40 €/MWh compared to the first half of 2020, from 1.66 €/MWh to 0.26 €/MWh on average, due to the greater influence of gas arrivals in Italy from the Mediterranean (Algeria and Azerbaijan) rather than from Northern Europe.

In the first half of 2021, gas prices at the border, still partially oil-linked, increased compared to the first six months of last year by around 80% (from € 10.7/MWh in the first half of 2020 to € 19.1/MWh in the first half of 2021).

Wholesale prices in Europe
(€/MWh)



Last data 30 June 2021
Source: REF-E processing

The so-called “CMEM component”, intended to reflect the cost of gas procurement in the price on the protected market, defined by ARERA on the basis of the forward quotations of the TTF, was 16.2 €/MWh in the first quarter of the year and 18.5 €/MWh in the second.

SIGNIFICANT EVENTS OF THE PERIOD

Acquisition of control of Futura

As part of the consolidation activities following the acquisition of the Unieco's Waste Management Division, on 30 March 2021, Iren Ambiente acquired from S.I.T. - Società Igiene Territorio S.p.A. a further stake in Futura S.p.A., representing 20% of the share capital. The purchase price amounts to € 1.1 million; following the transaction, the Iren Group holds a total stake of 60%.

Futura is based in Grosseto and operates a mechanical-biological treatment plant, with a composting section for the organic fraction.

Shareholders' Meeting

On 6 May 2021, the Ordinary Shareholders' Meeting of Iren S.p.A. approved the Company's financial statements at 31 December 2020 and the Directors' Report, and resolved to distribute a dividend of € 0.095 per ordinary share, confirming the proposal made by the Board of Directors. The Shareholders' Meeting also:

- approved the first section ("2021 remuneration policy") of the Report on the 2021 remuneration policy and on fees paid for 2020;
- made a favourable vote on the second section ("Fees paid for 2020") of the same Report;
- appointed the Board of Statutory Auditors and its Chairman for the three years 2021-2022-2023 and determined the annual remuneration to be paid to the same board's regular members.

Agreement between Iren S.p.A. and the Chief Executive Officer and General Manager, Massimiliano Bianco

On 29 May 2021 Iren S.p.A. and Massimiliano Bianco reached an agreement for the consensual termination of their relationship with the Company pursuant to which Mr Bianco relinquished, effective immediately, the positions of Director, Chief Executive Officer and General Manager, as well as all delegated powers and authority granted to him. The agreement also provides that the employment relationship as an Executive will continue until 30 November 2021 unless terminated earlier at the request of the same, in order to ensure a gradual internal handover.

The terms of the Agreement reached and the related economic conditions were approved by the Board of Directors of the Company held on the same date, after obtaining the favourable opinion of the Remuneration and Appointments Committee, also in the exercise of the functions envisaged by the regulations on transactions with related parties, as well as after preliminary investigation by the Company's Control, Risk and Sustainability Committee.

Appointment of the new Chief Executive Officer and General Manager, Gianni Vittorio Armani

Following on from the above, on 29 May the Board of Directors co-opted an engineer, Gianni Vittorio Armani as Director and appointed him as Chief Executive Officer and General Manager, with the conferment of the relative mandates and powers after verification of the requisites for assumption of the position. The Board also approved the economic-contractual conditions of the new fixed-term executive employment relationship, taking into account the preliminary investigation carried out by the Remuneration and Appointments Committee.

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

Income statement

IREN GROUP INCOME STATEMENT

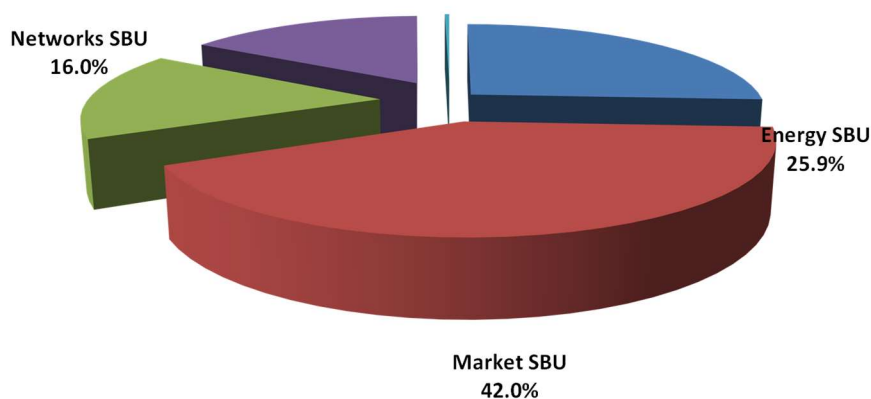
	thousands of euro		
	First half of 2021	First half of 2020 restated	Change %
Revenue			
Revenue from goods and services	1,966,711	1,742,825	12.8
Other income	38,293	83,063	(53.9)
Total revenue	2,005,004	1,825,888	9.8
Operating expenses			
Raw materials, consumables, supplies and goods	(562,083)	(508,371)	10.6
Services and use of third-party assets	(663,309)	(606,511)	9.4
Other operating expenses	(34,879)	(33,652)	3.6
Capitalised expenses for internal work	20,714	17,534	18.1
Personnel expense	(247,971)	(221,584)	11.9
Total operating expenses	(1,487,528)	(1,352,584)	10.0
GROSS OPERATING PROFIT (EBITDA)	517,476	473,304	9.3
Depreciation, amortisation, provisions and impairment losses			
Depreciation and amortisation	(228,507)	(206,508)	10.7
Provisions for impairment of receivables	(33,662)	(42,523)	(20.8)
Other provisions and impairment losses	(4,198)	7,626	(*)
Total depreciation, amortisation, provisions and impairment losses	(266,367)	(241,405)	10.3
OPERATING PROFIT (EBIT)	251,109	231,899	8.3
Financial income and expense			
Financial income	26,964	13,777	95.7
Financial expense	(41,603)	(44,144)	(5.8)
Total financial income and expense	(14,639)	(30,367)	(51.8)
Share of profit (loss) of associates accounted for using the equity method	6,276	5,143	22.0
Value adjustments on equity investments	-	(146)	(100.0)
Profit (loss) before tax	242,746	206,529	17.5
Income tax expense	(34,238)	(60,927)	(43.8)
Net profit (loss) from continuing operations	208,508	145,602	43.2
Net profit (loss) from discontinued operations	-	-	-
Net profit (loss) for the period	208,508	145,602	43.2
attributable to:			
- Profit (loss) for the period attributable to shareholders	193,238	132,674	45.6
- Profit (loss) for the period attributable to non-controlling interests	15,270	12,928	18.1

(*) Change of more than 100%

As required by IFRS 3, the income statement balances for the first half of 2020 have been restated to take into account, at the acquisition date, the effects arising from the completion, at the end of 2020, of the purchase price allocation to the final fair value of the acquired assets and liabilities of the company Territorio e Risorse. For further information, please refer to the paragraph "Restatement of amounts" in the section "Content and structure of the condensed consolidated interim report".

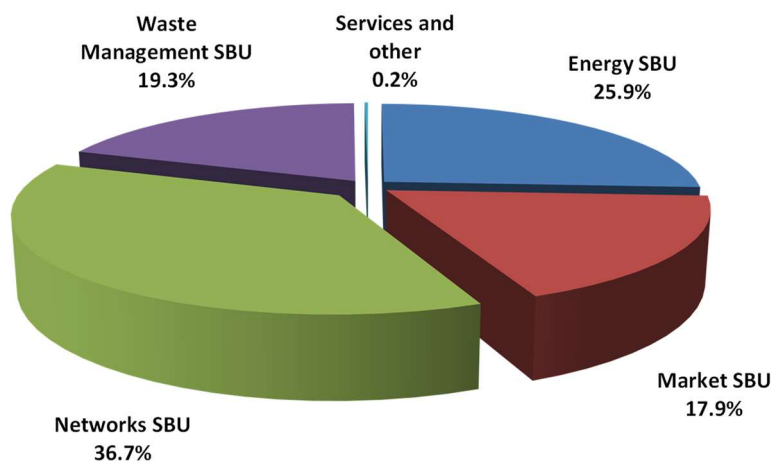
Revenue

At 30 June 2021, the Group reported revenue of € 2,005 million, up 9.8% from € 1,826 million in the first half of 2020. The increase in revenue, which was recorded in all business units, included approximately € 73 million as a result of the change in the scope of consolidation of the Waste Management area (relating to I.Blu and the companies of the Unieco Waste Management Division, acquired during the second half of 2020), higher energy revenue due to the increase in commodity prices and higher revenue of approximately € 33 million relating to the development of activities connected with energy requalification and building renovation favoured by recent tax breaks.



Gross Operating Profit (EBITDA)

EBITDA amounted to € 517.5 million, an increase of +9.3% compared to € 473.3 million in the corresponding period of 2020. The trend in this margin was characterised by an improvement in the energy scenario and a favourable climate trend. These factors, together with the operations to enlarge the scope of consolidation, made it possible to absorb the negative effects of the Covid-19 pandemic and the consequent periods of partial lockdown, amounting to € 6 million, which affected almost all of the first half of 2021, whereas in the previous year they only manifested themselves from March 2020. The improvement in margin affected all the group's business units: Waste Management (+23.6%), Market (+8.1%), Networks (+6.2%) and Energy (+5.4%).



Operating profit (EBIT)

The operating profit (EBIT) amounted to € 251.1 million, up +8.3% compared to € 231.9 million in the same period of 2020. Depreciation and amortisation increased by approximately € 22 million during the period, mainly due to the start-up of new investments and the expansion of the scope of consolidation, lower impairment losses on loans and receivables of approximately € 9 million, due to an improvement, compared to last year, in the estimate of the effects of the Covid-19 pandemic on expected losses, and lower releases of provisions of approximately € 12 million.

Financial income and expense

Net financial expense amounted to € 14.6 million; in the first half of 2020, the figure stood at € 30.4 million. The change was mainly due to higher financial income, which amounted to € 27.0 million (+13.2 million compared to the comparative period, when it stood at € 13.8 million). The increase is essentially related to a capital gain arising from the early settlement of financial liabilities.

Moreover, the decrease in the average cost of debt contributed to the decrease in financial expense, which stood at € 41.6 million compared to € 44.1 million in the first half of 2020 (-5.8%).

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

This item, amounting to + € 6.3 million (up from + € 5.1 million in the previous year), includes the pro-rata share of the results of the Group's associates and joint ventures, the most significant of which concern ASA, Aguas de San Pedro, Barricalla and ASTEA.

Value adjustments on equity investments

This item shows a nil balance in the first half of 2021. The amount in the comparative period related to the full impairment of an investee in the waste management sector.

Profit (loss) before tax

As a result of the above changes, the consolidated profit before tax amounted to € 242.7 million (€ 206.5 million in the first half of 2020).

Income tax expense

Income taxes for the period amounted to € 34.2 million (€ 60.9 million in the comparative period), with an effective tax rate of 14.1% (29.5% in the first half of 2020).

The latter is influenced by non-recurring tax income mainly related to the exercise of the option on the realignment of accounting and tax values pursuant to Decree 104/20 (Decree Law "August"). Not considering this income, the tax rate would have been approximately 29%.

Net profit (loss) for the period

As a result of the above, there was a profit for the period of € 208.5 million, a significant increase (+43.2%) compared to the result for the first half of 2020.

The figure is due to the profit pertaining to shareholders of € 193.2 million, while profit attributable to non-controlling interests was € 15.3 million.

Statement of Financial Position

RECLASSIFIED STATEMENT OF FINANCIAL POSITION OF IREN GROUP (1)

	thousands of euro		
	30.06.2021	31.12.2020 Restated	Change %
Non-current assets	6,624,484	6,582,382	0.6
Other non-current assets (liabilities)	(413,492)	(421,336)	(1.9)
Net Working Capital	24,966	42,155	(40.8)
Deferred tax assets (liabilities)	198,253	165,835	19.5
Provisions for risks and employee benefits	(633,473)	(657,188)	(3.6)
Assets (Liabilities) held for sale	1,144	1,285	(11.0)
Net invested capital	5,801,882	5,713,133	1.6
Equity	2,843,256	2,763,551	2.9
<i>Non-current financial assets</i>	(201,110)	(166,522)	20.8
<i>Non-current financial debt</i>	3,747,434	3,826,378	(2.1)
Non-current net financial debt	3,546,324	3,659,856	(3.1)
<i>Current financial assets</i>	(861,694)	(985,525)	(12.6)
<i>Current financial debt</i>	273,996	275,251	(0.5)
Current net financial debt	(587,698)	(710,274)	(17.3)
Net financial debt	2,958,626	2,949,582	0.3
Own funds and net financial debt	5,801,882	5,713,133	1.6

As required by IFRS 3, the financial position as at 31 December 2020 has been restated to take into account, at the acquisition date, the effects of updating the provisional fair value of the net assets of the Unieco Waste Management Division and the completion of the purchase price allocation to the final fair value of the acquired assets and liabilities of the district heating business unit of SEI Energia. For further information, please refer to the paragraph "Restatement of amounts" in the section "Content and form of the condensed consolidated interim report".

(1) For a reconciliation of the reclassified statement of financial position with the IFRS statement of financial position, please refer to the relevant annex to the Condensed Consolidated Interim Report.

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

Non-current assets at 30 June 2021 amounted to € 6,624.5 million, up compared to 31 December 2020, when they were € 6,582.4 million. The increase (+ € 42.1 million) was mainly due to the effect of the following:

- investments in property, plant and equipment and intangible assets (+ € 279.1 million) and depreciation and amortisation (- € 228.5 million) in the period;
- assets arising from the acquisition of Futura, relating to a mechanical biological waste treatment plant (€ 27.6 million);
- the change in the portfolio of CO2 emission rights (-38.8 million).

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

The increase in Other non-current assets (liabilities) (equal to € 7.8 million) is mainly due to the assets accrued from the tax authorities for energy efficiency measures in buildings.

Net working capital decreased by € 17.2 million to € 25.0 million from € 42.2 million at the end of 2020. The change is due to the estimate of taxes for the period net of advances paid and commercial items.

The balance of net deferred tax assets increased to € 198.3 million (€ 165.8 million at 31 December 2020) mainly due to the release of the deferred tax liabilities following the aforementioned tax realignment of the higher values of assets recognised in the financial statements.

The “Provisions for Risks and Employee Benefits” amounted to € 633.5 million and decreased by € 23.7 million compared to 31 December 2020, mainly due to the fulfilment of the obligation related to CO2 emission rights for the period.

Equity amounted to € 2,843.3 million, compared with € 2,763.5 million at 31 December 2020 (€ +79.8 million). The change refers to the net result (+ € 208.5 million), dividends distributed (- € 149.3 million), the performance of the cash flow hedge reserve linked to interest rate and commodities hedging derivatives (+ € 24.1 million), the change in the scope of consolidation (+ € 1.6 million), the purchase of treasury shares (- € 4.1 million) and other minor changes (- € 1.0 million).

Net financial debt at 30 June 2021 amounted to € 2,958.6 million, substantially in line with the figure at 31 December 2020 (€ 2,949.6 million). For more details please see the analysis of the statement of cash flows presented below.

CASH FLOW STATEMENT OF THE IREN GROUP

Change in net financial debt

The statement below details the movements in the Group's net financial debt that occurred in the period.

	thousands of euro		
	First half of 2021	First half of 2020 restated	Change %
Opening Net Financial (debt)	(2,949,582)	(2,706,127)	9.0
Profit (loss) for the period	208,509	145,602	43.2
Adjustments for non-financial movements	374,632	365,053	2.6
Utilisations of employee benefits	(4,918)	(3,393)	44.9
Utilisations of provisions for risks and other charges	(9,714)	(9,907)	(1.9)
Change in other non-current assets and liabilities	(12,214)	556	(*)
Other changes in capital	(67,113)	(17,235)	(*)
Taxes paid	(42,630)	-	-
Cash flows from operating activities before changes in NWC	446,552	480,676	(7.1)
Cash flows from changes in NWC	(40,220)	(220,100)	(81.7)
Operating cash flow	406,332	260,576	55.9
Investments in property, plant and equipment and intangible assets	(279,130)	(254,153)	9.8
Investments in financial assets	(1,701)	-	-
Proceeds from the sale of investments and changes in assets held for sale	2,743	(1,394)	(*)
Changes in consolidation scope	(24,862)	(24,353)	2.1
Dividends received	1,604	1,372	16.9
Total cash flows from/(used in) investing activities	(301,346)	(278,528)	8.2
Free cash flow	104,986	(17,952)	(*)
Cash flows of equity capital	(153,374)	(155,730)	(1.5)
Other changes	39,344	(39,255)	(*)
Change in net financial (debt)	(9,044)	(212,937)	(95.8)
Closing Net financial (debt)	(2,958,626)	(2,919,064)	1.4

(*) Change of more than 100%

As required by IFRS 3, the presentation of cash flows for the first half of 2020 has been restated to take into account, at the acquisition date, the effects of the completion, at the end of 2020, of the purchase price allocation to the final fair value of the acquired assets and liabilities of the company Territorio e Risorse. For further information, please refer to the paragraph "Restatement of amounts" in the section "Content and structure of the condensed consolidated interim report".

The increase in financial debt derives from the following:

- operating cash flow of + € 406.3 million, a significant improvement over the first half of 2020, when it stood at + € 260.6 million, mainly due to the change in net working capital;
- cash flow from investing activities of - € 301.3 million, higher than the - € 278.5 million in the comparative period, which includes technical investments for the period (€ 279.1 million) and the consideration paid and debt assumed for the acquisition of Futura (€ 24.9 million);
- a cash flow from equity of - € 153.4 million (- € 155.7 million in the first half of 2020), representing dividends paid and purchases of treasury shares in the period;
- the item other changes, amounting to + € 39.3 million (- € 39.3 million in the first half of 2020), which mainly includes the change in the fair value of interest rate and commodity risk hedging derivatives and the recognition of liabilities related to new lease agreements falling under the scope of IFRS 16.

Finally, the statement of cash flows prepared according to the model expressed as a change in cash and cash equivalents is presented at the beginning of the section "Condensed Consolidated Interim Report and Notes at 30 June 2021".

SEGMENT REPORTING

The Iren Group identifies the following business segments:

- Networks (Electricity distribution networks, Gas distribution networks, Integrated Water Service)
- Waste Management (Waste collection, treatment and disposal)
- Energy (hydroelectric production and other renewable sources, combined heat and power, district heating networks, thermoelectric production, energy efficiency services, public lighting, global services, heat management)
- Market (Sale of electricity, gas, heat and other customer services)
- Other services (Laboratories, Telecommunications and other minor).

These operating segments are reported on pursuant to IFRS 8, which requires the disclosure about operating segments to 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 operating segments presented and commented on below, revenue and expense referring to general activities were fully allocated to the segments 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 following tables show the Net Invested Capital compared to 31 December 2020 restated and the income statements for the first half of 2021 (up to the operating profit) by operating segment, compared to the figures for the first half of 2020 restated. At 30 June 2021, non-regulated activities contributed 34% to EBITDA (32% at 30 June 2020), regulated activities accounted for 44% (down from 47% in the corresponding period of 2020), and semi-regulated activities contributed 22% (21% in the first half of 2020).

Statement of financial position by operating segment at 30 June 2021

millions of euro

	Networks	Waste Management	Energy	Market	Other services	Non-allocable	Total
Non-current assets	3,016	1,260	1,918	215	35	180	6,624
Net Working Capital	(13)	132	(15)	(79)	-	-	25
Other non-current assets and liabilities	(604)	(201)	(62)	(20)	39	-	(848)
Net invested capital (NIC)	2,399	1,191	1,841	116	74	180	5,802
Equity							2,843
Net financial debt							2,959
Own funds and net financial debt							5,802

Reclassified statement of financial position by business segment as restated as at 31 December 2020

millions of euro

	Networks	Waste Management	Energy	Market	Other services	Non-allocable	Total
Non-current assets	2,980	1,234	1,953	202	35	178	6,582
Net Working Capital	(101)	63	20	58	2	-	42
Other non-current assets and liabilities	(601)	(207)	(86)	(18)	1	-	(911)
Net invested capital (NIC)	2,278	1,090	1,887	242	38	178	5,713
Equity							2,763
Net financial debt							2,950
Own funds and net financial debt							5,713

Income statement by operating segment for the first half of 2021

millions of euro

	Networks	Waste Management	Energy	Market	Other services	Non-allocable	Total
Total revenue and income	442	436	715	1,159	10	(757)	2,005
Total operating expenses	(252)	(337)	(581)	(1,066)	(9)	757	(1,488)
Gross Operating Profit (EBITDA)	190	99	134	93	1	-	517
Net amortisation, depreciation and impairment losses	(96)	(55)	(70)	(44)	(1)	-	(266)
Operating profit (EBIT)	94	44	64	49	-	-	251

Income statement by business segment for the first half of 2020 restated

millions of euro

	Networks	Waste Management	Energy	Market	Other services	Non-allocable	Total
Total revenue and income	490	350	551	1,073	11	(648)	1,826
Total operating expenses	(311)	(270)	(424)	(987)	(10)	648	(1,353)
Gross Operating Profit (EBITDA)	179	80	127	86	1	-	473
Net amortisation, depreciation and impairment losses	(98)	(48)	(54)	(41)	(1)	-	(241)
Operating profit (EBIT)	81	32	73	45	-	-	232

Networks SBU

At 30 June 2021, the Networks business sector, which includes the Gas Distribution, Electricity and Integrated Water Service businesses, reported revenues of € 441.5 million, down 9.8% compared to € 489.5 million in the first half of 2020. This contraction can be attributed to the provision of the Ministry of Ecological Transition (MITE), which reduced the quantitative obligation related to Energy Efficiency Certificates (TEEs) by a decree dated 21 May 2021. In fact, the application of the decree resulted in lower costs due to the reduction in the number of securities purchased to meet the obligation and, at the same time, a related reduction in revenues due to the lower number of securities delivered to the CSEA, with positive effects on the income statement for the period due to the difference between revenues and costs.

EBITDA amounted to € 189.8 million, an increase of +6.2% compared to € 178.7 million in the first half of 2020, while EBIT amounted to € 93.5 million, an increase of +15.1% compared to € 81.2 million in the same period of 2020. The trend in the operating profit (EBIT) was characterised by higher amortisation and depreciation of approximately € 5 million, related to increased investments, lower allocations to the provision for restoration of third-party assets of approximately € 1 million and lower allocations to the provision for bad debts of approximately € 5 million, as a result of an improvement, compared to last year, in the estimate of the effects of the Covid-19 pandemic on expected losses.

		First half of 2021	First half of 2020	Changes %
Revenue	€/mln	441.5	489.5	(9.8)
Gross Operating Profit (EBITDA)	€/mln	189.8	178.7	6.2
<i>EBITDA Margin</i>		<i>43.0%</i>	<i>36.5%</i>	
	<i>from Electricity Networks</i>	€/mln 40.1	37.1	8.0
	<i>from Gas Networks</i>	€/mln 45.8	41.1	11.4
	<i>from Integrated Water Service</i>	€/mln 103.9	100.5	3.4
Operating Profit (EBIT)	€/mln	93.5	81.2	15.1
Investments	€/mln	113.8	116.7	(2.4)
	<i>in Electricity Networks</i>	€/mln 22.5	21.7	3.8
	<i>in Gas Networks</i>	€/mln 19.1	21.6	(11.5)
	<i>in Integrated Water Service</i>	€/mln 70.3	72.2	(2.6)
	<i>Generic Services</i>	€/mln 1.9	1.2	58.5
Electricity distributed	GWh	1,807.8	1,745.5	3.6
Gas distributed	Mm3	777.3	679.3	14.4
Water sold	Mm3	86.1	87.5	(1.6)

Networks SBU - Electricity

EBITDA amounted to € 40.1 million, up 8% compared to € 37.1 million in the first half of 2020. The improvement can be attributed to higher tariff revenue related to the increase in tariff capital employed (RAB), which more than offset contingent liabilities and higher operating costs.

During the period, investments of € 22.5 million were made, up 3.8% from € 21.7 million in the first half of 2020, relating mainly to connections, line resilience activities and the construction of new cabins and LV/MV lines.

Networks SBU - Gas Distribution

The gross operating profit (EBITDA) amounted to € 45.8 million, an increase of +11.4% compared to € 41.1 million in the first half of 2020. The increase in the margin is due to the growth in tariff revenue and the effect of some extraordinary items referring to previous years and no longer repeatable, in particular relating to energy efficiency certificates (TEE).

Investments for the period amounted to € 19.1 million, down 11.5% compared with € 21.6 million in the first half of 2020, and involved upgrading the network to cathodic protection and installing electronic meters.

Networks SBU - Water Cycle

The gross operating profit (EBITDA) for the period amounted to € 103.9 million, up +3.4% compared to € 100.5 million in the first half of 2020. The increase in the margin is due to the constraint on tariff revenue (VRG) as a result of the increase in tariff invested capital (RAB) and an insurance reimbursement related to damage to plants, partially absorbed by an increase in operating costs.

Investments for the period amounted to € 70.3 million, down 2.6% compared to € 72.2 million in the first half of 2020, and related to the construction, development and extraordinary maintenance of distribution networks and plants and the sewerage network, as well as the installation of metering units, mainly for remote reading.

In addition, investments of € 1.9 million were made in information systems and the development of electric mobility across the three businesses.

Waste Management SBU

At 30 June 2021, the segment's revenue amounted to € 436.5 million, an increase of +24.6% compared to € 350.3 million in the first half of 2020. The increase is essentially due to the enlarged scope of consolidation related to the I.Blu companies (+ € 23 million approx.) consolidated from August 2020 and the companies of the Environment Division of the UNIECO group (+ € 50 million approx.) consolidated from 1 November 2020. Energy revenue was also up (about € 10 million), as was revenue from collection services, while revenue from disposal and special waste brokerage and management was down.

		First half year 2021	First half year 2020 restated	Changes %
Revenue	€/mln	436.5	350.3	24.6
Gross Operating Profit (EBITDA)	€/mln	99.5	80.5	23.6
<i>EBITDA Margin</i>		22.9%	23.0%	
Operating Profit (EBIT)	€/mln	44.4	31.9	39.0
Investments	€/mln	47.3	28.0	69.0
Electricity sold	GWh	246.6	257.8	(4.4)
Thermal energy produced	GWht	169.7	110.5	53.5
Waste managed	tonnes	1,752,139	1,330,152	31.7
Emilia area sorted waste collection	%	78.4	77.8	0.8
Piedmont area sorted waste collection	%	56.9	55.2	3.1
Liguria area sorted waste collection	%	72.9	71.7	1.7

The segment's EBITDA amounted to € 99.5 million, an increase of +23.6% compared to € 80.5 million in the first half of 2020. The increase in the margin is mainly due to the change in the scope of consolidation, amounting to approximately € 18.0 million. Margins on collection, the sale of recovered materials and energy revenues also improved as a result of the increase in the sale price of electricity (the national single price rose by over 100% compared to the previous year), offset by reductions in special waste brokerage and disposal, the latter due to reduced use of the Collegno landfill.

The operating profit amounted to € 44.4 million, an increase of +39% compared to € 31.9 million in the first half of 2020. The positive trend in EBITDA was partially absorbed by an increase in depreciation and amortisation of about € 8 million, influenced by the change in the scope of consolidation, partly offset by lower provisions of about € 1 million.

Investments for the period amounted to € 47.3 million, up sharply from € 28.0 million in the first half of 2020. Investments relate to the purchase of collection vehicles and equipment and the construction of plants; in particular, the paper and plastic sorting plant in Parma and the TMB plant in Genoa Scarpino. Also contributing to the growth in investments was the change in the scope of consolidation, in particular of the company I.Blu.

Energy SBU

At 30 June 2021, the revenues of the Energy SBU, which includes power generation, heat management, public lighting and energy efficiency activities, amounted to € 715.1 million, an increase of +29.7% compared with the € 551.2 million of the first half of 2020. The increase in revenue is mainly due to the increase in electricity selling prices (+ € 125 million approx.) resulting from the improvement in the energy scenario. Revenue from heat production also increased slightly, with an increase in volumes due to a more favourable heating season, partially offset by a drop in sales prices. There was also an increase in revenue from energy efficiency activities (about € 33 million).

		First half of 2021	First half of 2020	Changes %
Revenue	€/mln	715.1	551.2	29.7
Gross Operating Profit (EBITDA)	€/mln	134.2	127.3	5.4
<i>EBITDA Margin</i>		18.8%	23.1%	
Operating Profit (EBIT)	€/mln	64.6	73.3	(11.9)
Investments	€/mln	68.1	65.6	3.8
Electricity produced	GWh	4,612.5	4,560.4	1.1
<i>from hydroelectric and other renewable sources</i>	GWh	734.8	762.1	(3.6)
<i>from cogeneration sources</i>	GWh	3,130.9	2,831.5	10.6
<i>from thermoelectric sources</i>	GWh	746.8	966.8	(22.8)
Heat produced	GWht	1,698.4	1,507.1	12.7
<i>from cogeneration sources</i>	GWht	1,456.7	1,230.4	18.4
<i>from non-cogeneration sources</i>	GWht	241.8	276.7	(12.6)
District heating volumes	Mm3	96.8	94.4	2.6

At 30 June 2021, electricity generated totalled 4,612.5 GWh, up 1.1% from 4,560.4 GWh in the first half of 2020.

Total thermoelectric production amounted to 3,877.7 GWh, of which 3,130.9 GWh from cogeneration sources, up by +10.6% compared to 2,831.5 GWh in the first half of 2020, and 746.8 GWh from conventional thermoelectric sources, down by -22.8% compared to 966.8 GWh in the corresponding period of 2020. Production from renewable sources amounted to 734.8 GWh, of which 724.1 GWh came from hydroelectric sources and, marginally, approximately 10.7 GWh from other renewables (photovoltaic); overall, production decreased by -3.6% compared to 762.1 GWh in the first half of 2020. Heat production in the period amounted to 1,698.4 GWh, an increase of +12.7% compared to 1,507.1 GWh in the first half of 2020. Overall, district heating volumes amounted to 96.8 Mm³, an increase of 2.6% compared to 94.4 Mm³ in the first half of 2020.

EBITDA amounted to € 134.2 million, up +5.4% compared to € 127.3 million in the first half of 2020. The first half of 2021 was characterised by a national electricity demand of 154.9 TWh, an increase of +7.9% compared to 143.5 TWh in the corresponding period of 2020. The national single price for the period also averaged € 66.9/MWh, up 107.6% from € 32.2/MWh in the first half of 2020. The improvement in the energy scenario, characterised by rising demand and sharply higher prices for electric power, enabled the Energy SBU to improve its margins, despite the persistence of a partial lockdown that characterised most of the first half of 2021. This improvement was partially offset by a worsening of the unit marginality of heat production due to a sudden and progressive increase in the cost of gas, despite the greater quantities produced thanks to a more favourable thermal seasonality. The improvement compared to the first half of 2020 is also supported by the energy efficiency sector which, thanks to energy requalification and building renovation activities, favoured by recent tax breaks (e.g. facade bonus and 110% superbonus), shows an improvement of approximately +€ 4 million.

The operating profit (EBIT) amounted to € 64.6 million, down 11.9% compared to € 73.3 million in the same period of 2020, which benefited from the release of provisions of approximately € 16 million. Depreciation and amortisation increased by € 2 million.

Investments for the period amounted to € 68.1 million, up 3.8% compared to € 65.6 million in the corresponding period of 2020. The main investments in the period included the repowering of the Turbigio thermoelectric power plant and the development of district heating networks.

Market SBU

At 30 June 2021, the segment's revenue amounted to € 1,159.0 million, an increase of +8.1% compared to € 1,072.6 million in the first half of 2020. The increase in turnover, +€ 87 million approx., is due to the trend in the energy scenario with rising prices for both gas and electricity, and is minimally offset by lower quantities sold.

The gross operating profit (EBITDA) amounted to € 92.5 million, up 8.1% compared to € 85.6 million in the first half of 2020. The increase is due mainly to an improvement in unit margins on gas sales, which, in addition to higher prices, benefited in particular from the use of storage facilities in 2020. On the other hand, the margin on sales of electric power was down.

The operating profit (EBIT) amounted to € 48.5 million, an improvement of +7.4% compared to € 45.1 million in the first half of 2020. During the period, there was higher depreciation and amortisation of around € 6 million and lower provisions for bad debts of around € 2 million, as a result of an improvement, compared to last year, in the estimate of the effects of the Covid-19 pandemic on expected losses.

		First half of 2021	First half year 2020	Changes %	
Revenue	€/mln	1,159.0	1,072.6	8.1	
Gross Operating Profit (EBITDA)	€/mln	92.5	85.6	8.1	
EBITDA Margin		8.0%	8.0%		
	<i>from Electricity</i>	€/mln	21.2	30.6	(30.7)
	<i>from Gas</i>	€/mln	67.6	52.8	28.0
	<i>from Heat and other services</i>	€/mln	3.7	2.2	69.5
Operating Profit (EBIT)	€/mln	48.5	45.1	7.4	
Investments		32.3	22.9	40.7	
Electricity Sold	GWh	3,397.9	3,611.4	(5.9)	
Gas Purchased	Mm3	1,535.6	1,597.3	(3.9)	
	<i>Gas sold by the Group</i>	Mm3	585.2	644.8	(9.2)
	<i>Gas for internal use</i>	Mm3	839.7	818.1	2.6
	<i>Gas in storage</i>	Mm3	110.7	134.5	(17.7)

Sale of electricity

Volumes of electricity sold on the free market, net of pumping, grid losses, dedicated withdrawals and including imbalances, amounted to 3,215.9 GWh, down 5.9% compared with 3,417.8 GWh in the first half of 2020.

The downturn in the free market affected all customer sectors, with contractions for the sectors most affected by the pandemic ranging from -10% (retail) to -12.5% (small business). Only the Business segment, with sales of 1,423.3 GWh, saw an increase (+1.9%) compared with 1,396.5 GWh in the first half of 2020. Sales on the protected market amounted to 182 GWh, down 6% compared to 193.6 GWh in the first half of 2020.

The gross operating profit (EBITDA) from the sale of electricity amounted to € 21.2 million, down 30.7% from € 30.6 million in the first half of 2020. The contraction is due to the decrease in the unit margin related to the unfavourable energy scenario, despite an improvement in the PCV and PCR components. Higher commercial and customer management costs compared to the corresponding period in 2020 also contributed to the margin deterioration.

The table below shows the quantities sold by class of customer sector:

	First half year 2021	First half year 2020	Changes %
<i>Business</i>	1,423.3	1,396.5	1.9
<i>Small business</i>	264.7	302.4	(12.5)
<i>Retail</i>	697.1	774.9	(10.0)
<i>Wholesalers</i>	830.8	944.0	(12.0)
Free market	3,215.9	3,417.8	(5.9)
Protected market	182.0	193.6	(6.0)
<i>Imbalances, pumping, network leaks and dedicated withdrawals</i>	200.1	205.8	(2.8)
Total Electricity sold	3,598.1	3,817.2	(5.7)

Sale of Natural Gas

Purchased volumes amounted to 1,535.6 Mm³, down 3.9% compared with 1,597.3 Mm³ in the first half of 2020. Gas sold by the Group amounted to 585.2 Mm³, down 9.2% compared to 644.8 Mm³ in the first half of 2020. The retail and small business sectors show sales down compared to 2020 and this despite a more favourable heating season due to the effects of the pandemic. The Trading segment declined sharply, while the Business segment improved compared to the same period of 2020.

The gas used for internal consumption within the Group amounted to 839.7 Mm³, an increase of 2.6% compared to 818.1 Mm³ in the first half of 2020.

The gross operating profit (EBITDA) from gas sales amounted to € 67.6 million, an improvement of +28% compared to € 52.8 million in the first half of 2020.

In addition to the aforementioned improvement in the energy scenario, the increase in margins benefits from the profitable management of stockpiles carried out during 2020, in a particularly favourable price phase, and from an increase in the retail share component (QVD). The improvement in the first margin was partially absorbed by the higher operating costs incurred, with particular reference to customer management.

Sale of heat and other services

The sale of heat and other services showed a gross operating profit (EBITDA) of € 3.7 million, up from € 2.2 million in the first half of 2020. The change is attributable to the commercial activities of Iren Plus and Iren GO, the two business lines marketing goods and services ancillary to the supply of commodities and electric mobility.

Investments for the period by the Market SBU amounted to € 32.3 million, up 40.7% compared to € 22.9 million in the same period of 2020.

Services and other

At 30 June 2021, revenues from the sector comprising the activities of analysis laboratories, telecommunications and other minor activities amounted to € 9.6 million, down 10.3% compared to € 10.7 million in the first half of 2020.

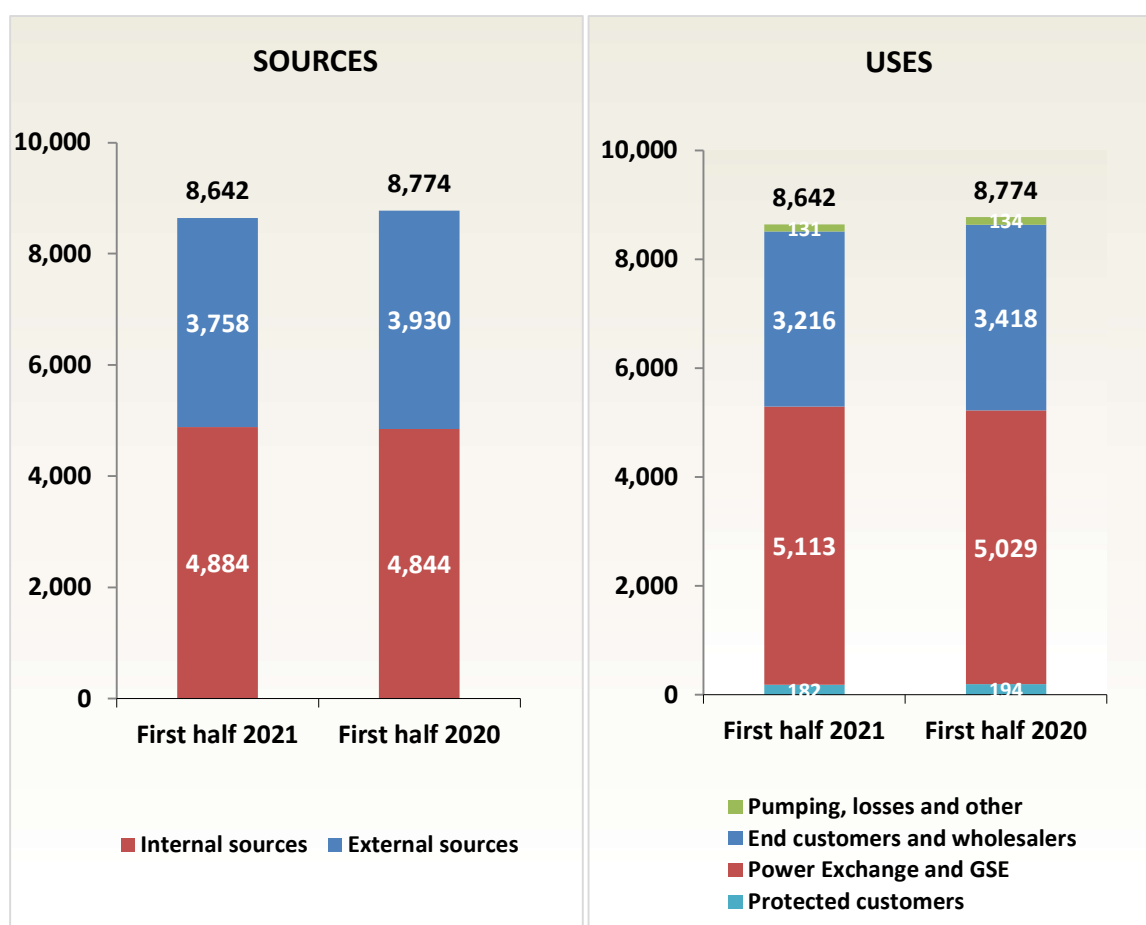
		First half of 2021	First half of 2020	Changes %
Revenue	€/mln	9.6	10.7	(10.3)
Gross Operating Profit (EBITDA)	€/mln	1.2	1.1	4.7
<i>EBITDA Margin</i>		<i>12.5%</i>	<i>10.7%</i>	
Operating Profit (EBIT)	€/mln	0.2	0.3	(42.8)
Investments	€/mln	17.7	21.0	(15.9)

The gross operating profit (EBITDA) amounted to € 1.2 million. Capital expenditure for the period amounted to € 17.7 million (€ 21.0 million in the first half of 2020) and related mainly to information systems, vehicles and buildings.

ENERGY BALANCES

Electricity balance

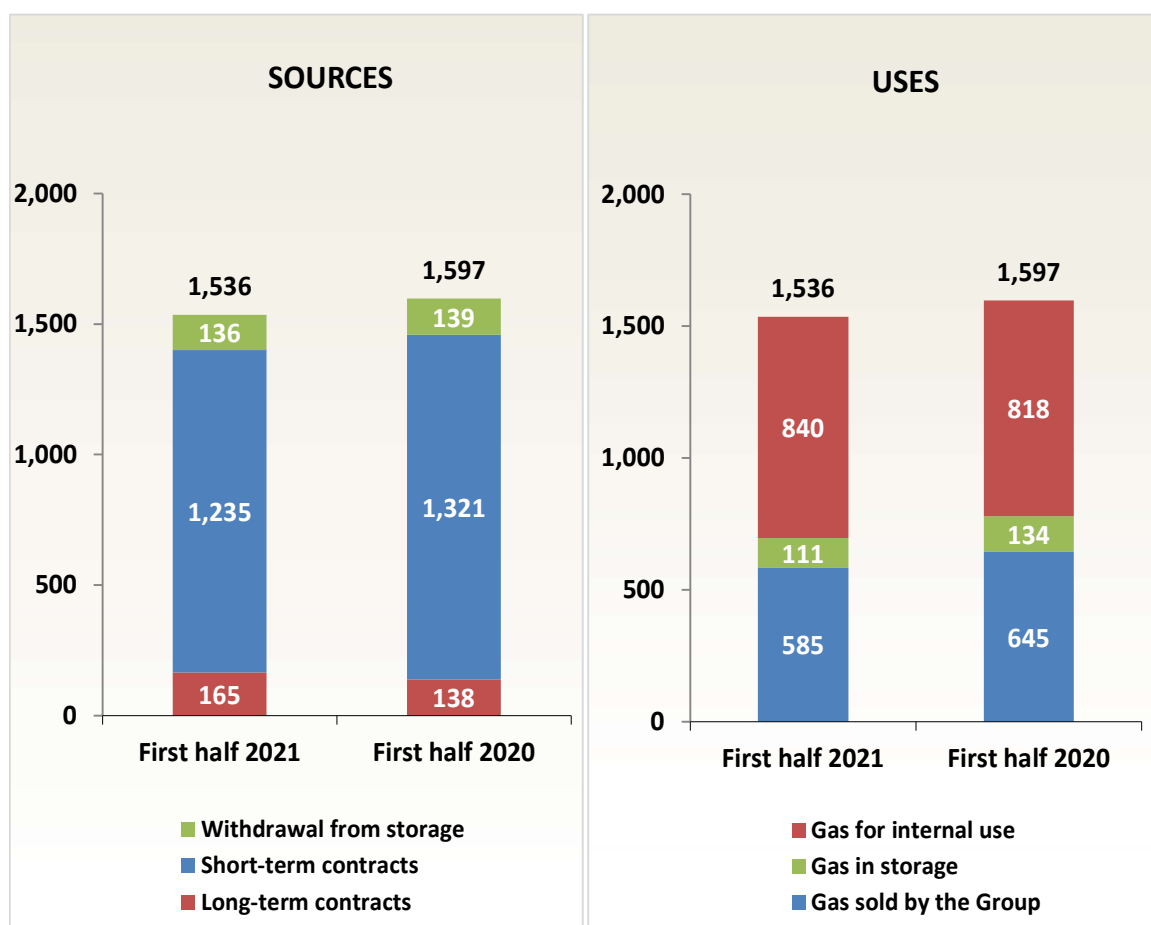
GWh	First half of 2021	First half of 2020	Changes %
SOURCES			
Group's gross production	4,883.5	4,844.2	0.8
<i>a) Hydroelectric and other renewables</i>	734.8	762.1	(3.6)
<i>b) Cogeneration</i>	3,130.9	2,831.5	10.6
<i>c) Thermoelectric</i>	746.8	966.8	(22.8)
<i>d) Production from WTE plants and landfills</i>	271.0	283.9	(4.5)
Purchases from Acquirente Unico [Single Buyer]	200.6	213.7	(6.1)
Energy purchased on the Power exchange	3,317.7	3,493.9	(5.0)
Energy purchased from wholesalers and imports	240.1	222.5	7.9
Total Sources	8,641.9	8,774.4	(1.5)
USES			
Sales to protected customers	182.0	193.6	(6.0)
Sales to end customers and wholesalers	3,215.9	3,417.8	(5.9)
Sales on the Power exchange	5,113.4	5,029.0	1.7
Pumping, distribution losses and other	130.6	134.0	(2.5)
Total Uses	8,641.9	8,774.4	(1.5)



Gas balance

Millions of m ³	First half of 2021	First half of 2020	Changes %
SOURCES			
Long-term contracts	165.0	137.5	20.0
Short- and medium-term contracts	1,234.9	1,321.1	(6.5)
Withdrawals from storage	135.7	138.7	(2.2)
Total Sources	1,535.6	1,597.3	(3.9)
USES			
Gas sold by the Group	585.2	644.8	(9.2)
Gas for internal use (1)	839.7	818.1	2.6
Gas in storage	110.7	134.4	(17.6)
Total Uses	1,535.6	1,597.3	(3.9)

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



EVENTS AFTER THE REPORTING PERIOD AND BUSINESS OUTLOOK

Completion of the acquisition of Sidiren

On 16 July 2021, Iren Mercato completed the transaction for the acquisition of 100% of the share capital of Sidiren S.r.l., a newly established company to which the business unit from Sidigas.com S.r.l., operating in the sale of natural gas, was previously contributed. Sidiren holds a portfolio of approximately 52 thousand gas clients, of which approximately 95% are domestic, distributed in 78 municipalities prevalently in the Province of Avellino. Sidiren reported a normalised 2020 EBITDA of approximately € 3.8 million, calculated taking into account the distorting effects of intercompany items and non-recurring expense.

BUSINESS OUTLOOK

Thanks to its resilient business profile with respect to the Covid-19 pandemic, the Group will continue to pursue its growth path as set out in the latest business plan, which envisages significant investments, especially in the Networks and Waste Management business units, in addition to investments to increase electricity generation capacity and extend the district heating network. The major investment plan in the regulated sectors to improve the quality of the service is therefore confirmed, especially in the water sector, where the goal is to increase purification capacity and reduce the use of the water resource.

With regard to the Waste Management sector, investments will be aimed at building the waste treatment and disposal plants envisaged in the business plan and at increasing the quality of the service by extending door-to-door collection and punctual pricing. These investments, together with the complete coverage of the waste cycle (from collection to treatment and disposal), will make it possible to increase the volume of recycled waste.

Therefore, Iren confirms sustainability as one of the main strategic pillars thanks to investments in projects linked to the Multi-circle Economy, equal to about 60% of the investments foreseen in the industrial plan, such as material recovery, efficient use and protection of resources, combined with energy efficiency and reduction of emissions.

Regarding the energy activities, in 2021 the Group implemented a series of actions that will mitigate the impact of volatility in energy prices thanks to a hedging policy implemented with the goal of stabilising margins.

The Group therefore confirms its development prospects thanks to the aforementioned investments capable of sustaining organic growth, to a strong development of activities concerning energy efficiency projects in buildings (taking advantage of the opportunities offered by current legislation) and to a complete integration of the recently acquired companies in the Environment sector.

Moreover, the prospects for profitability growth take into account the continued existence of the Covid-19 emergency, which the Group estimates, assuming that the Covid-19 health emergency is resolved in the second half of the year, will have a negative effect on EBITDA of no more than € 10 million, additional provisions for bad debts of € 10 million (already set aside in the first half of the year) and a partial re-absorption of € 20 million of the negative effect on net working capital recorded in 2020.

FINANCIAL MANAGEMENT

General framework

During the first half of 2021, the short-term part of the rate curve stabilised at a new low after the turbulence experienced in 2020 following the COVID-19 pandemic events. On the other hand, the medium/long-term part of the rates showed an upward movement.

The European Central Bank has kept rates unchanged since March 2016, with the reference rate at 0%. An examination of the trend in the six-month Euribor rate shows that the rate, deeply negative, is stable and equal to -0.5%.

Fixed interest rates, reflected in the IRS values, returned to positive levels for long-term maturities following the upward movement.

Activities performed

During the first half of 2021, work continued to consolidate the Iren Group's financial structure. Changes in financial requirements are monitored through careful financial planning, which makes it possible to forecast the need for new financial resources, taking into account the repayments of outstanding loans, changes in debt, 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 the companies, entails centralising with the parent treasury management, non-current loans and financial risk monitoring and management. Iren has relationships with leading Italian and international banks, for the purpose of procuring the types of loans best suited to its needs and at the best market conditions.

Turning to the transactions carried out in the first half of 2021, in March, a first tranche of € 5 million of the CEB (Council of Europe Development Bank) loan for a total of € 80 million, signed in May 2020, was drawn down to support the water infrastructure investment plan.

Direct loans with EIB and CEB, with a duration of up to 16 years, not used and available, amount to a total of € 295 million.

In order to optimise the Group's financial structure, the Liability Management activity continued and in June the voluntary early repayment of loans in the parent's portfolio was carried out for a total of € 35 million.

Within the Group, the consolidated exposure decreased due to the early repayment of Scarlino Energia loans for € 14 million; the loans of Futura, which has been consolidated since the end of March 2021, for € 21 million, together with the related interest rate risk hedges, were all extinguished early in April.

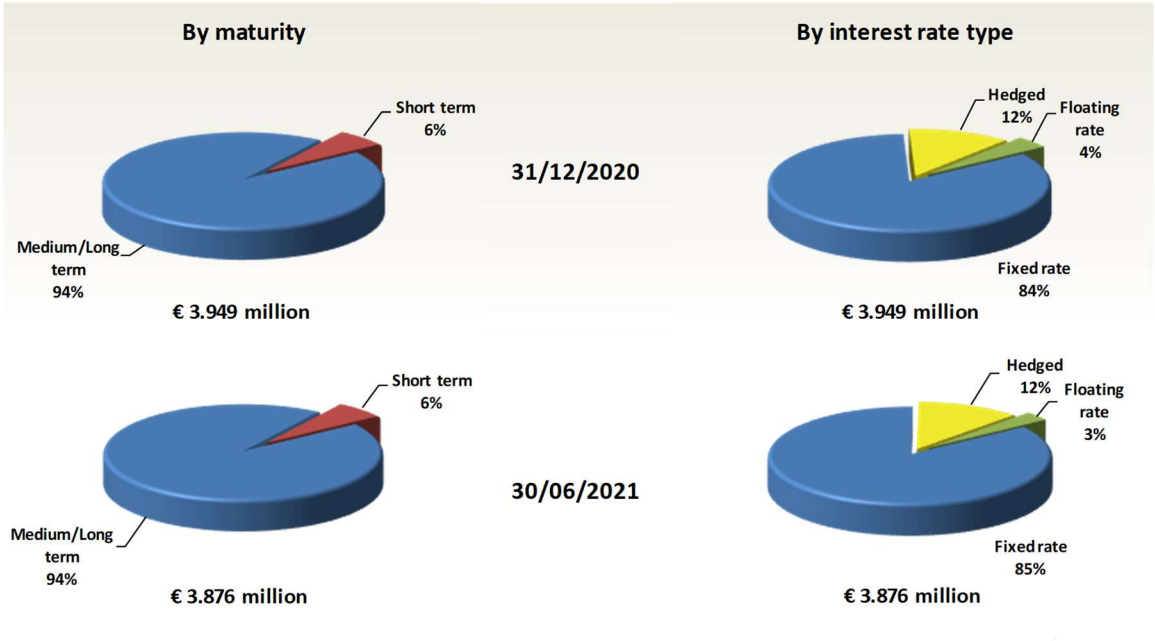
Financial debt from loans, which does not include financial liabilities recognised in accordance with IFRS 16, consisted of 15% loans and 85% bonds at the end of the period.

As regards financial risks, the Iren Group is exposed to various types of risk, 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. No new Interest Rate Swap contracts were entered into during the period.

At the end of the period, the portion of floating rate debt not hedged by derivatives was equal to 3% of financial debt from loans, in line with the Iren Group's objective of maintaining adequate protection from 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 financial debt from loans by maturity and rate type, compared with the situation at 31 December 2020, is shown in the chart below.



Rating

On 20 October 2020, Fitch confirmed the BBB rating with stable outlook for Iren and its senior unsecured issues. The rating is based mainly on the update of the business plan to 2025 which, in continuity with previous years, confirms the prevalence of regulated and semi-regulated activities (approximately 70% of the gross operating profit -EBITDA- at the end of the Plan). Fitch rates the company as well positioned within its benchmark indices, with limited impact from the negative market effects of the coronavirus emergency. Supporting the Group's liquidity profile and the rating, Iren has the aforementioned non-current credit lines agreed and available but not used for € 295 million and committed credit lines of the sustainability-linked revolving credit facility (RCF) which amounted to € 150 million at period-end and which are in addition to current liquid assets.

RISKS AND UNCERTAINTIES

The management of corporate risks is an essential component of the Internal Control System of the Corporate Governance of a listed company, and the Corporate Governance Code of Borsa Italiana assigns specific responsibilities on 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;
- Cyber Risks, linked to potential events related to the loss of confidentiality, integrity or availability of data or information after which negative impacts on the organisation, people, operations or other organisations could derive;
- Risks from Climate Change, which include risks due to the transition to a low carbon dioxide emission economy (transition risks) and risks of a physical nature (physical risks) that may result from catastrophic environmental events (acute risks) or from medium- to long-term changes in environmental patterns (chronic risks);
- Tax risks, associated with potential transactions carried out in violation of tax regulations or in contrast with the principles or purposes of the tax system;
- 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 Commissions to manage the financial, IT, credit and energy risks.

The Cyber Risk Policy, the Climate Change Risk Policy and the Tax Control Model were adopted in 2020 following the approval of the Board of Directors of Iren S.p.A., while the other Policies have undergone some substantial revisions over time to adapt them to the current organisational models and to the evolution of risk factors.

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

The Risk Management department, reporting to the Deputy Chairman, is present within the Group. This department is entrusted, among other things, with the following activities:

- verification of the integrated management of the Group's Enterprise Risk Management (ERM) System: methodological approach, definition of policies and monitoring of the System;
- stipulation and management of insurance policies in conjunction with the CEO and with the support of the “Procurement, Logistics and Services”, and “Legal Affairs” functions.

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, exchange rate 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 has been 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.

b) Foreign exchange risk

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

c) Interest rate risk

The Iren Group is exposed to interest rate fluctuations especially with regard to the measurement of borrowing costs. 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 Commission 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 waste management 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 assets may not be honoured on maturity with a consequent increase in their age and in insolvency up to an increase in assets 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 credit 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 and with credit insurance for the reseller customer segment.

An interest-bearing guarantee deposit is required for some types of services (water, natural gas, highly-protected 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.

The loss allowances impairment reflect, carefully and in accordance with the current legislation (applying the IFRS 9 method), 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 data. With regard to the emergency caused by Covid-19, and with specific reference to the possible liquidity difficulties of the customer portfolio linked to the measures to combat the pandemic and the regulatory and corporate measures to mitigate the economic and social impact of the crisis, the Group adjusted the loss allowance based on the assessment of expected losses.

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. The assessment of credit risk is carried out both at the consolidated level and at the level of Business Units and companies.

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 foreign exchange rate risk, characteristic of oil-based commodities, exists, but is attenuated thanks to the development of the European organised markets that trade the gas commodity in Euro 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 plans the production of its plants and purchases and sales of energy and natural, in relation to both volumes and price formulae. The objective is to achieve sufficient margin stability through a policy of indexed purchases and sales that achieves a high degree of natural hedging, with adequate recourse to futures and spot markets.

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

4. CLIMATE CHANGE RISKS

The Iren Group has included in the Enterprise Risk Management system a Policy dedicated to climate change risks, which are becoming increasingly important for organisations. Moreover, they affect the health of the planet, with estimates of significant effects already in the medium term. All companies, and in particular those operating in significantly exposed sectors such as Iren Group, must consider the analysis of climate change risks as an emerging and determining factor in the definition of their medium and long-term strategies.

The adoption of the Climate Change Risk Policy and the resulting risk analysis and management represent the preliminary steps in a process that will enable the Group to provide even more effective control over its exposure to damaging events and the opportunities that the external context and its changes may offer, as well as its contribution to the achievement of sustainable development objectives defined at national and international level.

The document was written with the extensive involvement of the corporate functions involved in managing these risks, with which a Climate Change Risk Assessment was carried out, based on which the Policy was subsequently drafted.

The Policy analyses and regulates, focusing on the applicability to the individual Business Units, the risk factors related to climate change, distinguishing between physical risks and transition risks. Physical risks resulting from changing climatic conditions are divided into acute physical risks - if related to local catastrophic natural events (e.g. floods, heat waves, fires, etc.) - and chronic physical risks - if related to long-term climate change (e.g. global warming, rising sea levels, water scarcity, etc.).

The transition to a low-carbon economy could entail extensive changes in government policies, with consequent regulatory, technological and market changes. Depending on the nature and speed of these changes, transition risks may result in a varying level of financial and reputational risk for the Group.

The Policy requires the presence of a Risk Commission to periodically review the Group's risk profile, defining and proposing updates to the Chief Executive Officer on strategies for managing risk classes and reporting any emerging critical issues to the Executive Bodies. The document also includes guidelines for reporting, aimed at ensuring transparency of information to all stakeholders.

5. TAX RISKS

Iren Group has adopted a specific internal control and tax risk management system, understood as the risk of operating in violation of tax regulations or in contrast with the principles or aims of the legal system.

The tax risk control and management system, the "Tax Control Framework" (hereinafter "TCF"), enables the Group to pursue the objective of minimising its exposure to tax risk by identifying, updating, assessing and monitoring tax-related governance, processes, risks and controls.

The Group is committed to managing its tax affairs in accordance with all applicable laws and regulations. For this reason, Iren has adopted the TCF as an internal control system that defines the governance for the management of taxation and related risk in line with the principles of the company strategy and, in particular, the Tax Strategy.

The Tax Control Framework adopted consists of a set of rules, guidelines, tools and models aimed at supporting the Group's employees in carrying out their daily activities, ensuring consistency on relevant tax matters.

Therefore, the TCF's structure provides for the presence of two pillars that outline its operating scheme: the Tax Strategy and the Tax Compliance Model.

The **Tax Strategy** defines the objectives and the approach adopted by the Group in managing the tax variable. The purpose of this document is to establish the Principles of conduct in tax matters in order to i) contain tax risk due to exogenous and endogenous factors, and ii) continue to guarantee over time the correct and timely determination and settlement of taxes due by law, and the performance of related obligations. The Tax Strategy has been approved and issued by the Board of Directors of Iren S.p.A..

The **Tax Compliance Model** is an element of the Internal Control and Risk Management System. This document contains the detailed description of the phases comprising the risk assessment, control and periodic monitoring processes carried out by Iren, and the subsequent reporting on tax issues to the Chief Executive Officer and the other relevant bodies and functions. It also aims to summarize the main responsibilities assigned to the various functions involved in tax-relevant processes. The Tax Compliance Model is prepared by the Tax and Compliance Function and is ultimately approved by the Board of Directors of Iren S.p.A..

The project to create a TCF aligned with the best practices in the field took shape with the submission of the application for access to the institution of Adempimento Collaborativo, a scheme between the Revenue Agency and large companies introduced by the Legislative Decree No. 128 of 5 August 2015 in order to promote the implementation of enhanced forms of communication and cooperation based on mutual trust between tax authorities and taxpayers, and to encourage, in the common interest, the prevention and resolution of tax disputes.

6. 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, IT, 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.

In 2020, a project was carried out to revise the Group Risk Map, which, through interviews with the Risk Owners of Iren S.p.A. and the Group companies, and the subsequent sharing and fine-tuning of the results, led to the construction of a very detailed risk map that corresponds to the reality of the Group, with qualitative and quantitative assessments of each individual risk and with details of controls and mitigation actions existing or planned. The identified risks have been associated with the ESG (Environmental, Social and Governance) category to which they belong. It is noted that for each risk it was verified whether and how it had been impacted by Covid-19.

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 departments operate, reporting directly to the Chief Executive Officer, 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. Cyber 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 disclosure 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 perimeter 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 Iren security platforms. Policies have been adopted to strengthen system access passwords, increase workstation security with the introduction of systems featuring behavioural analysis capabilities and automated and remote response execution. A Cyber Threat Intelligence (CTI) platform has also been introduced in order to capture evidence of attackers and threats potentially impacting corporate *assets*. In addition, the Group Cyber Risk Policy is in force, approved by the Board of Directors of Iren S.p.A., which - like the other main risk policies - provides for the convening of specific Risk Committees, the monitoring of performance indicators and dedicated reporting.

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

7. STRATEGIC RISKS

The Iren Group has adopted a Business Plan with a time horizon at 2025 which defines its strategic approaches and the related business objectives 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 customer base, energy efficiency);
- c) consolidation of regulated sectors (renewal of concessions: gas distribution, integrated water cycle and environment sector);
- d) external growth;
- e) energy scenario;
- f) sustainability and ESG (Environment, Social, Governance) targets.

In application of the Group's policies, the Plan was subject to a risk assessment carried out by the Risk Management Department and to the related stress tests, which showed substantial resilience including when facing adverse events characterised by specific sensitivities. On the basis of the aforementioned project to revise the Risk Map, a specific Risk Map relating to the risks of the Industrial Plan was prepared in parallel with the risk assessment, with the same time horizon. The development of this Risk Map, together with the construction of quantitative stresses, constitutes an important point of integration with the Strategic Planning function. In addition to the risk analysis associated with the Plan, the Risk Management Department contributes risk assessments specific to mergers & acquisitions and the main strategic plans concerning Iren Group.

TRANSACTIONS WITH RELATED PARTIES

The Procedure on Related Party Transactions (“RPT Procedure”) in force since 1 July 2021 is published on Iren's website (www.gruppoiren.it) and was approved by the Board of Directors on 28 June 2021, subject to the favourable opinion of the Related Party Transactions Committee (“RPTC”, entirely composed of Independent Directors).

Until 30 June 2021, the RPT Procedure approved by the Board of Directors on 30 June 2019 remained in force, again subject to the favourable opinion of the RPTC.

The above documents, in their versions in force from time to time, have been prepared in implementation:

- the provisions regarding transactions with related parties set forth in article 2391-bis of the Italian Civil Code, as most recently amended by Legislative Decree No. 49 of 10 May 2019, concerned with *“Implementation of Directive (EU) 2017/828 of the European Parliament and of the Council of 17 May 2017 amending Directive 2007/36/EC as regards the encouragement of long-term shareholder engagement”*;
- the Regulation containing provisions on related party transactions, adopted by Consob by Resolution No. 17221 of 12 March 2010 and subsequent amendments and additions (“Consob Regulation”), in the version in force from time to time, taking into account the indications of Consob Communication no. DEM/10078683 of 24 September 2010 (“Consob Communication”); in particular, the update of the RPT Procedure by the Company's Board of Directors on 28 June 2021, effective as of 1 July 2021, incorporates the amendments made by Consob Resolution No. 21624 to the text of the Consob Regulation, also effective as of the same date;
- the provisions of Article 114 of Legislative Decree No. 58 of 24 February 1998 (“Testo Unico della Finanza”/ TUF - Consolidated Law on Finance) 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 TUF, aim specifically:

- (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) establish the methods for fulfilling the related disclosure obligations, including those provided for in legal and regulatory measures in force and applicable.

These, very briefly, provide for:

- a) the identification of the scope of related parties as per the IFRS adopted in accordance with the procedure set out in section 6 of EC Regulation 1606/2002 in the version in force at the time.
- b) the definition of a “related-party transaction”;
- c) the identification of exceptions and transactions “of negligible amounts”;
- d) the procedures applicable to transactions of minor and major significance, as the case may be;
- e) the persons responsible for the paperwork on related-party transactions;
- f) the transactions on which the Shareholders must resolve;
- g) forms of disclosure and information flows.

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 sector, 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 financial and economic transactions with related parties is provided in the Notes to the Condensed Consolidated Interim Report in sections “V. Information on transactions with related parties” and “XI. Annexes to the Condensed Consolidated Interim Report”, as an integral part of the same.

As specified above, with a resolution adopted on 28 June 2021, effective as of 1 July 2021, the Company's Board of Directors approved an update to the RPT Procedure, implementing the amendments made by Consob Resolution No. 21624 to the text of the Consob Related Parties Regulation.

The main changes made concern in summary

- i. in Art. 3.1, the notion of Related Party, which, as of the effective date referred to above, is aligned with the IFRS in force from time to time (in particular, IAS 24);
- ii. in art. 3.2, the notion of Related Party Transaction, with a view to aligning it with the IFRS and, in particular, with IAS 24;
- iii. in art. 3.3.1, the introduction of a new definition regarding the Directors involved in the Transaction, who are required to abstain from voting on the Transaction itself, both for Transactions of minor relevance and for Transactions of major relevance;
- iv. in art. 3.3.5, a better illustration of the Conditions that can be considered equivalent to Market or Standard Conditions, identified in the participation in tenders in certain hypotheses identified by the Procedure;
- v. in Article 6.2, the introduction of an information flow to the Committee with respect to exemptions;
- vi. in Articles 9 and 10, (a) the specification that the opinion issued by the Committee is to be understood as a separate document from the minutes of the meeting; (b) the reinforcement of the checks by the Committee regarding the independence of the experts appointed to support the examination of the Transaction;
- vii. in Art. 14.5, the provision for the involvement of the Committee, at least on an informational basis, with regard to Ordinary major Transactions and those concluded at Conditions equivalent to Market or Standard Conditions.

LEGISLATIVE FRAMEWORK

The essential regulatory references, concessions and assignments in relation to the sectors in which the Iren Group operates are presented in detail in the Directors' Report prepared for the annual financial statements. Again with reference to these sectors, this section sets out the main regulatory changes (new regulations or amendments to pre-existing regulations) that occurred in the first half of 2021; what follows should therefore be read in conjunction with the financial statements as at and for the year ended 31 December 2020.

EUROPEAN FRAMEWORK

"EU Taxonomy" Regulation 2020/852

Regulation (EU) 2020/852 ("EU Taxonomy Regulation"), which entered into force on 12 July 2020, is part of a series of measures aimed at creating a sustainable financial ecosystem in line with the objectives of the Green Deal. In particular, the EU Taxonomy is a transparency tool, intended for companies and investors, based on scientific criteria of technical screening that establish whether a given activity can be classified as "environmentally sustainable".

The delegated regulation on climate change was adopted on 4 June 2021, while the adoption of the delegated regulations on the other environmental objectives of the EU Taxonomy was postponed until the first half of 2022. In addition, a supplementary act for transition activities, in particular gas and nuclear, is expected by the end of 2021.

The Taxonomy will be implemented gradually, with simplified reporting in 2022 (covering the 2021 financial year), partial reporting in 2023 (2022 financial year) - which implies the indication of the share of Revenues, Opex and Capex in line with climate change mitigation and adaptation criteria - and full implementation, covering all the environmental objectives of the Taxonomy, which will come into force in 2024 (2023 financial year).

Next Generation EU / National Recovery and Resilience Plan (NRP)

Through EU Regulations 2020/2094 (Next Generation EU) and 2021/241 (Recovery and Resilience Facility), the European Union established the framework for the recovery of the economy following the Covid-19 pandemic. On 13 July 2021, the Council of the European Union approved the assessment of the Italian PNRR. The measures in the Plan are structured around 6 tasks: 1. Digitalisation, innovation, competitiveness, culture and tourism; 2. Green revolution and ecological transition; 3. Infrastructure for sustainable mobility; 4. Education and research; 5. Cohesion and inclusion; 6. Health.

To the resources of the Recovery and Resilience Facility, amounting to € 191.5 billion, are added about € 13 billion from the REACTEU programme and about € 30.62 billion from the National Plan for Complementary Investment aimed at complementing the PNRR interventions with national resources. A total of around € 70 billion is dedicated to the ecological transition mission. All interventions must be completed by 2026.

The action plan is accompanied by a package of structural reforms in the areas of simplification of authorisations, procurement code, justice, public administration and competition. The first piece of legislation adopted by the Government is the Simplification and Governance Decree (Decree-Law 77 of 31 May 2021), which contains a series of measures aimed at simplifying the process of environmental authorisations.

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

Code on Public Contracts

Several new aspects in the field of public procurement, for all contracts, have been introduced by Decree Law No. 77 of 31 May 2021, “Governance of the National Recovery and Resilience Plan and first measures to strengthen administrative structures and accelerate and streamline procedures” (the “**Simplification DL**”). The 67 articles of the decree have been in force since June 1 but, as is likely, the final text, after conversion into law, will contain several changes and new provisions. However, the following provisions of interest contained therein should be mentioned now.

Extensions

The simplifications provided by Decree Law 76/2020 for contract determinations made by 31 December 2021 are extended to 30 June 2023. These include, in particular, derogations for contracts below the thresholds, simplified anti-mafia checks, the possibility of invoking urgency and limits on the suspension of works, the obligation to appoint a technical advisory board for works of Community importance and the possibility of assessing bids before checking the requirements of companies (so-called procedural reversal).

The extensions of the “Sblocca cantieri” (“unlocking of construction sites”) decree 32/2019

The derogations introduced by Law Decree 32/2019, better known as the “unlocking of construction sites” decree, are postponed until 30 June 2023. Until 30 June 2023 the provisions allow: municipalities that are not capital cities to contract on their own without the obligation of aggregation (excluding the works of the National Recovery and Resilience Plan) and the Contracting Stations to use integrated procurement; the possibility of autonomously appointing the members of the contract judging commissions without having to use the register of commissioners at ANAC; the possibility of starting the design of works with funds limited to the project; the faculty of contracting out ordinary and extraordinary maintenance works without an executive project. Amendments to the provisions on the CIPE's opinions were also extended: they are only required for works over 100 million, are the responsibility of the directorates for those between 50 and 100 million and are not due under 50 million.

Lastly, the possibility of making changes to projects subject to preventive archaeology has been postponed to 30 June 2023, as has the measure that allows for the approval of changes to final projects already approved by CIPE, without having to go through the latter again, if they do not exceed 50% of the value of the project.

Subcontracting

The removal of quantitative limits on subcontracting will take place in two stages. In the transitional phase, which will end on 30 November, the limit is increased to 50%. Afterwards it will cease to exist, in order to bring national legislation into line with European directives. The subcontractor shall apply the same contract as the contractor.

ANAC database

The DL introduces the obligation to transmit all data on contracts to the ANAC database, which will become the only “virtual place” of publication. The administrations responsible for certifying the requirements of companies will have to make them available “in real time” and in digital format in this database; the “virtual file” of the economic operator will also be created. However, the decree does not provide for a timetable for implementing the new rules, nor does it provide for sanctions in the event of inaction.

Training for contracting station staff

The Decree provides for a training programme, with a budget of € 40 million, to be managed by Consip to train the staff of contracting authorities.

ENERGY EFFICIENCY

110% deduction

During the six-month period in question, Law no. 178 of 30 December 2020, “Budget of the State for the financial year 2021 and multi-year budget for the three-year period 2021-2023” (Budget Law 2021), was enacted, which introduced some changes regarding energy efficiency measures, and in particular extended

the Superbonus to 30 June 2022 (and, in certain situations, to 31 December 2022 or 30 June 2023), subject to final approval by the Council of the European Union.

Based on these extensions, the legislation provides for the tax deduction to apply at a rate of 110 per cent for expenses incurred between 1 July 2020 and 30 June 2022 for specific upgrades, to be divided among those entitled to it in five equal annual instalments and in four equal annual instalments for the portion of expenditure incurred in 2022 (as opposed to the Ecobonus introduced by the 2020 Finance Act, which provided for a maximum amount of 65% recoverable over a period of 10 years) in the presence of the subjective, objective and technical requirements provided for by the legislation and the relevant provisions. For upgrades carried out by owner-occupied buildings, for which at least 60 per cent of the overall intervention has been carried out by 30 June 2022, the 110 per cent deduction is also available for expenses incurred by 31 December 2022.

Following the updates that have taken place, the following is a summary of the key points of the standard. Different types of upgrades are identified, which are divided into: leading upgrades, which are discounted at 110% on a stand alone basis, and trailing upgrades, which are only discounted at 110% if carried out at the same time as the leading upgrades together.

Leading upgrades:

- a) thermal insulation of facades and/or roofs (e.g. building insulation), according to maximum overall expenditure thresholds recognised, depending on the building units;
- b) Upgrades, on the common parts of buildings or on single-family buildings or on building units located within multi-family buildings which are functionally independent, of replacement of existing winter air-conditioning systems with centralised systems for heating, cooling or the supply of domestic hot water, condensation, heat pump, including hybrid or geothermal systems, also combined with the installation of photovoltaic systems and related storage systems, or with micro-cogeneration systems or solar collectors, always according to maximum overall expenditure thresholds.

Trailing upgrades:

- c) energy efficiency measures pursuant to Article 14 of Legislative Decree No. 63/2013, provided that they are carried out at the same time as at least one of the interventions referred to in points a) or b) in compliance with the expenditure limits provided by the legislation in force for the same interventions;
- d) upgrades for the elimination of architectural barriers for both the disabled and the over-65s;
- e) Installation of photovoltaic solar systems, including on structures appurtenant to buildings, connected to the electricity grid on buildings, including combined with storage systems, provided that it is carried out in conjunction with one of the upgrades referred to in points a) or b), according to differentiated thresholds of maximum expenditure. In this respect, the following constraints apply:
 - non-cumulative with other public incentives/facilities provided by European, national and regional legislation, including guarantee and rotation funds and incentives for on-site exchange;
 - deduction subject to the sale to GSE of the energy not self-consumed on site or not shared for self-consumption;
- f) Infrastructure for recharging electric vehicles, provided that they are carried out in conjunction with at least one of the upgrades referred to in points a) or b), always according to maximum expenditure thresholds.

Finally, instead of the direct use of the deduction due, it is possible to opt for: a) a contribution in the form of a discount on the consideration due in advance from the supplier up to a maximum amount equal to the consideration itself or b) the assignment of a tax credit of the same amount to other parties (such as, for example, the supplier, credit institutions and financial intermediaries. It is also possible for the supplier, who applied the discount under a), and the transferee under b) to make further subsequent transfers of the tax credit to third parties (including credit institutions/financial intermediaries).

In addition, Decree-Law No. 59 of 6 May 2021 on “Urgent measures relating to the Supplementary Fund for the National Recovery and Resilience Plan and other urgent measures for investments” contains, among other measures, further extensions on the Superbonus theme (extending them to 31 December 2022 for multi-buildings and 30 June 2023 for IACP buildings), provides for provisions relating to the upgrades of the National Investment Plan and is aimed at supplementing it with national resources.

AWARD AND PERFORMANCE OF INTEGRATED WATER SERVICES

European Directive No. 2020/2184 (in force since 12 January 2021) concerning the quality of water intended for human consumption for all countries of the EU

This Directive regulates the instruments available to Member States to introduce the necessary measures to provide water intended for human consumption that is healthy and clean, establishing for this purpose very specific characteristics (absence of micro-organisms, parasites or substances of any kind that may represent a potential danger to human health) and in any case satisfying the requirements indicated in the Annex to the Directive (microbiological, chemical, indicators and parameters).

The supply, treatment and distribution of water intended for human consumption must therefore be based on a risk assessment, with an approach covering the whole supply chain, from the catchment area to distribution. This approach implies that risk assessment should be performed for:

- points of abstraction of water intended for human consumption in river basins;
- supply systems up to the point of delivery, by water suppliers;
- domestic distribution systems.

For each of the points listed, the Directive lists the minimum elements that must be analysed.

It is also stipulated that materials coming into contact with water intended for human consumption, in particular for installations (new or repaired) for the treatment, storage or distribution of water must not:

- compromise the protection of human health;
- alter the colour, smell or taste of the water;
- promote microbial growth;
- cause contaminants to be released at higher levels than necessary.

Member States are therefore obliged to take action to ensure continuous monitoring of the quality of water intended for human consumption and to verify that it meets the requirements of the Directive.

AWARD AND PERFORMANCE OF WASTE MANAGEMENT SERVICES

The following measures of interest were issued during the reporting period:

1) COMMUNITY LEGISLATION

EU Commission Directive 2021/647/EU of 15 January 2021 on electrical and electronic equipment exempting the use of certain compounds of lead and hexavalent chromium in electrical and electronic initiators of explosives for civil use.

EU Council Regulation No 2021/770/EU of 30 April 2021, containing the calculation of the own resource based on non-recycled plastic packaging waste, the methods and procedure for making this resource available, the measures to meet cash requirements (so called "Plastic tax") [applicable as of 1 January 2021, went into effect on 1 June].

EU Commission Decision No 2021/958/EU of 31 May 2021, on reducing the environmental impact of certain plastic products pursuant to Directive 2019/904/EU, sets out the format for reporting data and information on fishing gear collected in Member States and the format for the quality control report.

EU Commission Regulation No 2021/899/EU of 3 June 2021 on animal by-products, laying down "Transitional measures for the export of meat-and-bone meal as fuel".

2) NATIONAL LEGISLATION

New technical annex Anci - Conai - Corepla on plastic packaging and framework agreement ANCI-CONAI. ANCI, CONAI and COREPLA, taking into account the changes made to Legislative Decree 152/2006 by the implementation of the European directive on waste and packaging, have signed the new Technical Annex (AT) for plastic packaging provided for by the Anci/Conai Framework Agreement 2020-2024. The Technical Annex shall be in force from 1 January 2021.

Decree 13 January 2021 (Ministry of Infrastructure and Transport), which transposes into Italian law Directive (EU) 2020/1833, amending the Annexes to Directive 2008/68/EC of the European Parliament and of the Council on the inland transport of dangerous goods (ADR). For the purpose of implementation, the Decree amends Legislative Decree No. 35 of 27 January 2010 implementing Directive 2008/68/EC.

Circular No. 10249 of 2 February 2021 of the Ministry of the Environment, concerning construction and demolition waste produced by households: it establishes that waste produced in the home and, in small quantities, in “do-it-yourself” activities, can be managed in the same way as urban waste pursuant to article 184, paragraph 1, of Legislative Decree No. 152/2006, and, therefore, may continue to be conferred at municipal collection centres.

Decree of 21 January 2021 (Ministry of Finance), concerning “Methods and terms of assessment, collection and payment of the contribution due by the undertakings participating in the national consortium for the management, collection and treatment of used mineral oils”, or CONOU. All lubricating oils intended for use on Italian territory will be eligible for aid, with the exception of those intended for processing into finished products.

Decree Law No. 22/2021 on “Urgent provisions regarding the reorganisation of the powers of Ministries” converted with amendments by Law No. 55 of 22 April 2021. The Ministry of Ecological Transition (Mi. TE) was created to replace the Ministry of the Environment and Protection of the Territory and the Sea (MATTEM), to which new competencies were attributed, specifically in the energy and climate sectors, in order to achieve European objectives on sustainable development, energy transition and combating climate change through the achievement of so-called climate neutrality by 2050. The functions of the Presidency of the Council of Ministers relating to the protection of the environment, the territory and the ecosystem, in certain matters, shall remain unchanged. In addition, new functions have been added to CITE (Interministerial Committee on Ecological Transition),

SNPA Guidelines No. 27/2021 “Development of methodologies for the annual Special Waste Report pursuant to art. 189 of Legislative Decree 152/2006” which provide an overview of the main EU and national waste legislation references.

Decree-Law No. 41 of 22 March 2021 “Urgent measures in the field of support to businesses and economic operators, labour, health and territorial services, related to the COVID-19 emergency” converted, with amendments, by Law No. 69 of 21 May 2021 (so called “Support Decree”). In addition to economic support measures, the measure also includes important provisions relating to the TARI and the deadline by which the choice of non-domestic users producing urban waste to use the public service or the market must be made (the choice of non-domestic users must be communicated to the municipality, or to the waste service manager in the case of a fee, by 30 June each year, with effect from 1 January of the following year - only for the year 2021 the choice must be communicated by 31 May with effect from 1 January 2022). An extension has been established for 2021 to 30 June 2021 for the approval by the Municipalities of the rates and regulations of the TARI and the corresponding tariff.

Decree of 4 March 2021, which makes some changes to the decree of 29 December 2010, concerning the implementing rules for the inland transport of dangerous goods.

Law No. 53 of 22 April 2021, which delegates the Government to adopt legislative decrees for the transposition of European Directives and the implementation of other acts of the European Union. The law contains environmental provisions on the subject of the circular economy, establishing the principles and criteria to which the Government's measures must necessarily adhere when transposing the aforementioned acts.

Circular No. 35259 of 12 April 2021 of the Ministry of Ecological Transition, clarifying certain issues related to the application of the TARI following the enactment of Legislative Decree 116/2020. Among the various information provided by the Circular, it is clarified that industrial activities also produce urban waste, with the consequent application of the TARI.

Support Decree bis (Decree-Law No. 73 of 25 May 2021), which contains various provisions on environmental matters: among them, the extension to 1 January 2022 of the provisions on the tax for plastic products with a single use (*plastic tax*) and the benefits inherent in the TARI (with the establishment of a fund aimed at allowing municipalities to grant a reduction in the TARI in favour of the aforementioned economic categories).

Decree 12 May 2021 of the Ministry of Ecological Transition in agreement with the Minister of Infrastructure and Sustainable Mobility, which aims to provide clarity on how to implement the provisions relating to the figure of the Mobility Manager. It also provides that companies and public administrations with individual local units (with more than 100 employees), located in a regional capital or a metropolitan city or a provincial capital or a municipality with a population exceeding 50,000 inhabitants, are required to adopt, by 31 December of each year, the Plan of home-work trips (PSCL) of its employees.

Board of Directors' resolution CONAI regarding the reduction of the contribution for paper and cardboard packaging. The basic fee will be reduced from € 55/tonne to € 25/tonne from 1 July 2021 for all paper and board packaging.

Note No. 8966 dated 3 May 2021 from the Minister of Ecological Transition, in response to the letter of urgent action on TARI concessions and waste regulation submitted to the Ministry by ANCI (National Association of Italian Municipalities) on 15 April 2021. The Minister also intends to set up a permanent technical round table with ANCI, the Regulatory Authority, the operators and their associations, in order to support the “transition” to the new waste management system.

Decree Law No. 77 of 31 May 2021, entitled “Governance of the national recovery and resilience plan and initial measures to strengthen administrative structures and accelerate and streamline procedures” (the so-called “DL Semplificazioni”). Title 1 of the regulation is dedicated to the “ecological transition and acceleration of the environmental and landscape procedure” (Via and Vas). Chapters 6 and 7 are dedicated to the acceleration of procedures for renewable sources and energy efficiency; Chapter 8 contains rules on “simplification for the promotion of the circular economy and hydrogeological contrast”, including amendments on the cessation of waste status (End of Waste). Finally, important changes are introduced to Part IV of the Consolidated Environmental Act, and the updated list of wastes is attached.

The home page of R.E.N.T.Ri (Experimental Laboratory for Functional Prototyping section) was published, i.e. the experimentation of the new system for the traceability of waste circulation. Starting at the end of June, for four months, companies will be able to test its first functionalities.

Special Waste Report 2021 presented by ISPRA, the Italian Institute for Environmental Protection and Research published in June (covering 2019). The production of special waste in Italy is close to 154 million tonnes, in line with the growth in GDP compared to the previous year: most of this comes from construction and demolition activities (45.5%), waste treatment and remediation activities (25.1%) and manufacturing activities (18.9%). 68.9% of special waste is sent for recovery, while only 7.3% is disposed of in landfills.

2) REGIONAL LEGISLATION

a) Emilia Romagna

During the first half of 2021, the Emilia Romagna Region issued a number of measures relating to waste management:

- Regional Government Decree 18 January 2021, No. 46: enacts the “*Program Agreement to Ensure the Proper Management and Traceability of Agricultural Waste*”;
- Regional Decree 3 May 2021, No. 643: is aimed at presenting, to the Legislative Assembly, “*the objectives and general strategic choices of the 2022-2027 Regional Waste Management and Polluted Area Remediation Plan*”;
- Decree 28 May 2021, No. 10211: contains the “*Computation of separate collection of waste from composting in the municipalities of Emilia Romagna*” for the year 2020.

b) Liguria

During the first half of 2021, the Liguria Region adopted the Regional Decree 19 March 2021, No. 215, with which it provided some initial indications for the application, in the regional territory, of operating methods for the management of urban waste produced by non-domestic users.

c) Piedmont

During the first half of 2021, the Piedmont Region promulgated the following provisions pertaining to waste management activities:

- Decree 26 January 2021, No. 35: identifies the municipalities subject to surcharges and reductions in the special tax for the deposit of waste in landfills (the so-called ecotax), for the year 2020;
- Decree 8 February 2021, No. 54: approves the first “*Environmental Monitoring Report related to special waste*”;
- Regional Law 16 February 2021, No. 4 “*Amendments to Regional Law 10 January 2018, No. 1 (Regulations on waste management and integrated urban waste management service and amendments to Regional Laws 26 April 2000, No. 44 and 24 May 2012, No. 7)*”: implements new national and EU legislation on waste, adjusting objectives and general principles, as well as modifying the organisation of the Territorial Districts;
- Regional Government Decree 12 March 2021, No. 14-2969: contains the act of guidance on the planning of urban waste management and reclamation, by which the regional planning on the subject was updated, in line with the provisions regarding the circular economy;
- Regional Government Decree 12 March 2021, No. 15-2970: identifies the Guidelines for the assessment of environmental and territorial sustainability in relation to authorisations for plants for the recovery of organic waste, for the production of biogas and biomethane subject to verification of subjection to EIA;
- Regional Government Decree 23 April 2021, No. 10-3125: provides for the approval of the “*Guidelines and reference criteria to support the assessments of the Associazione di Ambito Torinese per il Governo dei Rifiuti - ATO-R on the priorities of access to urban waste and waste resulting from the treatment of urban waste produced in the regional territory relating to the TRM S.p.A. energy recovery plant in Turin*”.

MAJOR HYDROELECTRIC SHUNT CONCESSIONS

With reference to Regional Law Piedmont Region No. 26/2020 “Allocation of large derivations for hydroelectric use”, issued in declared implementation of the new art. 12 Legislative Decree No. 79/1999, as amended by art. 11 quater of Decree-Law No. 135/2018 converted into Law No. 12/2019, which introduced the regulation of the annual fee for Large Derivation concessions for hydroelectric purposes applicable from 2021, the appeal by the Government before the Constitutional Court is still pending.

In addition, in relation to Regional Regulations No. 5/R (regulation of fees) and No. 6/R (obligation to supply energy free of charge from large hydroelectric derivation plants) of 18 December 2020, issued in implementation of article 21 of RL 26/2020, Iren Energia has indicated that it does not consider the new regulations to be legitimate and that it does not intend to comply with them. During the six months under review, other competitors in the industry challenged these regulations before the Regional Administrative Court of Piedmont.

CONCESSIONS AND ASSIGNMENTS OF THE IREN GROUP

The table below shows the changes that occurred in the first half of 2021 in the scope of concessions and awarded contracts by the Group's operating segments.

INTEGRATED WATER SERVICE

Liguria - Province of La Spezia

The Municipality of Deiva Marina approved, with the deliberation of the Municipal Council of 3 October 2020, the forfeiture of the entrusting to its participated Deiva Sviluppo S.r.l. in liquidation and the confluence in the unitary management of the ATO East Liguria in charge of the company of the Group ACAM Acque. With a deed signed on 25 February 2021 between the Municipality of Deiva Marina, Deiva Sviluppo and ACAM Acque, the takeover was completed with effect from 1 March 2021.

ENVIRONMENTAL SERVICE MANAGEMENT

Liguria - Province of La Spezia

By virtue of Article 7 of the Area Plan, which provides that upon termination of independent management of the service by the municipalities within the area, ACAM Ambiente takes over the service as a result of the local authority joining the unitary management of the Area, in the first half of 2021 the following municipalities joined the company's management:

- Deiva Marina from 1 March 2021;
- Rocchetta Vara from 30 March 2021;
- Borghetto Vara and Maissana from 1 April 2021.

REGULATORY FRAMEWORK FOR THE FIRST HALF OF 2021

GAS

Gas Energy Management

Resolution 134/2021/R/gas - Review of the processes for defining commercial relationships between balancing users and distribution users. Revision of the processes of conferring capacity at redelivery points on the transport network

Resolution 147/2019/R/gas had reformed the process of allocating capacity to gas transmission network exit points that feed into distribution networks (City Gate), effective 1 October 2020. Resolution 134/2021 intervened on this matter, postponing the entry into force of the reform to 1 October 2022.

Gas transport tariffs

The Lazio Regional Administrative Court, in ruling No. 440/2020, annulled Res. ARERA No. 575/2017/R/gas that had determined the transportation tariffs for the transitional period in the 2018-2019 years. By sentence No. 33/2021 the Lombardy Regional Administrative Court also repealed Res. ARERA No. 114/2019/R/gas, which established the tariff regulation for the natural gas transportation and measurement service for the period 2020-2023. ARERA also appealed this ruling to the Council of State.

Gas Networks

Resolution 287/2021/R/gas - Criteria for the decommissioning of traditional meters replaced with smart meters and determination of the amount to recover lost depreciation on class G4/G6 meters.

Res. 287/2021/R/gas confirmed what had been foreseen in the previous consultation (CD 545/2020), establishing that the decommissioning of measuring units carried out in application of the provisions of the Directives for the commissioning of gas measuring units, regardless of the class to which the decommissioned measuring unit belongs, are conventionally deducted from the stratification of the historical gross values starting from the values of the gross fixed assets relating to the oldest assets.

Consultation document 167/2021/R/gas - Reorganisation of gas measurement activities at entry and exit points of the transmission network - Final guidelines

The Authority confirms the current allocation of responsibilities for metering, i.e., the metering activity is the responsibility of each owner of the metering system and the meter reading activity is the responsibility of each transmission company. With this consultation document, a strengthening of service levels towards the largest transmission company, responsible for the commercial balancing of the network, is proposed in relation to the transmission and provision of measures.

The definition of optimal plant, performance and maintenance requirements to be applied to the person in charge of metering activities is also subject to consultation, with the simultaneous introduction and strengthening of service quality standards for both metering and meter reading activities. These standards would be associated with an economic incentive system, and in particular for the metering activity it would be a question of economic compensation consistent with the costs for the transmission system generated by measurement errors. The fees would be applied from 1 January 2023, for the purposes of any upgrading of facilities and metering data transmission systems. Each regulated entity would establish an Adaptation Plan with respect to the facilities in its ownership.

Consultation Document 250/2021/R/gas - Natural gas infrastructures: pilot projects to optimise management and innovative uses - Final guidelines

The regulator wants to promote actions to optimise distribution/transport networks or to make more efficient use of them, in three project areas:

- 1) methods and tools for optimised network management;
- 2) innovative uses of existing infrastructure;
- 3) technological/managerial innovation upgrades on networks.

The proposed projects will be assessed by an independent commission according to an evaluation grid defined in two macro-environments: the prospective dimension of energy, environmental and economic performance and the experimental dimension of the project. Costs will be covered, in whole or in part,

through tariff and non-tariff assignments, in accordance with a scheme for recognition of capital and operating cost components proposed as part of the consultation. The Authority has introduced an indicative ceiling for the extra-tariff contribution of no more than € 35-40 million. The duration of the testing will be a maximum of three years and the Owner of the project will have to submit to ARERA appropriate monitoring reports of the activities. The consultation is still ongoing.

Consultation Document 263/2021/R/gas - *Smart metering gas: regulation of outputs and performance of the metering service and billing obligations. Final guidelines*

The Authority intends to conclude the evaluation of the interventions related to the following two aspects:

- the current set of rules concerning the metering service;
- the current system of compensation and penalties to end customers and sellers (performance measurement).

Specifically, the Authority defines a period of 90 days from the installation of the *smart meter* within which commissioning of the meter must be ensured, providing for a transition period of six months from the approval of the measure. For class G4/G6 smart meters, readings are taken on a monthly basis without daily details up to the last gas day of the reference month.

With regard to compensation, the following categories are distinguished:

- compensation to end customers (class G4/G6), with partial recognition of the costs for the distributor for non-reading compensation up to the physiological level;
- compensation for sales companies (classes greater than or equal to G10 and classes smaller than G10 with AC greater than 5,000 sm³), payable for failure to achieve the proposed minimum objectives with regard to the timeliness of data transmission and their quality.

The consultation is still ongoing.

ELECTRICAL ENERGY

Terna Pilot Projects

In implementation of ARERA Resolution No. 300/2017/R/eel, Terna launched a series of pilot projects aimed at expanding the number of resources admitted to participate in the market for dispatching services.

Among others, the pilot project on the provision of ultra-fast frequency regulation service was established (so called Fast Reserve), and the related auction took place on 10 December 2020. Iren Energia participated in the Terna auction with 5 storage projects, winning the prize for 3 sites (Torino Nord, Turbigio, Moncalieri). The delivery period will run from 2023, for a duration of 5 years.

Following approval by the Authority (with Res. 215/2021/R/eel), Terna also published the documentation needed to start the pilot project for the provision of the secondary frequency/power regulation service.

Resolution 218/2021/R/eel and Terna Grid Code update

The resolution approves the changes to Terna's Grid Code and amends Annex A to the Res. 111/06 to regulate issues related to the new structure of the intraday market (MI), the new methods of coordination between the MI and the Dispatching Services Market (DSM) and the new price caps. In particular, the measure is functional to the implementation of the single coupling of the intraday electricity market.

Resolution 32/2021/R/eel - Provisions relating to the mechanism for recognising general system charges not collected from end customers and already paid to the distribution companies

The measure outlines the criteria for compensating transmission users for the portion of charges paid but not collected to end customers and the related procedures for submitting the application to CSEA.

Charges are subject to recovery:

- not already the subject of other reintegration mechanisms;
- shown on invoices with payment deadlines that have expired for at least 12 months at the time the application is submitted;
- for which the commercial counterparty has provided notice of default and at the same time has followed specific company procedures for the management of arrears and credit protection.

Access to the compensation mechanism may take place in two different ways: through the ordinary regime (where the user is required to indicate precisely the amount of uncollected charges relating to the period of reference of the request) or through the so-called simplified regime (where the amount of compensation is determined on the basis of the best estimate of uncollected charges to which a corrective discount of 25% is applied to their total). Compensation is disbursed on an annual basis with reference to the previous year's accrual; for the session relating to the year 2021, the possibility of requesting also the amounts of charges relating to the entire period between 1 January 2016 and 30 June 2020 has been provided for. The Authority has also provided the option for commercial counterparties to request reimbursement through their transport users (who are required to submit an application to CSEA upon receipt of the request from one or more commercial counterparties); it remains up to the user to choose the participation scheme.

ELECTRICITY NETWORKS

Electricity distribution and metering tariffs

Determination 2/2021 - Program of actions for the implementation of tariff regulation of withdrawals and inputs of reactive energy, with:

- submission by operators to ARERA by 30 June 2021 of 2017-2024 investments for better voltage and reactive energy control;
- Terna sends a report to ARERA on the coordination achieved with the DSOs for investment planning by 31 October 2021.

The purpose of the determination is therefore to refine the regulation of withdrawn reactive energy and introduce the regulation of injected reactive energy (anticipated in Res. 568/2019 and deferred to 2022 by Res. 395/2020/R/eel).

Resolutions 279/2021/R/eel and 124/2021/R/eel - Changes to the tariffs of non-domestic low-voltage users for April - July 2021

As happened for some months of 2020, also in 2021 ARERA provided - for the months from April to July - a reduction in grid tariffs and general charges for low voltage non-domestic customers with power above 3 kW, characterised by:

- power quota zeroed;
- reduced fixed fee (as if the supply were at 3 kW), without impact on the available power.

Resolutions 106/2021/R/eel and 201/2021/R/eel - 2G commissioning plans

Res. 201/2021/R/eel of ARERA approved the commissioning plan of the 2G smart metering systems presented by IRETI, agreeing to its start-up of the massive phase in the 2nd half of 2021, confirming the expected expenditure admitted to the recognition of capital costs in line with that planned by the Company. Downstream of CD 361/2020, Res. 106/2021/R/eel has envisaged - for DSOs serving up to 100,000 users - the installation from 2022 of only 2G smart meters with the aim of commissioning 2G meters for at least 90% of the 1G in the field by 2025. The unit cost recognised amounts to 145 €/2G and will be recognised over 15 years in decreasing instalments.

Resolution 109/2021/R/eel - Regulation of the transport and dispatch of electricity withdrawn for subsequent feed-in to the grid

Res. 109/2021/R/eel provides that, from 1 January 2022, withdrawals for subsequent feed-in from storage systems may be treated as negative energy input. For the application of the new regulation, producers shall submit to the distributor an application (with a sworn expert's report) by 31 July 2021 (existing plants) or before the end of the connection process (new plants).

Resolutions 63/2021/R/com and 257/2021/R/com - New regulation for economic hardship bonus

From 1 January 2021, all social bonuses for economic hardship (electricity, gas, water) will be granted automatically to eligible citizens/families after they submit their Single Substitute Statement (Dichiarazione Sostitutiva Unica – “DSU”) to obtain the ISEE certificate. On the other hand, the physical hardship bonus will not be paid automatically for the time being. The 2021 bonus will in any case be granted to those

entitled to it for the entire period of benefit, including through the recognition of any bonus shares already accrued.

Resolutions 541/2020/R/eel and 160/2021/R/eel - Experimental regulation of power increase for private recharge

Res. 541/2020/R/eel (updated by Res. 160/2021/R/eel) launched an experiment from 1 July 2020 until 31 December 2023 to exploit the potential of 1G and 2G at low voltage end customers to offer them, at the same cost and only in cases where it can be demonstrated that they are being used to recharge electric vehicles, a greater availability of withdrawable power during the night/holiday period.

WASTE

During 2021, the process of updating the MTR for the second regulatory period (2022-2025) was initiated and at the same time the start of tariff regulation for treatment plants, for which the resolution is expected to be published in August 2021, through the following consultation documents:

1. **CD 196/2021 (first guidelines for MTR-2 and plant regulation criteria)** containing the following aspects:
 - (i) four-year Economic and Financial Plan with biennial tariff update, (ii) planned according to CD for detailed elements with parameter determination, (iii) regulation of plants (UW and SW of urban origin) with guaranteed flows (iv) exclusion of recycling plants;
2. **CD 282/2021 (final guidelines for the definition of the MTR-2)** characterised by the following elements:
 - a. Relating to the integrated waste management cycle:
 - enhancement of the economic and financial planning over a multi-year horizon, drawn up with the aim of guaranteeing sustainable tariff dynamics;
 - Deferral by means of adjustments, during the regulatory period, for full recovery of recognised costs.
 - b. Treatment related:
 - the regulation will apply only to plants considered “integrated” and to plants “essential for the cycle-minimum”. All other facilities, considered “additional,” will not be regulated but will have transparency requirements. The Regions are expected to play an active role in identifying the “minimum” cycle closure plants;
 - recognition in the tariff of all operating and capital costs, based on the operator's actual values (2-year time lag), with application of the RAB system for the remuneration of capital;
 - a gradual mechanism for recovering the difference between the recognised costs for the year (a-2) resulting from the application of the plant access tariffs calculated according to MTR-2 and the amount included in the tariff revenues for the same year.

As part of the waste management service quality proceeding, **CD 72/2021** was published in February 2021 setting out the first guidelines for the regulation of contractual quality, specifically relating to: (i) Service quality charter; (ii) Complaints and information request management, (iii) User contact point management, (iv) Accrual and payment methods, (v) Adjustment of amounts due (vi) Bulky waste collection, and technical quality exclusively for the profiles of continuity, regularity and safety of the service. The Authority plans to introduce the following measures:

- service obligations to ensure uniform minimum performance throughout the country;
- indicators and related general quality standards differentiated on the basis of the starting level of management;
- obligations to record data relating to the performance actually achieved by the operator;
- obligations to communicate the recorded data to the Authority;
- incentive mechanisms capable of encouraging paths to improve the operators’ performance.

WATER SERVICE

ARERA Resolution 83/2021/R/ldr - Resolution initiating the procedure for updating TIMSII

The Authority resolved to initiate proceedings to update the TIMSII (Consolidated text on the integrated water service measure) for the following purposes:

- a) declare the obligations to install and ensure the proper functioning of the meters, also taking into account the potential contribution (to be determined as a result of cost-benefit analysis) that could result from the use of new measuring instruments equipped with water smart metering devices;
- b) reinforce, also with a view to simplification, the effectiveness of the provisions regarding the collection of measurement data and procedures for remote reading;
- c) improve the transparency of periodic communication to users about their consumption habits (also with innovative methods of communication through applications on mobile devices or accessible online);
- d) define specific standards and related automatic compensation to users in case of non-compliance;
- e) regulate the treatment of hidden losses;
- f) identify best practices to enable multi-building unit owners to have their consumption data available.

The process, which will include one or more consultation documents, will be concluded by December 2021.

OTHER GENERAL MATTERS

Incentives

Decree of the Ministry of Ecological Transition 21 May 2021 on “Determination of the national quantitative energy saving objectives that can be pursued by electricity and gas distribution companies for the years 2021-2024 (so-called white certificates)”.

The decree touches upon some macro issues of reform of the mechanism of EECs:

- reduction of 2020 obligations from 7.09 MEEC to 2.84 MEEC (-40%) and extension of the 2020 obligation year to 16 July 2021;
- determination of 2021-2024 targets (in sharp decline compared to historical trends);
- introduction of a new system of downward auctions, the mechanism of which is to be defined by decree of the MITE by 31 December 2021;
- new types of upgrades eligible for incentives.

ARERA Resolution No. 6/2021 - DMRT redetermined the primary energy savings obligations for distributors of electric power and natural gas for the 2020 mandatory year.

Regulation of energy network tariffs

Res. 271/2021/R/com - Initiation of proceedings for the adoption of measures relating to methods and criteria for tariff regulation based on total expenditure (ROSS-base) for determining the recognised cost of regulated infrastructure services in the electricity and gas sectors

The Authority is initiating proceedings aimed at introducing new cost recognition methods for infrastructure services in the electricity and gas sectors, based on a “total expenditure” approach that is referred to as Totex-base, common to all the aforementioned services, and which is a first step in the introduction of the ROSS integrated approach (“Regulation by expenditure and service objectives”), in line with the Authority's Strategic Framework 2019-21.

In particular, the ROSS-base procedure will be developed along the following lines:

- realignment of efficiency incentives, with extension to total efficiency and not just operating costs;
- introduction of capitalisation rates set by the regulator;
- mechanisms for monitoring returns on regulatory capital employed;

The first consultation document is expected by the end of 2021, and the conclusion of the procedure for defining the general criteria for determining the recognised cost to be applied to all infrastructure services in the electricity and gas sectors by the end of 2022.

PERSONNEL

As at 30 June 2021 the Iren Group had 8,837 employees, up compared to 8,680 employees as at 31 December 2020, as the table below shows, divided into parent and first-level companies and their subsidiaries.

Company	Workforce at 30.06.2021	Workforce at 31.12.2020
Iren S.p.A.	1,063	1,063
IRETI and subsidiaries	2,161	2,154
Iren Ambiente and subsidiaries	4,171	4,065
Iren Energia and subsidiaries	901	874
Iren Mercato and subsidiaries	541	524
Total	8,837	8,680

The main changes in the workforce compared to 31 December 2020 were ascribable to:

- the acquisition, in March 2021, of Futura S.p.A. by Iren Ambiente, for a total of 28 resources;
- the company San Germano due to the launch/conclusion of contracted services, including seasonal work;
- continuation of the generational turnover plan, with a considerable number of recruitments on the labour market.

RESEARCH AND DEVELOPMENT

In the Iren Group technological innovation is central in strategic decisions and in defining the products and services offered by the Group.

The Business Plan to 2025 confirmed the role of innovation in the IREN Group's Vision as the cornerstone of the development of all the sectors in which it operates, with the aim of making IREN an example of excellence and innovation in the multi-utility sector. In particular, the Business Plan outlined a strong development programme in support of the circular economy involving all the multi-utility sectors, in accordance with the concept of “multicircularity” that distinguishes the Group's philosophy and approach. In fact, particular attention is paid to sectors and trends considered strategic in the coming years and with transversal effects on the various BUs. With this in mind, the main innovation activities underway within the Group are aimed at researching, demonstrating and adopting technologies and processes to support the sustainable development of its businesses.

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

- efficiency on several levels and assets (users, buildings, urban agglomerations, public lighting systems, Group energy assets, networks);
- new systems for recovering energy waste and increasing plant efficiency;
- solutions for the production of renewable hydrogen and for the production of synthetic methane or other commodities combined with carbon dioxide capture;
- use of renewable hydrogen as a zero-emission energy carrier;
- thermal, electric and hybrid storage systems (Power-to-X);
- business models and analysis of platforms for the implementation of Energy Communities;
- optimised management and digitisation in waste collection;
- processes aimed at maximising the recovery of energy and materials from different waste fractions, separately and not separately collected;
- automation and robotics in waste treatment plants, to support operational staff;
- Internet of Things (“IoT”), home automation and data intelligence ICT tools;
- optimised management of the integrated water cycle (districtisation, identification and reduction of network losses, energy and process efficiency in the purification chain) and tools to support field sensors;
- detection and removal of pathogens in water samples;
- systems for the quantitative reduction and recovery of material and/or energy from sludge deriving from waste water treatment processes;
- innovative solutions related to electric mobility and, more generally, to the electrification of consumption;
- enhancing network resilience and limiting losses and inefficiencies;
- “smart safety” systems for assisting personnel or reporting situations of potential risk;
- smart and bidirectional electric vehicle charging systems (V1G, V2G) in order to balance the grid or consumption;
- exploiting the potential offered by new telecommunications solutions, such as Low Power Wide Area networks (e.g. LoRa) or 5G and its applications for distributed computing (e.g. edge computing, 6G);
- “industry 4.0” solutions in support of the personnel involved in plant operation and maintenance activities, for predictive maintenance and monitoring in the field.

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 start-ups. Additionally, it takes an active part in working groups and associations on specific research and development and promotes events such as conferences, workshops and hackathons. In the first half of 2021, technical activities continued relating to the Group's various co-funded projects, as well as the development of internal technology projects, also in partnership with innovative companies and start-ups, on the basis of planning that, starting from an analysis of the long-term scenario, is aimed at equipping the Group with the necessary tools to seize the opportunities and mitigate the risks arising from the evolution of the markets in which it operates.

“IREN UP”, an innovative Corporate Venture Capital program with the aim of supporting the highest potential Italian startups in the cleantech sector, has been further structured during 2021. The program provides an unprecedented package of customized services including testing, technical support, legal advice, market testing, commercial and industrial agreements. In the first half of 2021, IREN UP continued its portfolio management activities, setting up follow up operations for the investments already in place: most of the agreements in fact provide for milestones and tranches to be released if technical and economic objectives are achieved.

In addition, scouting activities and participation in innovation ecosystem events continued, allowing new investment targets to be identified. The first half of 2021 also saw a reduced number of public open innovation events due to the Covid-19 emergency, which limited the possibility of interaction with the innovation ecosystem through traditional means. In spite of this difficulty, IREN was able to support the Circular Cities Hackaton carried out in collaboration with the non-profit organisation Tondo, promoting a challenge focused on new business models related to citizen energy communities.

COMPLETED AND ONGOING FUNDED RESEARCH PROJECTS

Also in the first half of 2021 IREN contributed to the implementation of important innovation projects co-financed with public research funds. In this regard, the main projects underway are listed below, for a total value borne by the IREN Group of approximately € 8.2 million, of which about half is financed. In relation to these amounts, the expenditure incurred in the first six months of 2021 was approximately € 1,243,000, of which approximately € 740,000 was covered by financing.

Below are the projects underway in the first half of 2021:

Material recovery from WEEE R1/R2 (Ministry of Environment Announcement)

The project has as its main objective the development of technologies with high replicability and rapidly transferable to the industrial world, aimed at optimising the management of waste electrical and electronic equipment (WEEE), and in particular the recovery of polyurethane from refrigerators (WEEE R1) as secondary raw material and optimisation of the separation of cement from the carcass of washing machines (WEEE R2). During the first six months of 2021, Iren Ambiente and AMIAT, partners in the project, completed the technical-economic feasibility analysis for the implementation of a refining line for the polyurethane produced by the treatment of WEEE R1; tests of a prototype for the semi-automated cutting of washing machine carcasses were also carried out at the AMIAT Trattamento Beni Durevoli (TBD) plant. The project will end in August 2021.

SATURNO (Call for proposals Bioeconomy Technological Platform - Piedmont Region)

The project will validate, on an industrial platform, the conversion of the organic fraction of waste and exhaust CO₂ from vehicles and industrial production into biofuels and biochemicals. Specifically, the project envisages the valorisation of the organic fraction of urban waste, normally converted into thermal energy, electricity, bio-methane and compost, through the extraction of high value-added substances such as hydrogen, carboxylic acids, bio-fertilisers and bio-stimulants.

IREN is involved in the project together with its associate GAIA, where, in the first months of 2021, an optical selector for the separation of the different fractions of plastics present in the FORSU (Organic Fraction of Municipal Solid Waste) surplus has been tested; IREN is also involved in the development of the Business Plan of the integrated biorefinery SATURNO, tested and validated during the project.

During the first six months of 2021, IREN continued to collect and process experimental data in order to set up the development of the Business Plan. In addition to the field tests of the optical selector, experimental activities have also been started on the treatment and valorisation of bio-plastics within the traditional anaerobic digestion/composting processes.

OnlyPlastic (RFCS – 2019)

The OnlyPlastic project aims to replace fossil carbon sources (coal, coke, petroleum coke) in the electric arc furnaces of the Feralpi steelworks in Lonato (BS) with densified polymers derived from residues from the treatment of plastic waste. In order to achieve optimum use of SRA (secondary reducing agent) granules in Feralpi's steel plant, a prototype is to be built for the transport, handling and loading of the granules, as well as the design of a new injection system that meets the characteristics of the SRA obtained in accordance with the specifications of the UNI 10667-17 standard.

Within the project, the role of IREN, through I.BLU, is configured in the production of densified plastic material to be used as a reducing agent/ foam alternative to fossil fuels in steel production processes. I.BLU will supply both a product derived from post-consumer plastic waste for injection and one designed for basket loading.

Launched in September 2020, in the first months of the project I.BLU took part in the characterisation and optimisation of the product for use in steelworks.

PolynSPIRE (Horizon 2020)

The PolynSPIRE project aims to demonstrate a range of sustainable, innovative and cost-effective solutions for the energy and material recovery of post-consumer plastics and industrial waste. Three macro-sectors of innovation are considered: 1) chemical recycling assisted by the use of microwaves and magnetic catalysts; 2) advanced additives and irradiation of polymers with high energy radiation to promote high quality plastic recycling; 3) development of plastic waste as a carbon source in the steel industry. Specifically, IREN participates in the project through its subsidiary I.BLU contributing to the third line of research. With regard to this issue, activities concerning the optimisation of the formulation and production process of the I.BLU granule have been completed and industrial testing in steel mills has begun.

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.

IREN is involved in the project as district heating network operator and has provided operational data of electricity and heat production of the Turin plants and district heating network demand as input to the CHEST system model. In the first half of 2021, IREN carried out a scouting activity of other European projects with low Technology Readiness Level concerning similar themes and technologies (Power-to-X-to-Power) and started the development of business models for the evaluation of the techno-economic feasibility of the CHEST system in different application fields.

Energy Shield (Horizon 2020)

The project intends to develop an integrated cyber security platform, usable by all actors of the energy chain (Transmission System Operators, Distributors, Aggregators, Producers) to prevent future attacks and learn how to defend yourself by analysing past attacks.

IREN participates as a Distributor (through IRETI) supporting the partners in the definition of the specific cyber security instruments, preparing a feasibility test (on paper) and possibly an “offline” field test applied to one or more subsystems of the network (remote control, SCADA, smart meters, supporting TLC networks etc.). During the first few months of 2021, tests were carried out on the functionalities of the “security culture framework and tool” both by revising and translating into Italian the questionnaires to be submitted to the group’s employees and by participating in an initial testing cycle of the same (through the involvement of a restricted pool of end users).

IREN and IRETI have interacted with partners/technology providers for the development of the different software that will make up the integrated platform. In particular, in the Martinetto electrical substation significant parameters will be monitored (voltages, currents, switch states) to allow the testing (online and offline) of solutions for raising cybersecurity standards in the network. Iren has defined with the industrial partner Siga the characteristics of the monitoring infrastructure and has procured the necessary components for this activity, which will be assembled in summer 2021.

ENERGYNIUS (POR-FESR 2014-2020 Emilia-Romagna)

The ENERGYNIUS (acronym for 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. 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. IREN participates in the

project as an external partner, providing its point of view on the development of the project tools and eventually with field tests.

EVERYWH2ERE (Horizon 2020)

The objective of the project is to develop an electric 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) and able to guarantee high levels of reliability and safety as well as a reduction in emissions compared to traditional generators.

The IREN Group, as a third party to Environment Park, will test a hydrogen skid, currently tested at Friem's site in Segrate (Milan), for the production of electricity during events/exhibitions (uninterruptible power supply/mobile generator mode).

INCIT-EV (Horizon 2020)

The objective of the INCIT-EV project is to develop and field test a set of electric vehicle charging infrastructure, hardware and software technologies and business models to drive large-scale adoption of electric mobility.

IREN and IRETI will play a central role in the development of the Pilot Project, which aims to test a system of DC columns (both slow and fast recharging), directly connected to the DC power supply cabin of the trams at the Caio Mario interchange car park in Turin. In the first half of 2021, IREN participated in the definition of the HW/SW infrastructure, layout and connectivity/communication requirements of the Pilot (conversion cabin and columns) and coordinated the partners involved in defining the specifications for its implementation.

PLANET (Horizon 2020)

The Planet project ended in February 2021. The consortium pursued the objective of developing technologies and analysing regulatory constraints for the synergistic exploitation of distribution networks (electricity, gas and heat). During the project, storage and conversion technologies were modelled, intelligent multi-grid automated management systems were simulated, new business models were created, and energy conversion systems were tested in a physical pilot.

Specifically, IREN designed and installed a pilot heat pump system that can be managed remotely, to integrate the heating and cooling system in a building it manages in Turin. The aim of the experimentation was to validate in the field the joint management of energy carriers for the activation of demand flexibility strategies with a view to providing ancillary services to the electricity grid. The heat pump was tested in the winter heating season to balance load imbalances or participate in ancillary electricity markets, while optimizing the building's energy needs and flexibility measures required by the electrical grid.

PUMP-HEAT (Horizon 2020)

The aim of the project is to increase the flexibility and efficiency of conventional fossil fuel plants, particularly combined cycle plants, in order to meet the increasing demands on the grid to compensate for fluctuations in supply from renewable sources. The project investigates the combination of heat pumps with cogeneration combined cycle and conventional combined cycle plants; the combination with systems for heat and cold storage is also analysed. In particular, in the first half of 2021, activities were completed to integrate the pilot plant with one of the two combined cycles of the Moncalieri (Turin) thermoelectric power plant, with the aim of testing the technologies studied and developed during the project.

5G-Solutions (Horizon 2020)

The aim of the 5G-Solutions project is to test, in different field tests, the functionality, potential and limits of the 5G network, with particular attention to the evaluation of performance indicators defined by the relevant standardisation bodies.

IREN participates in the activities of the “Smart Energy” vertical by evaluating the benefits related to the integration and exploitation of the 5G network - in its main characteristics of speed, limited latency, high reliability and distributed computing opportunities - in the use cases of Demand Side Management, through the intelligent regulation of HVAC systems and electrical loads of residential buildings, and Smart Charging of electric vehicles. For the case study on Demand Side Management, in synergy with the PLANET project pilot, the experiments focused on a building in the City of Turin equipped with a prototype heat pump. The software infrastructure for controlling and monitoring the case studies was also defined and developed in Beta version. Finally, a first prototype of the hardware that will remotely control the heat pump has been developed, the sensors and actuators needed to optimise consumption have been integrated and 5G

connectivity tests have been carried out on the experimental part of the TIM network, a project partner. For the Smart Charging case study, the experiments will be carried out at the Group's Martinetto headquarters, where the existing charging infrastructure will be integrated.

Evolution2G (EMEUROPE Call 2016)

The "eVolution2G" project ended in January 2021. The project deepened and field tested the Vehicle to Grid (V2G) concept, i.e. a system in which electric vehicles play an active balancing role on electricity grids or on a utility's consumption. The main innovations of the project were based on:

- development of an EMCS (Energy Management and Control System) prototype for managing data according to different stakeholders, with a view to improving the balance of the electricity grid;
- testing of prototype V2G charging solutions, both at home and in public/urban areas.

Specifically, IREN has equipped itself with two DC bidirectional prototype columns and has carried out several experimental tests related to different V2G usage scenarios (i.e. vehicle charging, powering a stand-alone house, using the car battery to power the grid). The project represented one of the first practical applications at European level of V2G technologies.

WaterTech (MIUR)

The project is the result of the merger of the two project ideas WATERTECH and SMART WATER, presented in the framework of the MIUR Smart Cities call for proposals, with a view to offering a more robust analysis of the integrated water system, focusing both on the management of problems related to water distribution networks and the application of innovative models and technologies for wastewater treatment.

In 2021, research activities continued on the water and wastewater systems listed in the technical specifications of the project, carried out by internal staff and external researchers in collaboration with the universities of Bologna and Palermo.

MARILIA - MARA-BASED INDUSTRIAL LOW-COST IDENTIFICATION ASSAYS (Horizon 2020)

The MARILIA project, started in September 2020, aims to develop, from Technology Readiness Level 2/3 to 5, a new low-cost, high-sensitivity, expeditive test for the detection of pathogens in water samples, but potentially applicable also in other sectors such as food, health, agriculture. The objective is to validate the test at laboratory level, developed for the identification of a set of bacteria (to be identified with the contribution of IREN), laying the foundations for a subsequent deployment in the field by introducing a significant streamlining in terms of speed and cost compared to current analytical practices. During the first half of 2021, IREN shared clustering and monitoring standardisation activities with the partnership. In more detail, IREN has participated in the working groups related to the Water Europe technology platform on Water & ICT and Smart Sensors, as well as in the CEN/TC 230 WG4 working groups aimed at defining guidelines for the installation and management of online sensors.

PRELUDE (Horizon 2020)

The Prelude project was launched in December 2020 with the aim of testing on several pilot buildings in Europe solutions for innovative plant operation, including maximising opportunities for free-running, self-consumption and integration of renewable sources. From the technological point of view, PRELUDE intends to integrate multiple physical and mathematical models developed by the partners, databases of the different pilots and monitoring and control systems of the case study assets into a single modular platform/middleware based on FusiX, a metadata and DSS (Decision Support System) infrastructure developed by the EMTECH partner in previous EU projects.

IREN and IREN Smart Solutions participate in the project as coordinators of the experimental field activities on the Italian pilot that will see different levels of sensorisation, implementation and direct feedback to the inhabitants installed in some flats and at multi-building level. In the first months of the project, the building for the experiments has been identified in Turin and the characteristics of the sensors and actuators that will be installed on the pilot have been defined, also after some integration tests on the field.

RES-DHC (Horizon 2020)

The objective of the project, also awarded in 2020, is to create tools to support regulators and stakeholders in increasing the use of renewables in district heating and cooling systems. Programmatic and techno-economic assessment tools, actions to improve policies and regulatory frameworks, and innovative dissemination and communication means will be tested in six European pilot areas with the aim of validating their benefits and providing a set of tools for future energy projects.

IREN and IREN Energia participate in RES-DHC to test the tools and skills of the partners on studies/projects for the renewal of existing TLR networks or new expansion projects, with the primary objective of improving the way in which the Group's innovative district heating 4.0 projects are planned, communicated and accepted. In the first half of 2021, a preliminary SWOT-type analysis on district heating in Italy and its retrofitting with RES-E/T was produced. The Italian stakeholder group involving 12 different stakeholders on the subject was also launched, with the aim of sharing analyses and best practices and receiving suggestions to facilitate the integration of renewable sources in TLR networks.

BESTSAFE4IREN (Bando PRIA4.0 - Competence centre CIM4.0)

The project aims to increase the levels of redundancy, security and interoperability of worker safety equipment by integrating it with a LoRaWAN wireless infrastructure and a next-generation DLT patent capable of certifying data from field sensors on blockchain networks, in a standardised and anonymised manner, with the aim of guaranteeing the appropriate level of neutrality required for operational, regulatory, insurance and legal use. The project, started at the end of 2020, will develop a solution that will be tested on a portion of the TRM waste-to-energy plant and on a portion of a hill in the City of Turin where IREN operators handle waste collection. In the first six months of 2021, case studies were defined in detail, field tests verifying LoRaWAN connectivity were conducted, and prototype hardware systems were developed that will be installed in the vehicles under test.

OTHER INNOVATION ACTIVITIES

In the first half of 2021, in addition to co-financed projects, IREN carried out approximately 40 initiatives and self-financed projects, involving internal and external resources. In particular, as far as external collaborations are concerned, IREN has activated several research contracts with Italian universities and research bodies, which have covered aspects such as the design and testing of innovative plant solutions to support IREN's businesses, the creation of models and the identification of new processes and services.

A number of significant self-financed projects are presented below:

Water

During the first half of the year, research activities for the optimisation of aqueduct networks continued. In particular, IREN has initiated collaborations aimed at testing the use of specific probes to detect the presence of water in biomasses by measuring cosmic rays in the aqueduct sector, for the pre-location of water losses, and in the hydroelectric sector, for the estimation of water in snowpacks.

In addition IREN benefited from the results of an important research project aimed at improving the ARERA technical quality indicators in the integrated water cycle sector, for the purpose of responding to the needs of competitiveness and efficiency required by the new Regulation of the Technical Quality of the Integrated Water Service supporting the adoption of innovation in the planning of Investments. This made it possible to identify technological nuclei for which proof of concepts and feasibility studies could be carried out. During the first half of the year, two projects were launched to define the state of the art of the technological cores to be used for the disinfection of drinking water and to optimise the energy consumption of drinking water distribution plants and networks.

In the water sector, following the patent filing of the technological core that demonstrated the feasibility of the acoustic telemetry technique, in 2021 IREN carried out, in collaboration with the Politecnico di Torino, the design of the components of the system with acoustic modems, testing them on portions of the network built in the laboratory (bed test) and in the field. During the first half of 2021, on the basis of the executive design carried out, four prototypes were built and the test methods were defined at the pilot site set up at the IREN headquarters in Via Nubi di Magellano.

Work continued on researching new technologies to be applied to purification processes aimed at optimising management and recovering materials and energy from the supply chain. With regard to optimised management, in the first months of 2021, scouting activities focused on technologies for energy efficiency and on-line process monitoring, for which field tests are planned in the second half of the year. In the area of sludge reduction and recovery of materials and energy, collaboration with start-ups and research bodies continued, with the aim of assessing the yields and applicability of innovative processes such as hydrolysis, gasification or biotechnological processes for the extraction of high-value compounds, such as biopolymers.

As far as gasification is concerned, an in-depth study was developed to assess the feasibility and methods of applying the process to the sludge line of the Group's treatment plants.

The research activity involving Hera, IREN, SMAT, and A2A also continued. During the year, in fact, IREN continued to share its experience and knowledge through joint development of innovative projects, with repercussions to the benefit of the said Companies, with the objective of developing applied research, innovation and technological development in the context of management of the water service. In particular, during the first half of the year, projects continued dedicated to (i) on-line monitoring sensors dedicated to early warning; (ii) the recovery of substances useful for the production of bioplastics from the urban waste water purification cycle; (iii) the management of the presence of legionella in water networks by comparing different analytical methods; (iv) the monitoring of chlorites and chlorates by identifying infrastructural and technological upgrades, control and mitigation activities, and behaviours in the field of transparency and communication, in view of the entry into force of new limits provided by the revision of the European Drinking Water Directive for the two disinfection by-products (DBPs) chlorite and chlorate.

Projects included in the AMGA Foundation's research programme

During the first half of the year, IREN continued to collaborate on research projects financed by the AMGA Foundation relating to economic-regulatory issues and technical-scientific aspects connected with water, energy and environmental resources. Projects completed during the first half of the year included research on:

- MYRAEE - MYco Recovery of Electrical and Electronic Equipment;
- nanocatalysers based on manganese oxides for sustainable energy production (Mn4Energy);
- comparative assessment of biogas cleaning and upgrading processes;
- markets in search of regulation: tenders for gas distribution concessions;
- optimal methods of managing urban drainage systems based on innovative monitoring of rainfall using IoT low-power wide-area network technology;
- the economic, environmental and organisational performance of the Italian water sector;
- reuse of purified wastewater: analysis of the hygienic-sanitary impact;
- regulation of water and environmental services, analysis of factors that determine operating and capital costs, and possible impacts on price recognition models;
- intervention proposals for the removal of emerging pollutants and micropollutants in water treatment plants: conventional and innovative processes;
- national guidelines for the sustainability of third sector entities (ETS) with particular reference to energy and water;
- behavioural economy and energy market;
- cost-benefit analysis in the energy field (reference to no-dig);
- cost characteristics and economies of scale in the environmental services sector.

Ongoing projects include:

- applicability of Landfill Mining to old landfill sites in Italy;
- application of WSP to the water service: methodological and informative aspects for the stakeholders involved;
- resilience indicators in water distribution systems with respect to climatic and socio-economic changes;

During the first half of the year, additional research projects were identified under the Project 4.0 research call that the Foundation launched last year. Projects identified, funded and contracted in the first half of 2021 include:

- assessment of the residual risk in the effluent and sewage sludge for the presence of emerging micropollutants and identification of the best technologies to be adopted to reduce the risk to acceptable values;
- water quality and environmental exposure: focus on emerging contaminants from wastewater;
- integrated asset management in a context of geo-hydrological risk and climate change;
- evaluation of the presence of viral indicators in sludge from both wastewater purification and organic waste treatment, through molecular biology and electron microscopy methods;
- development of an innovative technology for the degradation of emerging pollutants through the use of non-conventional photocatalysts;
- multifunctional nanostructures as catalysts for clean energy production and simultaneous water purification (NYMPHEA);
- sewage treatment plants as possible hotspots in the spread of antibiotic resistance;
- stabilisation of PFAS in landfill leachate;
- analysis of retail prices on energy markets: evidence from the ARERA offers portal;
- the lever of tariff regulation to stimulate the engagement and awareness of users towards behaviours that favour waste prevention, reuse and recycling.

Waste Management

During the first half of 2021, research activities continued on scouting and quanti-qualitative analysis of the energy and environmental performance of processes and technologies for capturing and converting CO₂ produced by various types of emissions into products with high added value. Specifically, with regard to the capture and use of carbon dioxide produced by biogas upgrading processes, a study has been launched to assess the potential for integrating algal cultures with anaerobic digestion processes of OFMSW (nutrient use and CO₂; biomass valorisation).

Again with a view to optimising the management of the organic waste chain, a study was carried out on possible alternatives for the valorisation of digestate/compost through the extraction and production of fertilised products in compliance with the new European regulations.

In addition, the research activity launched in 2020 aimed at defining and evaluating a correlation model between the chemical composition of gaseous emissions (from waste treatment) and odour concentration continued.

During 2021, research activities continued on the valorisation of bottom and fly ashes produced by the Group's incineration plants. In particular, the activities carried out, which involved universities and industry, focused on assessing the industrial applicability of the processes previously studied at laboratory level.

With regard to the treatment of WEEE, following the development of a feasibility study with annexed field tests of a robotic system based on artificial vision for the automation of the process of dismantling end-of-life LCD screens treated at the TBD - Trattamento Beni Durevoli (Treatment of Durable Goods) plant in Volpiano (Turin), activities were started for the inclusion of the industrial line within the same plant.

Energy

Innovation Industry 4.0

IREN continues to research innovative solutions that fall under the definition of "Industry 4.0" applicable to the Energy Business Unit, with particular reference to the field of advanced and predictive maintenance. The analysis focused on specific verticals, namely infrastructure digitisation (big data and analytics) and process efficiency (advanced robotics, virtual and augmented reality, operator safety), concentrating on the thermoelectric, hydroelectric and district heating sectors.

In the first half of 2021, during the coldest months, the experimental technique of monitoring district heating networks by night-time aerial flight was used again. Using an aircraft-mounted high-resolution thermal imaging camera, it was possible to fly over the city of Turin and identify water and heat losses from the network using thermal image processing software. On the basis of the acquired data, a research activity has been started for the development of advanced maintenance models starting from the topological data of the Turin network and from the analysis of the temporal evolution of the above mentioned thermal images.

In the district heating field, instead, 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.

Other innovations in the energy field

In the research area, in the first half of 2021, IREN has:

- launched a project to build a complete supply chain with the production of hydrogen from electrolysis fed with electricity from renewable source plants (Hydroelectric and Waste-to-Energy) owned by the Iren group and its use in mobility in the Turin area.
In this context, IREN is also active at the tables of bodies and associations for the promotion and standardisation of hydrogen development;
- purchased a 50 kW electrolyser (approx. 10 Nm³/h nominal) based on alkaline technology for the production of hydrogen, with which to carry out tests in relevant environments of interest to the company. The tests will be carried out in collaboration with Environment Park;
- launched a research activity for the scouting and quantitative-qualitative analysis of the energy and environmental performance of processes and technologies for the capture and conversion of CO₂ from waste-to-energy plants into high value-added products (chemicals, gas, fuels, etc.);
- launched a project for the analysis of the evolutionary scenarios of thermal consumption due to variations in technical and exogenous factors over time and the possible effects on the Turin district heating network and on the production units;
- continued experimentation at a portion of the uncovered car park at the Martinetto site to test smart lighting systems. Innovative lighting fixtures from different manufacturers have been installed in this area, equipped with sensors capable of processing external stimuli (radar, presence sensors) and controlled remotely via a platform capable of integrating input from different databases. As part of the same experimentation, electric vehicle charging solutions integrated into public lighting poles and IoT sensor systems for air quality monitoring were also installed;
- carried out research to estimate the impacts of public and private electric mobility on Turin's electricity distribution network, with the aim of supporting network development decisions;
- developed solutions to support Renewable Energy Communities and self-consumption for which Italian legislation has recently provided a series of incentives, anticipating part of the transposition of the European RED-II directive. In this context, a preliminary study was carried out with annexed technological scouting of the technologies present on the market or under development. Subsequently, a pilot project was launched in the city of Parma to test the technologies currently on the market, and software was developed that allows for a quick estimate of the costs to be incurred and the incentives that can be obtained through an Energy Community;
- completed the LoRa Castellarano project, which provided for the implementation of the IoT connectivity network based on the LoRaWAN communication protocol covering the Municipality of Castellarano. The project tested distributed sensor solutions to serve the smart city, starting with assets managed directly by IREN, such as the gas distribution network, the drinking water network, and waste collection, and including additional services for citizens, such as monitoring weather conditions, air quality, car traffic, noise, parking, and the comfort conditions of some buildings owned by the municipality. The pilot project ended on 30 June 2021.

Corporate Venture Capital – IREN UP

During the first half of 2021, numerous activities were also carried out as part of the “IREN UP” Corporate Venture Capital programme. IREN UP focused on portfolio management activities, setting up follow up operations for the investments already in place.

In the case of the start-up Re Mat, which operates in the polyurethane recycling sector, the capital entry was finalised and the first loans were granted to finance development activities, which resulted in the start-up of the first polyurethane recycling plant in the first half of the year.

As far as the start-up i-Tes is concerned, the experimentation of the second prototype of phase change storage connected to district heating substations has been started and a storage unit has been installed at the Moncalieri power plant as part of the H2020 Pump-Heat project.

With regard to the start-up Enerbrain, the negotiation of an important financing round for approximately € 5 million was concluded and IREN, through IREN Smart Solution, increased its stake in July to 10% of the capital also through the conversion of previously subscribed option rights. With regard to Smart Mobility, the assessment of the assets by the Liquidator continued and the final steps to close the company are underway.

IREN UP has also been involved in the evaluation process of the Start Cup Emilia-Romagna start-up competition, where a special prize will be awarded to IREN for the Cleantech category. As every year, the public report on Italian Incubators sponsored by IREN UP was presented, which this year also participated in the advisory board contributing to the definition of the study.

The search and analysis of start-ups at national level during the first six months of 2021 has resulted in contacts with more than 100 start-ups, about ten of which are at an advanced stage of dossier analysis.

Among the many activities of analysis and collaboration with innovative companies, it is worth mentioning the various tests on innovative bioplastics and recyclable plastics, as well as feasibility studies for the disposal of sludge and the introduction of sustainability-related content on the B2C app dedicated to IREN customers.

Lastly, through collaboration with the Intesa San Paolo Innovation Centre, a scouting activity of start-ups active in the V2G field was pursued and the company participated in the activities of the Smart Mobility Corporate Club, an inter-company group that brings together Intesa San Paolo, Stellantis, Iren and Cisco.

Condensed Consolidated Interim Report and Notes

at 30 June 2021

STATEMENT OF FINANCIAL POSITION

		thousands of euro			
	Notes	30.06.2021	of which related parties	31.12.2020 Restated	of which related parties
ASSETS					
Property, plant and equipment	(1)	3,865,809		3,833,443	
Investment property	(2)	2,490		2,764	
Intangible assets with a finite useful life	(3)	2,362,091		2,355,140	
Goodwill	(4)	214,054		213,502	
Investments accounted for using the equity method	(5)	174,321		173,513	
Other equity investments	(6)	5,719		4,020	
Non-current trade receivables	(7)	98,279	17,746	115,113	32,717
Non-current financial assets	(8)	201,110	132,221	166,522	127,680
Other non-current assets	(9)	76,905	6,945	66,670	6,944
Deferred tax assets	(10)	379,154		369,375	
Total non-current assets		7,379,932	156,912	7,300,062	167,341
Inventories	(11)	83,981		66,606	
Trade receivables	(12)	790,544	117,044	875,661	100,185
Current tax assets	(13)	4,527		9,622	
Other receivables and other current assets	(14)	296,779	838	317,082	13
Current financial assets	(15)	140,732	8,286	95,356	9,951
Cash and cash equivalents	(16)	720,962		890,169	
Total current assets		2,037,525	126,168	2,254,496	110,149
Assets held for sale	(17)	1,144		1,285	
TOTAL ASSETS		9,418,601	283,080	9,555,843	277,490

As required by IFRS 3, the financial position as at 31 December 2020 has been restated to take into account, at the acquisition date, the effects of updating the provisional fair value of the net assets of the Unieco Waste Management Division and the completion of the purchase price allocation to the final fair value of the acquired assets and liabilities of the district heating business unit of SEI Energia. For further information, please refer to the paragraph "Restatement of amounts" in the section "Content and structure of the condensed consolidated interim report".

thousands of euro

	Notes	30.06.2021	of which related parties	31.12.2020 Restated	of which related parties
EQUITY					
Equity attributable to shareholders					
Share capital		1,300,931		1,300,931	
Reserves and Retained Earnings (Losses)		988,442		855,061	
Net profit (loss) for the period		193,238		235,345	
Total equity attributable to shareholders		2,482,611		2,391,337	
Equity attributable to non-controlling interests		360,644		372,214	
TOTAL EQUITY	(18)	2,843,255		2,763,551	
LIABILITIES					
Non-current financial liabilities	(19)	3,747,434	1,868	3,826,378	2,013
Employee benefits	(20)	104,947		109,027	
Provisions for risks and charges	(21)	407,277		405,456	
Deferred tax liabilities	(22)	180,901		203,540	
Other payables and other non-current liabilities	(23)	490,397	150	488,006	138
Total non-current liabilities		4,930,956	2,018	5,032,407	2,151
Current financial liabilities	(24)	273,996	4,604	275,251	4,755
Trade payables	(25)	845,532	21,742	977,906	40,230
Other payables and other current liabilities	(26)	371,432	5	345,447	363
Current tax liabilities	(27)	19,705		5,309	
Provisions for risks and charges - current portion	(28)	133,725		155,972	
Total current liabilities		1,644,390	26,351	1,759,885	45,348
Liabilities related to assets held for sale	(29)	-		-	
TOTAL LIABILITIES		6,575,346	28,369	6,792,292	47,499
TOTAL EQUITY AND LIABILITIES		9,418,601	28,369	9,555,843	47,499

INCOME STATEMENT

		thousands of euro			
	Notes	First half of 2021	of which related parties	First half of 2020 restated	of which related parties
Revenue					
Revenue from goods and services	(30)	1,966,711	166,293	1,742,825	162,972
Other income	(31)	38,293	3,459	83,063	2,122
Total revenue		2,005,004	169,752	1,825,888	165,094
Operating expenses					
Raw materials, consumables, supplies and goods	(32)	(562,083)	(30,795)	(508,371)	(14,453)
Services and use of third-party assets	(33)	(663,309)	(21,095)	(606,511)	(11,837)
Other operating expenses	(34)	(34,879)	(3,058)	(33,652)	(6,246)
Capitalised expenses for internal work	(35)	20,714		17,534	
Personnel expense	(36)	(247,971)		(221,584)	
Total operating expenses		(1,487,528)	(54,948)	(1,352,584)	(32,536)
GROSS OPERATING PROFIT (EBITDA)		517,476		473,304	
Depreciation, amortisation, provisions and impairment losses					
Depreciation and amortisation	(37)	(228,507)		(206,508)	
Provisions for impairment of receivables	(38)	(33,662)		(42,523)	
Other provisions and impairment losses	(38)	(4,198)		7,626	
Total depreciation, amortisation, provisions and impairment losses		(266,367)		(241,405)	
OPERATING PROFIT (EBIT)		251,109		231,899	
Financial income and expense					
Financial income	(39)	26,964	1,212	13,777	2,693
Financial expense		(41,603)	(39)	(44,144)	(1)
Total financial income and expense		(14,639)	1,173	(30,367)	2,692
Share of profit (loss) of associates accounted for using the equity method	(40)	6,276		5,143	
Value adjustments on equity investments	(41)	-		(146)	
Profit (loss) before tax		242,746		206,529	
Income tax expense	(42)	(34,238)		(60,927)	
- of which non-recurring		32,258		-	
Net profit (loss) from continuing operations		208,508		145,602	
Net profit (loss) from discontinued operations	(43)	-		-	
Net profit (loss) for the period		208,508		145,602	
attributable to:					
- Profit (loss) for the period attributable to shareholders		193,238		132,674	
- Profit (loss) for the period attributable to non-controlling interests	(44)	15,270		12,928	
Earnings per ordinary and savings share					
- basic (euro)	(45)	0.15		0.10	
- diluted (euro)		0.15		0.10	

As required by IFRS 3, the income statement balances for the first half of 2020 have been restated to take into account, at the acquisition date, the effects arising from the completion, at the end of 2020, of the purchase price allocation to the final fair value of the acquired assets and liabilities of the company Territorio e Risorse. For further information, please refer to the paragraph "Restatement of amounts" in the section "Content and structure of the condensed consolidated interim report".

STATEMENT OF OTHER COMPREHENSIVE INCOME

		thousands of euro	
		First half of 2021	First half of 2020 restated
Profit /(loss) for the period - Group and Third parties (A)		208,508	145,602
Other comprehensive income that will be subsequently reclassified to the Income Statement			
- effective portion of changes in fair value of cash flow hedges		33,336	(7,112)
- changes in fair value of financial assets		-	(620)
- share of other profits/(losses) of companies accounted for using the equity method		(331)	-
Tax effect of other comprehensive income		(8,939)	1,681
Total other comprehensive income to be subsequently reclassified to the Income Statement, net of tax effect (B1)	(46)	24,066	(6,051)
Other comprehensive income that will not be subsequently reclassified to the Income Statement			
- actuarial gains/(losses) on employee defined benefit plans (IAS19)		-	-
- 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 not to be subsequently reclassified to the Income Statement, net of tax effect (B2)	(46)	-	-
Total comprehensive income/(expense) (A)+(B1)+(B2)		232,574	139,551
attributable to:			
- Profit (loss) for the period attributable to shareholders		216,692	127,053
- Profit (loss) for the period attributable to non-controlling interests		15,882	12,498

As required by IFRS 3, the income statement balances for the first half of 2020 have been restated to take into account, at the acquisition date, the effects arising from the completion, at the end of 2020, of the purchase price allocation to the final fair value of the acquired assets and liabilities of the company Territorio e Risorse. For further information, please refer to the paragraph "Restatement of amounts" in the section "Content and structure of the condensed consolidated interim report".

STATEMENT OF CHANGES IN EQUITY

	Share capital	Share premium reserve	Legal reserve
31/12/2019 Restated	1,300,931	133,019	64,642
Dividends to shareholders			
Retained earnings			12,071
Purchase of treasury shares			
Change in equity interests			
Other changes			
Comprehensive income for the period			
of which:			
- Net profit for the period			
- Other comprehensive income			
30/06/2020 Restated	1,300,931	133,019	76,713
31/12/2020 Restated	1,300,931	133,019	76,713
Dividends to shareholders			
Retained earnings			10,503
Purchase of treasury shares			
Change in consolidation scope			
Change in equity interests			
Other changes			
Comprehensive income for the period			
of which:			
- Net profit for the period			
- Other comprehensive income			
30/06/2021	1,300,931	133,019	87,216

As required by IFRS 3, the financial position as at 30 June 2020 and 31 December 2021 has been restated to take into account, at the acquisition date, the effects of updating the provisional fair value of the net assets of the Unieco Waste Management Division and the completion, at the end of 2020, of the purchase price allocation to the final fair value of the acquired assets and liabilities of the company Territorio e Risorse. For further information, please refer to the paragraph "Restatement of amounts" in the section "Content and form 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 non-controlling interests	Total equity
(31,429)	584,032	750,264	236,362	2,287,557	363,756	2,651,313
		-	(119,504)	(119,504)	(25,451)	(144,955)
	104,787	116,858	(116,858)	-	-	-
	(10,775)	(10,775)		(10,775)	-	(10,775)
	(94)	(94)		(94)	(1)	(95)
	(114)	(114)		(114)	(2)	(116)
(5,621)	-	(5,621)	132,674	127,053	12,498	139,551
			132,674	132,674	12,928	145,602
(5,621)	-	(5,621)		(5,621)	(430)	(6,051)
(37,050)	677,836	850,518	132,674	2,284,123	350,800	2,634,923
(13,493)	658,822	855,061	235,345	2,391,337	372,214	2,763,551
			(121,892)	(121,892)	(27,390)	(149,282)
	102,950	113,453	(113,453)	-	-	-
	(4,092)	(4,092)		(4,092)		(4,092)
	-	-		-	1,575	1,575
	(1,266)	(1,266)		(1,266)	(287)	(1,553)
	1,832	1,832		1,832	(1,350)	482
23,454	-	23,454	193,238	216,692	15,882	232,574
			193,238	193,238	15,270	208,508
23,454	-	23,454		23,454	612	24,066
9,961	758,246	988,442	193,238	2,482,611	360,644	2,843,255

CASH FLOW STATEMENT

thousands of euro

	First half of 2021	First half of 2020 restated
A. Opening cash and cash equivalents	890,169	345,876
Cash flows from operating activities		
Profit (loss) for the period	208,508	145,602
Adjustments:		
Income tax expense for the period	34,238	60,927
Share of profit (loss) of associates and joint ventures	(6,276)	(5,143)
Net financial expense (income)	14,639	30,367
Amortisation of intangible assets and depreciation of property, plant and equipment	228,507	206,508
Net impairment losses (reversals of impairment losses) on assets	157	146
Net provisions	103,683	71,340
Capital (gains) losses	(315)	908
Utilisations of employee benefits	(4,918)	(3,393)
Utilisations of provisions for risks and other charges	(9,714)	(9,907)
Change in other non-current assets and liabilities	(12,214)	556
Other changes	(67,113)	(17,235)
Taxes paid	(42,630)	-
B. Cash flows from operating activities before changes in NWC	446,552	480,676
Change in inventories	(17,132)	10,671
Change in trade receivables	71,141	34,245
Change in tax assets and other current assets	14,690	(22,850)
Change in trade payables	(133,149)	(247,848)
Change in tax payables and other current liabilities	24,230	5,682
C. Cash flows from changes in NWC	(40,220)	(220,100)
D. Operating cash flow (B+C)	406,332	260,576
Cash flows from/(used in) investing activities		
Investments in property, plant and equipment and intangible assets	(279,130)	(254,153)
Investments in financial assets	(1,701)	-
Proceeds from the sale of investments and changes in assets held for sale	2,743	(1,394)
Changes in consolidation scope	2,579	(24,353)
Dividends received	1,604	1,372
E. Total cash flows from/(used in) investing activities	(273,905)	(278,528)
F. Free cash flow (D+E)	132,427	(17,952)
Cash flows from/(used in) financing activities		
Capital increase	-	-
Purchase of treasury shares	(4,092)	(10,775)
Dividends paid	(147,366)	(140,094)
New non-current loans	5,000	75,000
Repayment of non-current loans	(93,196)	(21,821)
Change in financial payables for leasing	(5,440)	(103,154)
Change in other financial payables	(13,723)	(75,525)
Change in financial receivables	(29,752)	335,253
Interest paid	(14,511)	(10,404)
Interest received	1,446	1,875
G. Total cash flows from/(used in) financing activities	(301,634)	50,355
H. Cash flows for the period (F+G)	(169,207)	32,403
I. Closing cash and cash equivalents (A+H)	720,962	378,279

As required by IFRS 3, the presentation of cash flows for the first half of 2020 has been restated to take into account, at the acquisition date, the effects of the completion, at the end of 2020, of the purchase price allocation to the final fair value of the acquired assets and liabilities of the company Territorio e Risorse. For further information, please refer to the paragraph "Restatement of amounts" 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) and established 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).

The paragraph on segment reporting, includes the information required by IFRS 8.

The condensed consolidated interim financial statements for the period ended 30 June 2021 comprise the interim financial statements of the parent and its subsidiaries (together, the “Group” and, individually, the “Group entities”) and the Group's interests in joint ventures and associates, which are accounted for using the equity method.

I. CONTENT AND FORM OF THE CONDENSED CONSOLIDATED INTERIM REPORT

The Condensed Consolidated Interim Report of the Iren Group at 30 June 2021 has been prepared in accordance with Article 154-ter, paragraph 2 of Legislative Decree No. 58 of 24 February 1998 as amended by Legislative Decree No. 195 of 6 November 2007.

The condensed consolidated interim financial statements at 30 June 2021 have been prepared in accordance with the International Financial Reporting Standards (“IFRS”) issued by the International Accounting Standards Board and endorsed by the European Union, as well as the measures issued in implementation of Article 9 of Legislative Decree No. 38/2005. The IFRS also include the revised 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 consolidated interim financial statements, having been prepared in accordance with IAS 34 - Interim Financial Reporting, do not include all the information required for the annual financial statements and must be read together with the annual financial statements as at and for the year ended 31 December 2020 available at the company's registered office, at Borsa Italiana S.p.A. and on the website www.gruppopen.it.

The financial statements have been drawn up on the basis of historical cost, except for certain financial instruments measured at fair value. The accounting policies applied in the preparation of the condensed consolidated interim financial statements are the same as those adopted for the preparation of the previous year's financial statements, to which reference should be made for a discussion of them, with the exception of the principles and interpretations adopted for the first time as from 1 January 2021 and illustrated in detail in the following paragraph “Accounting standards, amendments and interpretations applied as from 1 January 2021”.

The financial statement formats adopted by the Iren Group in preparing these condensed consolidated interim financial statements are the same as those applied in preparing the financial statements as at 31 December 2020.

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 expenses from total revenue.

The indirect method is used for the cash flow statement. The cash and cash equivalents analysed in the cash flow statement include cash on hand and amounts in current accounts.

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

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

The financial statements of the consolidated companies were prepared at the end of the reporting period.

ALTERNATIVE PERFORMANCE MEASURES

Iren Group uses alternative performance measures (APMs) in order to convey more effectively the information on the profitability performance of its business lines, and on its financial and capital 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 individual items that make up the indicator, please refer to the reconciliation statement 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 the analyses of operating trends and to measure performance in terms of operating efficiency over time.

Net financial debt: calculated as the sum of non-current financial liabilities at net of non-current financial assets and current financial liabilities at net of current financial assets and cash and cash equivalents.

This APM is used by the Group in the context of documents both internal to the Group and external and represents a useful tool to assess the Group's financial structure, including by comparing the reporting period with those related to the previous periods or fiscal years.

Gross operating profit (EBITDA): calculated by subtracting total revenues from the total operating costs. 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 (both as a whole and at the individual Business Units level), including by comparing the operating results for the reporting period with those for previous periods or fiscal years. This indicator also makes it possible to carry out the analyses of operating trends and to measure performance in terms of operating efficiency over time.

Operating earnings: determined by subtracting the depreciation, amortisation, provisions and operating impairment write-downs from gross operating profit (EBITDA).

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

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 by 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, divestments, changes in the consolidation scope and dividends collected.

Investments: calculated as the sum of investments in tangible, intangible and financial assets (equity investments) and reported at gross of the capital gains.

This APM is used by the Group in the context of internal documents of the Group and external documents, and measures the financial resources absorbed in purchases of consumer durable goods in the period.

EBITDA margin: calculated by comparing the adjusted EBITDA to the Revenue from sales and services.

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 indebtedness: determined as the ratio between net financial indebtedness and net 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 2021

As of 1 January 2021, the following accounting standards and amendments to accounting standards, issued by the IASB and endorsed by the European Union, must be applied:

Interest rate benchmark reform - Phase 2

In August 2020, the IASB published the Interest Rate Benchmark Reform - Phase 2 (amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4, and IFRS 16), endorsed by the European Union with Reg. 2021/25 of 13 January 2021. While Phase 1 focused on the consequences of pre-reform IBOR by providing exceptions to hedge accounting requirements, Phase 2 examines the consequences of contractual changes resulting from the reform by clarifying the proper accounting treatment of the financial instruments involved when interest rate benchmarks are replaced by alternative rate benchmarks.

The amendments mainly concern the following topics:

1) The accounting impacts of a change in the cash flows of a financial instrument resulting from a change in the contractually agreed index. With reference to the changes resulting from the reform of interest rates, the IASB has identified two types of scenarios: a) scenarios in which the reform of interest rates leads to a change in contractual conditions and b) scenarios in which the reform leads to changes in cash flows without requiring changes in contractual conditions. In either case, if the changes are the direct result of the interest rate reform and generate cash flows that are economically equivalent to those expected immediately before the changes resulting from the reform, then the instrument should not be derecognised. In essence, the effective interest rate of the instrument must be changed to reflect these changes, without any impact immediately recognised in the income statement (IFRS 9 B5.4.5.).

2) The consequences of an index change for hedge accounting. In Phase 2, the IASB introduces additional exceptions to the hedge accounting requirements to ensure that hedging relationships affected by the IBOR reform do not have to be discontinued upon replacement:

- i. the hedging relationship must not be interrupted if the change in documentation meets certain conditions (IFRS 9 6.9.1);
- ii. when the hedging relationship is changed to consider the new reference rate, the Cash Flow Hedging reserve recognised under Other comprehensive income is deemed to be calculated based on the alternative reference rate (IFRS 9 6.9.7);
- iii. for the purpose of assessing the retrospective effectiveness of a hedging relationship on a cumulative basis, as soon as the Phase 1 exceptions cease to apply, the cumulative change in the fair value of the hedged item and the hedging instrument can be reset to zero to prevent the hedging relationship from being terminated due to the accumulated ineffectiveness during Phase 1 (IAS 39 102V);
- iv. where the alternative reference rate is designated as a non-contractually specified risk component or the elements have been hedged at portfolio level, specific guidance is provided to manage the transition (IFRS 9 6.9.9-13).

3) Information required in the notes. In order to help all users of financial statements understand the nature and extent of risks arising from the reform and the progress made by entities in completing the transition to alternative reference rates, the following disclosures are required:

- a description of how the entity manages the IBOR transition for the various rates involved and the risks arising from that transition;
- the carrying amount of financial assets and liabilities not linked to derivatives and the nominal value of derivatives that continue to relate to benchmark interest rates subject to reform. These amounts are broken down by reference interest rate and presented separately;
- the impact of the IBOR reform on the entity's risk management strategy.

4) The impact of the IBOR reform on standards other than those relating to financial instruments, in particular IFRS 4 Insurance Contracts and IFRS 16 Leases. With respect to IFRS 16, in the case of leases that include variable payments indexed to benchmark rates that are within the scope of the IBOR reform, the document provides, as a practical expedient, that changes in lease payments resulting from the IBOR reform are accounted for as adjustments to the lease liability, rather than as lease modifications. This exception is strictly limited to changes that are the direct result of the IBOR reform and are economically equivalent to previous assumptions (e.g. the previous benchmark rate).

The Iren Group's hedging relationships are exposed to the EURIBOR benchmark index. The EURIBOR's calculation methodology was subject to review in 2019 by the European Money Markets Institute (EMMI) in order to meet the requirements of the Benchmarks Regulation (EU) 2016/1011 (BMR): it is therefore assumed that EURIBOR will continue to be used in the immediate future, and the directors believe that the risk associated with the IBOR transition is therefore almost nil and no significant effects are expected in the Group's consolidated financial statements. Iren also continues to monitor developments in the interest rate benchmark reform for determining interest rates and the inclusion of fallback clauses in contracts for financial transactions to guarantee the effectiveness of hedging relationships. It should be noted that the IBOR reform has not, at present, had any impact on the Iren Group's interest rate risk management strategy. At 30 June 2021, the nominal amount of financial liabilities not linked to derivatives and correlated to the EURIBOR benchmark was € 101,268 thousand, while the nominal amount of hedging instruments correlated to this index was € 458,281 thousand.

ACCOUNTING STANDARDS, AMENDMENTS AND INTERPRETATIONS ENDORSED BUT NOT YET APPLICABLE AND NOT APPLIED IN ADVANCE BY THE GROUP

Amendments to IAS 37 – Onerous contracts.

This document, published by the IASB in May 2020 and endorsed by the European Union with Reg. 2021/1080 of 28 June 2021, specifies which costs must be included in the cost of performing a contract in order to identify whether it is onerous. In particular, paragraph 68A clarifies that costs necessary to perform the contract include: (a) incremental costs incurred by the entity in performing the contract, such as materials and direct labour; and (b) an allocation of other costs, such as a portion of the depreciation of a facility used to perform the contract on a non-exclusive basis. The amendment must be applied as of 1 January 2022, with respect only to contracts in effect on the date of initial application. An entity shall not restate prior periods; the cumulative effect of applying the amendment for the first time shall be recognised in the opening balance of retained earnings (or other equity component if appropriate).

Amendments to IAS 16 - Proceeds before Intended Use.

This document, published by the IASB in May 2020 and endorsed by the European Union with Reg. 2021/1080 of 28 June 2021, introduces amendments to IAS 16 - Property, Plant and Equipment with respect to the accounting for any revenue arising from the sale of items produced by the entity to “bring the asset to the location and condition necessary for it to be capable of operating in the manner intended by management” (e.g. samples produced during the testing of equipment). Such income no longer has to be deducted from the cost of property, plant and equipment (the offset is therefore cancelled). Sales revenue and costs of such items shall be recognized in the income statement in accordance with the principles applicable to them.

If not presented separately in the statement of comprehensive income, an entity shall disclose in the notes to the financial statements the amounts of income and expense to items produced that are not an output of the entity's ordinary activities and specify which lines of the statement of comprehensive income include them.

The amendment is to be applied retrospectively from 1 January 2022, but only with respect to property and equipment that came into use or became available for use after the beginning of the first comparative period presented. The cumulative effect of applying the amendment for the first time shall be recognised in the opening balance of retained earnings (or other equity component if appropriate).

USE OF ESTIMATES

In preparing the condensed consolidated interim financial statements in accordance with IFRS, estimates and assumptions are based on past experience and other factors considered reasonable in the circumstances and have been adopted to determine fair values for the assets and liabilities to which they relate. Actual amounts resulting from the occurrence of events may differ from these estimates. Estimates were used to recognise certain revenue from sales on an accruals basis, loss allowance, inventories, amortisation, depreciation and impairment losses, employee benefits, the determination of the fair value of derivative instruments and certain financial assets, 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.

Certain complex measurement processes, such as the determination of impairment of non-current assets, are generally only carried out in full during the preparation of the annual financial statements, when all necessary information is available, except in cases where there are impairment indicators that require an immediate assessment of possible impairment losses.

In accordance with IAS 36, during the first half of 2021, the Group verified that there were no specific impairment triggers specifically relating to goodwill. However, it was deemed appropriate to re-test the recoverable amount of non-financial assets relating to the goodwill recognised at 30 June 2021, following the actual and expected economic and financial impacts of the spread of the Coronavirus in 2021. For further details see note 4 Goodwill. In addition, there were no indicators of impairment in relation to investments or assets.

In the same way, the actuarial valuations necessary to determine employee benefits are normally carried out in the preparation of the annual financial statements.

SEASONALITY

The Iren Group's profit for the period reflects the seasonal nature of the sectors in which it operates. Specifically, sales of natural gas, electric power generated by hydroelectric power plants and the production and sale of heat are affected by weather conditions and, consequently, cannot be extrapolated for the entire year.

The sale of electricity and the waste cycle show more consistent results over the course of the year, albeit with a trend linked to the contingent situation. On the other hand, linear results are typical of regulated network businesses (gas distribution, electricity distribution and Integrated Water Service).

RESTATEMENT OF AMOUNTS

Restatement of amounts at 30 June 2020

The Group acquired control of Territorio e Risorse S.r.l. in October 2019. For this acquisition, the final fair value of the identifiable assets acquired and liabilities assumed was determined during the fourth quarter of 2020, reflecting the best knowledge gained in the interim. In the condensed consolidated interim financial statements as at and for the six months ended 30 June 2020, it had therefore been recognised on a provisional basis, as permitted by IFRS 3.

In accordance with the standard, the fair value was updated with effect from the date of acquisition and, therefore, all the changes were made to the acquiree's financial position at that date. The resulting balances in the condensed consolidated interim financial statements at 30 June 2020 were restated to reflect the new amounts.

In detail, changes in the fair values of the previously recognised identifiable assets acquired and liabilities assumed resulted in the following adjustments to the statement of assets as at 30 June 2020:

	30.06.2020 Published	IFRS3 accounting effect	30.06.2020 Restated
thousands of euro			
ASSETS			
Intangible assets with a finite useful life	2,197,996	2,345	2,200,341
Goodwill	160,475	(1,223)	159,252
Total non-current assets	6,783,597	1,122	6,784,719
TOTAL ASSETS	8,459,088	1,122	8,460,210
EQUITY			
Net profit (loss) for the period	132,728	(81)	132,647
Total equity attributable to shareholders	2,284,204	(81)	2,284,123
TOTAL EQUITY	2,635,004	(81)	2,634,923
LIABILITIES			
Deferred tax liabilities	206,719	653	207,372
Total non-current liabilities	4,395,792	653	4,396,445
Current financial liabilities	315,670	550	316,220
Total current liabilities	1,428,292	550	1,428,842
TOTAL LIABILITIES	5,824,084	1,203	5,825,287
TOTAL EQUITY AND LIABILITIES	8,459,088	1,122	8,460,210

Similarly, and always with a view to a comparative presentation, the changes in the income statement and cash flow statement for the first half of 2020 are also reported below.

	thousands of euro		
	First half 2020 Published	IFRS3 accounting effect	First half of 2020 Restated
Depreciation and amortisation	(206,432)	(76)	(206,508)
OPERATING PROFIT (EBIT)	231,975	(76)	231,899
Profit (loss) before tax	206,605	(76)	206,529
Income tax expense	(60,949)	22	(60,927)
Net profit (loss) for the period	145,656	(54)	145,602
attributable to:			
- Profit (loss) for the period attributable to shareholders	132,728	(54)	132,674
- Profit (loss) for the period attributable to non-controlling interests	12,928	-	12,928

	thousands of euro		
	First half 2020 Published	IFRS3 accounting effect	First half of 2020 Restated
Profit (loss) for the period	145,656	(54)	145,602
Adjustments:			
Income tax expense for the period	60,949	(22)	60,927
Amortisation of intangible assets and depreciation of property, plant and equipment	206,432	76	206,508
Operating cash flow	260,576	-	260,576
Cash flows for the period	32,403	-	32,403

Restatement of amounts at 31 December 2020

In November 2020, the Group completed the acquisition of Unieco's "Waste Management Division", which operates in the urban and special waste treatment sector.

As permitted by IFRS 3, the fair value of the net assets acquired was provisionally recognised in the financial statements as at and for the year ended 31 December 2020. Similarly, it is not considered final as at the date of this report. However, during the first half of 2021, a better understanding of the acquired business enabled an update to be made to this fair value with respect to certain identifiable assets acquired and liabilities assumed, which was recognised effective as at the acquisition date.

In addition, in the first half of 2021, the allocation of the consideration paid to the final fair value of the identifiable net assets of the "SEI Energia" business unit, acquired in May 2020, was completed. Also in this case, the variations were recognised in the financial position of the business at the date of acquisition.

The above updates have resulted in the following adjustments to the statement of financial position at 31 December 2020, shown for comparative purposes in the table below.

	thousands of euro		
	31.12.2020 Published	IFRS3 accounting effect	31.12.2020 Restated
ASSETS			
Property, plant and equipment	3,831,865	1,578	3,833,443
Goodwill	213,587	(85)	213,502
Total non-current assets	7,298,569	1,493	7,300,062
Inventories	66,521	85	66,606
Total current assets	2,254,411	85	2,254,496
TOTAL ASSETS	9,554,265	1,578	9,555,843
EQUITY			
Net profit (loss) for the period	235,322	23	235,345
Total equity attributable to shareholders	2,391,314	23	2,391,337
TOTAL EQUITY	2,763,528	23	2,763,551
LIABILITIES			
Non-current financial liabilities	3,825,197	1,181	3,826,378
Total non-current liabilities	5,031,226	1,181	5,032,407
Current financial liabilities	274,877	374	275,251
Total current liabilities	1,759,511	374	1,759,885
TOTAL LIABILITIES	6,790,737	1,555	6,792,292
TOTAL EQUITY AND LIABILITIES	9,554,265	1,578	9,555,843

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 has all of the following:

- power over the investee, i.e. the current ability to direct the relevant activities of the investee that significantly affect the investee's returns;
- exposure, or rights, to variable returns from its involvement with the investee;
- the ability to use its power over the investee to affect the amount of the investor's returns.

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

Equity and the 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 with the elimination of intra-group balances, transactions, unrealised income and expenses.

Furthermore: a) all changes in the equity interest that do not constitute a loss of control are treated as equity transactions and, therefore, have a balancing entry in equity; b) when a parent transfers control in an investee but retains an interest in the company, it measures the retained equity investment at fair value and recognises any gains or losses deriving from loss of control in the income statement.

Joint ventures

These are companies over which 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 companies, 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 as public entity, the existence of joint control is ascertained 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/revenue 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 condensed consolidated interim 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 eliminated on consolidation. 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 scope of consolidation includes companies in which the parent exercises direct or indirect control as well as jointly controlled companies and associates.

Parent:

Iren S.p.A.

Consolidated companies

The four companies responsible for the single business units and their direct and indirect subsidiaries are consolidated .

1) Iren Ambiente and its subsidiaries:

- Waste Management ACAM
- AMIAT V and the subsidiary:
 - AMIAT
- Bonifica Autocisterne
- I.Blu
- Iren Ambiente Parma
- Iren Ambiente Piacenza
- Monte Querce
- ReCos
- Rigenera Materiali
- San Germano
- Territorio e Risorse
- TRM
- Unieco Holding Ambiente and its subsidiaries:
 - AMA
 - Bio Metano Italia
 - Gheo suolo e ambiente
 - Manduriambiente
 - Picena Depur
 - Sereco Piemonte
 - UCH Holding and its subsidiary:
 - Iren Ambiente Toscana (formerly STA) and its subsidiaries:
 - Energy Side
 - Futura
 - Produrre Pulito
 - Scarlino Holding and its subsidiaries:
 - Scarlino Energia
 - Scarlino Immobiliare
 - STA partecipazioni
 - TB
 - Unirecuperi and its subsidiary:
 - Borgo ambiente
 - Uniservizi
- Uniproject

2) Iren Energia and its subsidiaries:

- Asti Energia e Calore
- Iren Smart Solutions and its subsidiary:
 - Studio Alfa
- Maira and its subsidiary:
 - Formaira

- 3) Iren Mercato and its subsidiary:
- Salerno Energia Vendite
- 4) IRETI and its subsidiaries:
- ACAM Acque
 - ASM Vercelli and its subsidiary:
 - ATENA Trading
 - Consorzio GPO
 - Iren Laboratori
 - Iren Acqua and its subsidiary:
 - Iren Acqua Tigullio
 - Nord Ovest Servizi

On 22 April 2021, Iren Ambiente acquired an additional 7.42% interest in its subsidiary UCH Holding and therefore, following this transaction, the Group holds 100% of the company's share capital.

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

CHANGE IN CONSOLIDATION SCOPE

As reported in “Significant events of the period”, following the recent M&A transaction relating to the Unieco Waste Management Division, on 30 March 2021 the Group increased its stake in the associate Futura S.p.A., acquiring a further 20% of the share capital (for a consideration of € 1,100 thousand) and gaining control by virtue of a total shareholding of 60%. The company operates a mechanical-biological treatment plant that treats 140 thousand tonnes of non-sorted waste per year, equipped with a composting section for the organic and green fraction, whose concession expires in 2041.

Futura therefore falls within the consolidation scope and is consolidated at 31 March 2021. Pending the definition of the Purchase Price Allocation to be completed in accordance with IFRS 3, the positive difference between the acquisition cost of the investment and the provisional fair value, at the date control was acquired, of the identifiable assets acquired and the identifiable liabilities assumed was allocated to goodwill for € 552 thousand.

IV. GROUP FINANCIAL RISK MANAGEMENT

A summary of the risk management and control methods is shown below with respect to financial instruments (liquidity risk, foreign exchange 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 has been 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.

The current and prospective financial position 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, the short-term bank credit lines used by the parent were nil.

The nominal cash flows projected for the repayment of financial liabilities to lenders and the contractual terms of existing loans are substantially unchanged from those reported in the notes to the consolidated financial statements at 31 December 2020 in the section "a) Liquidity Risk" of the section "V. Group Financial Risk Management". Similarly, as regards the liabilities relating to the application of IFRS 16 on leases, the expected cash flows shown in the situation at 31 December 2020 remain basically unchanged when the analysis is updated to the date of this document.

Cash flows required to settle other financial liabilities, other than those to lenders and those related to the application of IFRS 16 on the subject of leases, do not differ significantly from the carrying amount.

Iren has relationships with leading Italian and international banks, for the purpose of procuring the types of loans best suited to its needs and at the best market conditions. Details of the activities performed in this area and of the individual transactions are shown in the section "Financial Income and Expense" of the Directors' Report.

Financial debt from loans at period-end was 15% loans and 85% bonds. 59% of the total debt was financed by sustainable funds and 86% of the outstanding debt for loans was at a fixed rate of interest and 14% 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 risk and covenants), Iren complies with the clauses in its loan agreements. Specifically, for certain medium/ long-term loan agreements Iren is committed to observing financial covenants (such as Debt/EBITDA, EBITDA/borrowing costs) verified on a yearly basis. Moreover, other covenants have been provided for the Change of Control clause, which states that the Iren Group should be kept under the direct and indirect control of public shareholders. In addition, Negative Pledge clauses exist whereby the company undertakes not to grant collateral beyond a specific limit, and the *Pari Passu* clause, which reserves an equal treatment for lending banks with respect to the treatment related to other unsecured creditors. Some medium/long-term financing contracts of companies that contribute to the Group's net financial debt, in particular TRM's Project Finance contract, also require compliance with financial covenants, which are complied with.

b) Foreign exchange risk

Except as indicated in 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 borrowing costs. 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. For non-speculative purposes, the risks associated with the increase in interest rates are monitored and, if necessary, reduced or eliminated by swap and collar contracts with financial high credit standing counterparties, for the sole purpose of hedging. At the end of the period, all contracts entered into meet the requirement to limit exposure to interest rate risk and also meet the formal requirements for hedge accounting.

The total fair value of these interest rate hedging contracts at 30 June 2021 was negative € 59,088 thousand. The hedging contracts entered into, together with fixed-rate loans, hedge approximately 97% of loans against interest rate risk, in line with the Iren Group's target of maintaining adequate protection against significant increases in the interest rate.

In order to allow a full understanding of the risks of interest rate changes to which the Group is subject, a sensitivity analysis of the net financial expenses and of the valuation components of derivative financial contracts to interest rate changes is conducted annually at 31 December.

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 waste management 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 assets may not be honoured on maturity with a consequent increase in their age and in insolvency up to an increase in assets 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 credit 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 and with credit insurance for the reseller customer segment.

An interest-bearing guarantee deposit is required for some types of services (water, natural gas, highly-protected 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.

The loss allowances reflect, carefully and in accordance with the current legislation (applying the IFRS 9 method), 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 data.

With regard to the emergency caused by Covid-19, and with specific reference to the possible liquidity difficulties of the customer portfolio linked to the measures to combat the pandemic and the regulatory and corporate measures to mitigate the economic and social impact of the crisis, the Group adjusted the loss allowance based on the assessment of expected losses.

Credit risk control 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. The assessment of credit risk is carried out both at the consolidated level and at the level of Business Units and companies. Some of the above assessments are carried out at intervals of less than three months or when there is a specific need.

There is credit concentration in the transaction between the subsidiaries Iren Smart Solutions 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 plans the production of its plants and purchases and sales of energy and natural, in relation to both volumes and price formulae. The objective is to achieve sufficient margin stability through a policy of indexed purchases and sales that achieves a high degree of natural hedging, with adequate recourse to futures and spot markets.

In addition to the regular physical contracts, Over the Counter (OTC) commodity derivative contracts (Commodity swaps on TTF and PSV indices) are in place to hedge the energy portfolio, for a total of 3.6 TWh. With regard to activity on the regulated EEX platform, there are derivative transactions on the PUN for a total net notional amount of 0.7 TWh. The overall fair value of these instruments at 30 June 2021 was a positive € 78,155 thousand.

RECOGNITION OF DERIVATIVES

Financial 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 under hedge accounting rules

These transactions may include:

- **fair value hedges:** 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 profit or loss;
- **cash flow hedges:** the derivative is recognised at fair value with a contra entry in a specific equity reserve for the effective portion of the hedge and in profit or loss for the ineffective portion; when the hedged instrument arises, the amount recognised in equity is reversed to profit or loss.

Classification in the income statement of the ineffective portion and the 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 it is recognised in financial income and expenses.

Transactions not recognised under hedge accounting

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 profit or loss 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 portion is recognised to adjust the cost or revenue to which it refers, while the portion determined from measuring the derivative at the end of the period is classified under other expense or other income;
- in the case of interest rate risk hedges, in financial income and expense.

As regards the measurement of the derivative in the statement of financial position, the fair value of the derivative is recognised in non-current financial assets and liabilities if the related underlying item is non-current. Conversely, the derivative is recognised in current financial assets and liabilities if the underlying item is settled within the reporting period.

FAIR VALUE

In addition to the carrying amount, the fair value, along with the main methods and assumptions used to determine it, must be disclosed for every asset and liability class recognised 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 with reference to the reporting date. The present value of future flows is determined by applying the forward interest rate curve at the reporting date.

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

	30.06.2021		31.12.2020	
	Carrying amount	Fair Value	Carrying amount	Fair Value
Hedging assets	63,614	63,614	17,244	17,244
Bonds due after 12 months	(3,127,054)	(3,294,234)	(3,124,430)	(3,339,613)
Bonds due within 12 months	(181,821)	(187,300)	(181,628)	(187,490)
Loans - non-current portion	(527,860)	(531,367)	(580,201)	(584,871)
Loans - current portion	(34,724)	(35,845)	(49,150)	(50,836)
Hedging liabilities	(60,122)	(60,122)	(73,115)	(73,115)
Total	(3,867,967)	(4,045,254)	(3,991,280)	(4,218,681)

The carrying amount of the financial asset and liability classes not included in the table above is equal to fair value.

FAIR VALUE HIERARCHY

The table below 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: quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2: inputs other than Level 1 quoted prices that are observable for the asset or liability, either directly (as in the case of prices) or indirectly (i.e. derived from prices);
- Level 3: unobservable inputs for the asset or liability.

	thousands of euro			
30.06.2021	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			30,948	30,948
Derivative financial assets - Cash Flow Hedges		63,614		63,614
Derivative financial assets - Fair Value Hedges				
Derivative financial assets not recognised under hedge accounting				
Total assets		63,614	30,948	94,562
Derivative financial liabilities - Cash Flow Hedges		(60,122)		(60,122)
Derivative financial liabilities - Fair Value Hedges				
Derivative financial liabilities not recognised under hedge accounting				
Total liabilities		(60,122)		(60,122)
Total		3,492	30,948	34,440

	thousands of euro			
31.12.2020	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			28,444	28,444
Derivative financial assets - Cash Flow Hedges		17,244		17,244
Derivative financial assets - Fair Value Hedges				
Derivative financial assets not recognised under hedge accounting				
Total assets		17,244	28,444	45,688
Derivative financial liabilities - Cash Flow Hedges		(73,115)		(73,115)
Derivative financial liabilities - Fair Value Hedges				
Derivative financial liabilities not recognised under hedge accounting				
Total liabilities		(73,115)		(73,115)
Total		(55,871)	28,444	(27,427)

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, thereby also enabling 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 debt 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

The main transactions directly carried out between the Group's main subsidiaries and the owner municipalities classified as related parties (Municipality of Turin, Municipality of Reggio Emilia, Municipality of Parma, Municipality of Piacenza and Municipality of Genoa) where Iren operates.

Through Iren Smart Solutions, the Group operates services awarded by the Municipality of Turin, i.e. 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 Smart Solutions are governed by specific long- term agreements.

In this regard an onerous current account contract is in place between the City of Turin and Iren Smart Solutions for management of the amounts past due related to the above activities.

Over the last few years, a number of important plant upgrades and energy efficiency measures have been carried out on the city's public lighting systems and the heating plants of many municipal buildings.

The Group, through Iren Mercato, provides to the Municipalities of Genoa, Reggio Emilia, Parma, Piacenza and Turin commercial supplies of energy vectors, specifically district heating, under the terms and 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.

Again in the context of the sector, for the Municipality of Turin the waste management and snow clearing services, and post-operative management of the "Basse di Stura" landfill site are provided by AMIAT in accordance with the Service Contract in place. In this regard an onerous current account contract is in place between the City and said AMIAT for management of the amounts past due related to the above activities.

Transactions with associates

Among the main transactions carried out by the Iren Group with joint ventures and associates, the following are noted:

- a centralised cash management line provided to Valle Dora Energia;
- the sales of electricity and water, and the work related to the integrated water service provided to AMTER;
- the sale of heat to NOVE, operating in the district heating sector;

- the waste disposal service, covering also special waste, provided by Iren Ambiente, TRM, and San Germano in favour of GAIA and SETA, operating in the collection sector;
- the procurement of natural gas from Sinergie Italiane;
- the transfer of waste to the landfills of associates ASA S.c.p.a., Barricalla, CSAI and Rimateria, and the related leachate disposal service;
- the service as Sole Manager of urban waste by associate SEI Toscana to TB.

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. Specifically, it is noted that in order to supply the integrated water service in the provinces of Parma, Piacenza, and Reggio Emilia, the company IRETI, against payment of an annual lease, uses the assets of the companies Parma Infrastrutture, Piacenza Infrastrutture, and AGAC Infrastrutture, controlled by the Municipalities involved. In addition, the Group provides methane gas and waste treatment services to AMIU, a subsidiary of the Municipality of Genoa, and waste disposal services to SMAT, a subsidiary of the Municipality of Turin.

In addition, Rigenera Materiali (wholly owned by Iren Ambiente), after being entrusted by AMIU Genova, holds the concession for the design, construction, management and operation of the mechanical biological treatment plant of urban waste, with production of CSS, currently under construction in Scarpino.

The remaining transactions 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 transactions with related parties is provided in chapter “XI. Annexes to the Condensed interim Consolidated Financial Statements”, 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 fees envisaged for the performance of duties in the management or control bodies of the parent or of other Group companies, there were no transactions.

Transactions that consist of assigning remuneration and economic benefits, in any form, to members of the management 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 its meeting on 30 April 2021, the RPTC unanimously expressed its favourable opinion with reference to the transaction, qualified as “of minor significance”, concerning the stipulation, between IREN Mercato S.p.A. and the Municipality of Genoa, of a contract for commercial visibility through inclusion as an official partner in the event “*The Ocean Race, Genoa Grand Final 2022 -23*”.

During the first half of 2021, the RPTC also received a periodic report on the status of execution of certain transactions previously examined, under the terms of Article 9(g) and Article 10(b) of the RPT Procedure), including (i) the transaction, qualified as being of greater significance, concerning the conclusion of an Agreement between the Municipality of Turin, on the one hand, and IREN, as agent of its subsidiaries AMIAT, Iren Energia (which was succeeded by Iren Smart Solutions) and Iren Mercato, on the other hand, for the regulation of the existing relationships between the parties - a transaction on which the RPTC had expressed a favourable opinion and for which reference should be made to the Information Document published on 29 March 2018 as well as to the Supplementary Information Document published on 9 July 2018, both documents available on the website www.gruppoiren.it; (ii) the transaction, qualified as of minor importance, concerning the presentation, by the subsidiary IREN Mercato S.p.A, of a Public Private Partnership Project for the electrification of a bus line of Azienda Municipale Trasporti S.p.A. (AMT Genoa); (iii) the transaction, classified as most significant, relating to the so-called Project Financing “EfficienTO”, concerning the efficiency upgrading of the buildings of the City of Turin and their management, presented by IREN Smart Solutions S.p.A.

At the meeting of 27 May 2021, also in the context of the functions assigned under the RPT Procedure in force at that time, the Remuneration and Appointments Committee expressed a favourable opinion on the terms of the agreement for the consensual termination of the relationship between Mr. Massimiliano Bianco and the Company, on the basis of which Mr. Bianco resigned, with effect from 29 May 2021, from

the positions of Director, Chief Executive Officer and General Manager, as well as all the powers and authorities granted to him.

At the meeting held on 29 May 2021, also in the exercise of the functions assigned under the RPT Procedure in force at the time, the Remuneration and Appointments Committee expressed a favourable opinion on the economic-contractual conditions of the fixed-term executive employment relationship between IREN S.p.A. and Gianni Vittorio Armani, who was on the same date co-opted by the Board of Directors as a new member of the Board of Directors, in replacement of Mr. Massimiliano Bianco, who resigned, and was appointed as CEO and General Manager of the Company.

VI. OTHER INFORMATION

CONSOB COMMUNICATION NO. DEM/6064293 of 28 July 2006

Significant non-recurring events and transactions

During the first half of 2021, the Iren Group benefited from the option on the realignment of accounting and tax values under Article 110 of Legislative Decree 104 of 14 August 2020, and subsequent amendments and additions (“decree no. 104/20”) which, in paragraphs 8 and 8-bis, gives IFRS-adopter and OIC-adopter companies the possibility to opt for the realignment of the (lower) tax values to the (higher) carrying amounts of certain property, plant and equipment and intangible assets (paragraph 8), as well as goodwill and other intangible assets (paragraph 8-bis). The application of the regulation contained in Decree 104/20 resulted in the recognition of net tax income of € 32,258 thousand in the first half of 2021. For further details, reference should be made to note 42 “Income taxes”.

Positions or transactions deriving from atypical and/or unusual operations

It should be noted that during the first half of 2021, the Group did not carry out any atypical and/or unusual transactions, 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 non-controlling investors.

PUBLICATION OF THE FINANCIAL STATEMENTS

The Interim Financial Report was authorised for publication by the Board of Directors of Iren S.p.A. in its meeting of 3 August 2021.

VII. NOTES TO THE STATEMENT OF FINANCIAL POSITION

Unless otherwise stated, the tables below are in thousands of euro.

ASSETS

NON-CURRENT ASSETS

NOTE 1_PROPERTY, PLANT AND EQUIPMENT

The breakdown of property, plant and equipment, including rights of use, divided between historical cost, accumulated depreciation and carrying amount, is shown in the table below:

	thousands of euro					
	Cost at 30/06/2021	Accumulated depreciation at 30/06/2021	Net book value at 30/06/2021	Cost at 31/12/2020	Accumulated depreciation at 31/12/2020	Net book value at 31/12/2020
Land	141,759	(6,543)	135,216	142,675	(6,259)	136,416
Buildings	806,926	(302,073)	504,853	807,873	(294,372)	513,501
Plant and machinery	5,682,753	(2,939,237)	2,743,516	5,631,017	(2,848,472)	2,782,545
Industrial and commercial equipment	170,400	(126,988)	43,412	167,082	(123,831)	43,251
Other assets	356,179	(235,191)	120,988	325,483	(210,046)	115,437
Assets under construction and payments on account	317,824	-	317,824	242,293	-	242,293
Total	7,475,841	(3,610,032)	3,865,809	7,316,423	(3,482,980)	3,833,443

The variation in the historical cost of property, plant and equipment, including rights of use, is as follows:

	thousands of euro					
	31/12/2020	Increases	Decreases	Changes in consolidation scope	Reclassifications	30/06/2021
Land	142,675	121	(876)	66	(227)	141,759
Buildings	807,872	4,313	(564)	-	(4,695)	806,926
Plant and machinery	5,631,017	44,653	(24,125)	33,771	(2,563)	5,682,753
Industrial and commercial equipment	167,082	5,697	(1,413)	24	(990)	170,400
Other assets	325,483	10,784	(2,371)	2,885	19,398	356,179
Assets under construction and payments on account	242,293	84,715	(330)	454	(9,308)	317,824
Total	7,316,422	150,283	(29,679)	37,200	1,615	7,475,841

The change in accumulated depreciation of property, plant and equipment, including rights of use, is as follows:

	thousands of euro					
	31/12/2020	Depreciation for the period	Decreases	Changes in consolidation scope	Reclassifications	30/06/2021
Land	(6,259)	(301)	17	-	-	(6,543)
Buildings	(294,372)	(14,029)	412	(470)	6,386	(302,073)
Plant and machinery	(2,848,472)	(108,640)	23,962	(9,505)	3,418	(2,939,237)
Industrial and commercial equipment	(123,831)	(4,470)	1,278	(719)	754	(126,988)
Other assets	(210,046)	(16,516)	2,247	(33)	(10,843)	(235,191)
Total	(3,482,980)	(143,956)	27,916	(10,727)	(285)	(3,610,032)

The column "Changes in consolidation scope-" refers to the balances acquired during the first half of the year relating to the Futura companies.

The balance of the "reclassifications" 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

Assets under construction include all expenses incurred for investments in progress and not yet in operation.

Increases

The increases for the period, amounting to € 150,283 thousand, mainly relate to:

- development of the district heating network and new connections to the network, including heat exchange substations, meters and remote reading equipment, for € 22,509 thousand;
- investments in electricity distribution networks, including primary substations, for € 21,007 thousand;
- investments in gas networks not under concession in accordance with IFRIC 12 for € 5,810 thousand;
- investments in thermoelectric and hydroelectric power plants for € 44,856 thousand;
- investments for the collection and disposal of waste in the waste management sector amounting to € 42,341 thousand.

Depreciation and amortisation

Ordinary depreciation and amortisation for the first half of 2021, amounting to € 143,956 thousand, were calculated on the basis of the rates indicated in the 2020 annual report and deemed representative of the residual useful life of the fixed assets.

Italian Law Decree No. 135 of 14 December 2018 (Urgent provisions on support and simplification for businesses and the public administration – the so-called “D.L. Semplificazioni” – converted, with amendments, by Italian Law No. 12 of 11 February 2019, governs the new system of remuneration of Wet Works in relation to large shunting concessions for hydroelectric plants; the new law establishes that Wet Works must be transferred without payment to the Regions. If the Operator has made new investments during the useful life and provided that these investments have been authorised or permitted by the competent Public Administration, the Operator will have the right to a remuneration limited to the non-depreciated value. Consequently, for purposes of legal consistency, as of 2019, the depreciation schedule of the Wet works concerning the expired concessions was redetermined, considering the possible reassignment dates thereof; on the basis of the previous law, it had been suspended since the 2012 financial statements.

Finally, no assets are pledged against liabilities.

Rights of use - IFRS 16

IFRS 16 provides for the recognition in the statement of financial position 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 acts as lessee mainly relate to property and production plant leases and long-term vehicle and motor vehicle rentals.

The breakdown of rights of use, divided between historical cost, accumulated depreciation and carrying amount, is as follows:

	thousands of euro					
	Cost at 30/06/2021	Accumulated depreciation at 30/06/2021	Net book value at 30/06/2021	Cost as at 31/12/2020	Accumulated depreciation at 31/12/2020	Net book value at 31/12/2020
Land	6,260	(1,299)	4,961	6,253	(1,037)	5,216
Buildings	29,130	(6,633)	22,497	27,252	(5,293)	21,959
Plant and machinery	1,773	(146)	1,627	783	(170)	613
Industrial and commercial equipment	791	(509)	282	812	(401)	411
Other assets	19,649	(9,616)	10,033	20,558	(7,448)	13,110
Total	57,603	(18,203)	39,400	55,658	(14,349)	41,309

The variation in the historical cost of rights of use is as follows:

	thousands of euro				
	31/12/2020	Increases	Decreases	Changes in consolidation scope	30/06/2021
Land	6,253	48	(41)	-	6,260
Buildings	27,252	2,352	(474)	-	29,130
Plant and machinery	783	1,244	(254)	-	1,773
Industrial and commercial equipment	812	-	(21)	-	791
Other assets	20,558	81	(1,045)	55	19,649
Total	55,658	3,725	(1,835)	55	57,603

The change in the accumulated depreciation of rights of use is as follows:

	31/12/2020	Depreciation for the period	Decreases	30/06/2021
Land	(1,037)	(279)	17	(1,299)
Buildings	(5,293)	(1,624)	284	(6,633)
Plant and machinery	(170)	(103)	127	(146)
Industrial and commercial equipment	(401)	(119)	11	(509)
Other assets	(7,448)	(2,941)	773	(9,616)
Total	(14,349)	(5,066)	1,212	(18,203)

thousands of euro

NOTE 2_ INVESTMENT PROPERTY

The following table highlights the breakdown of the item:

	Cost at 30/06/2021	Accumulated depreciation as at 30/06/2021	Net book value at 30/06/2021	Cost at 31/12/2020	Accumulated depreciation at 31/12/2020	Net book value at 31/12/2020
Land	646	-	646	709	(6)	703
Buildings	3,972	(2,128)	1,844	4,172	(2,111)	2,061
Total	4,618	(2,128)	2,490	4,881	(2,117)	2,764

thousands of euro

This item consists mainly of properties whose fair value is not lower than their carrying amount.

NOTE 3_ INTANGIBLE ASSETS WITH A FINITE USEFUL LIFE

The breakdown of intangible assets, divided between historical cost, accumulated amortisation and carrying amount is as follows:

	Cost as at 30/06/2021	Accumulated amortisation at 30/06/2021	Net book value at 30/06/2021	Cost as at 31/12/2020	Accumulated amortisation as at 31/12/2020	Net book value at 31/12/2020
Development costs	10,591	(4,839)	5,752	8,880	(3,948)	4,932
Industrial patents and intellectual property rights	200,426	(123,290)	77,136	190,177	(109,072)	81,105
Concessions, licences, trademarks and similar rights	3,146,713	(1,272,349)	1,874,364	3,092,281	(1,223,665)	1,868,616
Other intangible assets	413,443	(201,839)	211,604	423,217	(182,200)	241,017
Assets under development and payments on account	193,235	-	193,235	159,470	-	159,470
Total	3,964,408	(1,602,317)	2,362,091	3,874,025	(1,518,885)	2,355,140

thousands of euro

The change in the historical cost of intangible assets is as follows:

	thousands of euro					
	31/12/2020	Increases	Decreases	Changes in consolidation scope	Reclassifications	30/06/2021
Development costs	8,880	219	-	-	1,492	10,591
Industrial patents and intellectual property rights	190,177	7,421	-	-	2,828	200,426
Concessions, licences, trademarks and similar rights	3,092,281	46,918	(1,008)	212	8,310	3,146,713
Other intangible assets	423,217	75,218	(84,467)	1,088	(1,613)	413,443
Assets under development and payments on account	159,470	46,415	(32)	14	(12,632)	193,235
Total	3,874,025	176,191	(85,507)	1,314	(1,615)	3,964,408

Changes in accumulated amortisation of intangible assets are shown in the following table:

	thousands of euro					
	31/12/2020	Amortisation for the period	Decreases	Changes in consolidation scope	Reclassifications	30/06/2021
Acc. amortisation of development costs	(3,948)	(865)	-	-	(26)	(4,839)
Acc. amortisation of industrial patents and intellectual property rights	(109,072)	(14,215)	-	-	(3)	(123,290)
Acc. amortisation of concessions, licences, trademarks and similar rights	(1,223,665)	(49,292)	779	(171)	-	(1,272,349)
Acc. accumulated amortisation of other intangible assets	(182,200)	(20,145)	711	(519)	314	(201,839)
Total	(1,518,885)	(84,517)	1,490	(690)	285	(1,602,317)

The column “changes in the consolidation scope” refers to the balances acquired during the first half of the year relating to the Futura companies.

The balance of the “reclassifications” 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.

The increases in the item “other intangible assets” refer mainly to the purchases of emission allowances and the capitalisation of costs for commercial development of customers, while the decreases refer to the cancellation of the emission allowances.

The carrying amount of other intangible assets at the end of the first half of the year included € 96,871 thousand in assets recognised as costs incurred for the commercial development of customers.

Industrial patents and intellectual property rights

This item mainly relates to the total costs borne for the purchase and internal production of business software and the acquisition of rights for the exclusive use of technical studies on the statistical trend of network losses, amortised over three to five years.

Concessions, licences, trademarks and similar rights

This item consists mainly of:

- assets recognised in application of IFRIC 12, related to 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 non-owned penstocks of hydroelectric plants;
- concessions for the operation and management of photovoltaic systems.

Other intangible assets

This item consists mainly of:

- rights to use telecommunication infrastructure owned by third parties;
- emission allowances held for internal needs;
- costs for the commercial development of customers;
- valuation of the customer list made for the purchase price allocation for the acquisition of control over Atena Trading, Salerno Energia Vendite, Studio Alfa and Spezia Energy Trading;
- the valuation of the environmental authorisations for the operation of the biodigester and recovery plants on the purchase price allocation for the acquisition of control of Ferrania Ecologia and Territorio e Risorse.

Assets under development 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 amounted to € 214,054 thousand (€ 213,502 thousand at 31 December 2020), up by € 552 thousand in the first half of 2021 as a result of the acquisition of control of Futura, in which, pending the valuation to be performed in accordance with IFRS 3 - Business Combinations, the provisionally determined positive difference between the acquisition cost and the acquisition-date provisional fair value of the identifiable assets acquired and liabilities assumed has been allocated to goodwill.

In the first half of 2021, the acquisition of control of the business unit called “SEI Energia”, which includes the district heating network in the municipalities of Rivoli and Collegno and 49% of the company NOVE, which manages the district heating network in the municipality of Grugliasco, was finalised in May 2020. The provisionally-recognised amounts in the 2020 financial statements have been redetermined following the upward adjustment of the acquired business unit’s inventories by € 85 thousand and, consequently, the difference recognised as goodwill was reduced.

Goodwill is considered an intangible asset with an indefinite useful life and, therefore, is not amortised, but is tested for impairment at least once a year to verify the recoverability of its carrying amount. 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. At the Group level the Cash Generating Units coincide with the individual Business Units described in the introduction 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 goodwill to the Cash Generating Units.

	thousands of euro
	30/06/2021
Waste Management	63,378
Energy	6,755
Market	32,460
Networks	111,461
Total	214,054

Waste Management Cash Generating Unit

Goodwill, amounting to € 63,378 thousand, mainly refers to:

- the acquisition of control of Futura in March 2021 (€ 552 thousand);
- the acquisition of control of the companies operating in waste management acquired from Unieco in November 2020 (€ 46,745 thousand);
- the acquisition of control of I.Blu S.r.l. in August 2020 (€ 5,562 thousand);
- the acquisition of control over Ferrania Ecologia s.r.l. in July 2019 (€ 7,048 thousand);
- the 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);
- the acquisition of control of ACAM Ambiente (ACAM group) in April 2018 (€ 2,572 thousand).

Energy Cash Generating Unit

Goodwill, amounting to € 6,755 thousand, refers to:

- the acquisition of control in May 2020 of a business unit called "SEI Energia" which includes the district heating network in the municipalities of Rivoli and Collegno, and 49% of the company NOVE which manages the district heating network in the municipality of Grugliasco (€ 2,068 thousand);
- the acquisition of control over Iren Rinnovabili in 2017 following the expiry of the governance agreements entered into with the other shareholder CCPL S.p.A. which made Iren Rinnovabili a joint venture. The goodwill of € 3,544 thousand 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;
- the Heat Service Management business unit transferred in 2017 from the Market Cash Generating Unit to the Energy Cash Generating Unit (€ 948 thousand).

Market Cash Generating Unit

Goodwill of € 32,460 thousand derives mainly from:

- the acquisition of control of Spezia Energy Trading S.r.l. in September 2018 (€ 2,694 thousand);
- the 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;
- 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;
- business unit acquired from ENEL in 2000 and referred to electricity users of the city of Parma, for an amount of € 7,421 thousand;

Networks Cash Generating Unit

Goodwill of €111,461 thousand refers mainly to:

- the acquisition of control of Nord Ovest Servizi in July 2020 (€ 1,325 thousand);
- the acquisition of control of Busseto Servizi in January 2019 (€ 1,638 thousand);
- the acquisition of control over ACAM Acque (ACAM group) in April 2018 (€ 15,442 thousand);
- the acquisition of control of Acqua Italia S.p.A in 2005 (now Mediterranea delle Acque 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;
- the 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 acquisition cost and the fair value of acquired and identifiable assets and liabilities was recognised as goodwill for € 64,608 thousand;
- business unit acquired from ENEL in 2000 and referred to electricity users of the city of Parma, for an amount of € 3,023 thousand;

As anticipated in paragraph I “Basis of presentation ” of this report, during the first half of 2021, in accordance with IAS 36, the Group verified the non-existence of specific impairment triggers with particular reference to goodwill.

In particular, following the occurrence of the effects of the pandemic linked to the spread of the Coronavirus, the Company assessed, in accordance with paragraphs 9 and 12 of IAS 36, whether there were indications, based on internal or external sources of information, of impairment of its non-financial assets at 30 June 2021.

From the analysis carried out and in consideration of the particular nature of the business (over 70% in regulated or semi-regulated sectors) in which the company operates, there was no evidence of impairment of non-financial assets.

However, following the actual and expected economic and financial impacts of the Coronavirus outbreak in 2021, it was deemed appropriate to re-test the recoverable amount of non-financial assets with reference to the goodwill recognised at the reporting date.

The objective of the analysis was to recalculate the impairment reserves” (difference between the recoverable amount and the carrying amount of non-financial assets for each CGU) based on the Business Plan used for the impairment test at 31 December 2020, supplemented by the expected impacts in 2021 of the spread of the pandemic. These impacts have been identified as a decrease of approximately € 10 million of lower EBITDA in the current financial year as a result of emerging external costs (IPR, cleaning, sanitation, operational activities, penalties), and a drop in revenue.

The changes that occurred between 31 December 2020 and 30 June 2021 in the risk components of the discount rates (WACC) were assessed and, as they were not material, the cash flows were discounted using the same WACC as that estimated for the 2020 impairment test and reported in the financial statements at 31 December 2020.

The test confirmed the carrying amount of the non-financial assets at 30 June 2021, with only marginal changes in the estimated impairment reserves at 31 December 2020.

NOTE 5_INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

Equity investments accounted for using the equity method are investments in companies in which the Group has joint control or exercises significant influence. The equity method is applied on the basis of the latest available financial statements (consolidated if any) of the investees.

The list of Group companies measured using the equity method at 30 June 2021 is attached as an annex.

The changes that occurred in the first half of the year are described below.

Equity investments in joint ventures

	31/12/2020	Changes in consolidation scope	Loss due to equity measurement	Dividend distribution	Impairment losses of the period	Other changes	30/06/2021
Acque Potabili	9,907	-	(1,643)	-	-	-	8,264
TOTAL	9,907	-	(1,643)	-	-	-	8,264

thousands of euro

As of 31 May 2021, the company Acque Potabili was put into liquidation.

Investments in associates

	31/12/2020	Changes in consolidation scope	Gains (losses) due to equity measurement	Dividend distribution	Impairment losses of the period	Other changes	30/06/2021
A2A Alfa	-	-	-	-	-	-	-
Acos	12,388	-	887	-	-	-	13,275
Acos Energia	902	-	264	-	-	82	1,248
Acquaenna	3,854	-	210	-	-	(120)	3,944
Aguas de San Pedro	11,711	-	1,290	-	-	470	13,471
Aiga	-	-	-	-	-	-	-
Amat	-	-	-	-	-	-	-
Amter	1,014	-	132	-	-	-	1,146
Asa	37,030	-	1,689	-	-	(211)	38,508
Asa scpa	1,197	-	-	-	-	-	1,197
Astea	23,318	-	985	(277)	-	-	24,026
Asti Servizi Pubblici	9,815	-	619	(451)	-	-	9,983
Barricalla	1,076	-	1,255	(1,189)	-	-	1,142
BI Energia	813	-	(197)	-	-	-	616
CSA	619	-	(10)	-	-	-	609
CSAI	1,126	-	(54)	-	-	-	1,072
CSP	-	-	-	-	-	-	-
Innovazione nelle ICT	-	-	-	-	-	-	-
Fingas	-	-	-	-	-	-	-
Fratello Sole Energie Solidali	297	-	(41)	-	-	-	256
Futura	1,813	(1,813)	-	-	-	-	-
G.A.I.A.	14,746	-	34	-	-	-	14,780
Global Service	6	-	-	-	-	-	6
Iniziative Ambientali	473	-	14	-	-	-	487
Mondo Acqua	665	-	-	-	-	-	665
Nove	2,300	-	7	-	-	-	2,307
Rimateria	1,396	-	-	-	(1,396)	-	-
SEI Toscana	9,525	-	(503)	-	-	-	9,022
SETA	11,157	-	976	(454)	-	-	11,679
Sienambiente	9,812	-	461	-	-	13	10,286
Sinergie Italiane	-	-	-	-	-	-	-
STU Reggiane	5,405	-	-	-	-	-	5,405
Tirana Acque	-	-	-	-	-	-	-
Valle Dora Energia	1,148	-	(99)	(122)	-	-	927
TOTAL	163,606	(1,813)	7,919	(2,493)	(1,396)	234	166,057

For the subsidiary Futura, the change in the scope of consolidation refers to the acquisition of control and the consequent consolidation of the company.

With regard to the associate Rimateria, the Court of Livorno declared the company bankrupt on 14 June 2021 and, therefore, the investment was fully impaired. In addition, the liability previously recognised for the variable portion of the purchase price of the company's shares (earn-out) was cancelled as the condition for payment was not met.

As regards the equity investment in Sinergie Italiane, whose carrying amount is zero, the provisions for risks to cover the risk of losses related to this investee amount to € 6,500 thousand (unchanged compared to 31 December 2020).

The amounts in the Other changes column are mainly due to the exchange difference (Agua de San Pedro) and changes in the hedging reserves (Asa and Acquanna).

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 have been kept at cost.

The list of other Group equity investments as at 30 June 2021 is attached in the annex.

The breakdown of this item is as follows:

	31/12/2020	Increases	(Decreases)	30/06/2021
AISA Impianti	992	-	-	992
Autostrade Centro Padane	1,248	-	-	1,248
Enerbrain	-	1,451	-	1,451
Environment Park	1,243	-	-	1,243
Others	537	250	(2)	785
TOTAL	4,020	1,701	(2)	5,719

thousands of euro

NOTE 7_NON-CURRENT TRADE RECEIVABLES

Trade receivables, which are discounted, amounted to € 98,279 thousand (€ 115,113 thousand as at 31 December 2020) and refer mainly to:

- trade receivables of the integrated water service for tariff adjustments and for lower volumes supplied than the operator's guaranteed revenue; the current tariff method provides generally (unless the fee growth limit is reached) for their recovery through fees after two years (€ 59,533 thousand as at 30 June 2021, € 61,800 thousand as at 31 December 2020);
- trade 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 amounts due (€ 16,969 thousand as at 30 June 2021, € 15,975 thousand as at 31 December 2020);
- trade receivables from the City of Turin for the technological renovation and efficiency upgrading of the thermal plants at certain municipal buildings, as well as the non-current portion of trade receivables for the management and maintenance of the plants, traffic lights, thermal and electrical power determined on the basis of the expected collection time (€ 17,746 thousand at 30 June 2021, € 32,717 thousand at 31 December 2020). For more information on the Iren Group's overall position with the City of Turin, please refer to Note 8 "Non-current financial assets".

NOTE 8_NON-CURRENT FINANCIAL ASSETS

This item amounted to € 201,110 thousand (€ 166,522 thousand at 31 December 2020) and consisted of financial receivables, derivative instruments with a positive fair value and securities other than equity investments. These are detailed in the following table.

	thousands of euro	
	30/06/2021	31/12/2020
Non-current financial receivables from associates	35,763	34,620
Non-current financial receivables from related-party shareholders	96,458	92,954
Non-current financial receivables from others	11,693	13,700
Fair value of derivatives – non-current portion	1,895	800
Securities other than equity investments	73	24
Other financial assets	55,228	24,424
Total	201,110	166,522

Non-current financial receivables from associates

They mainly consist of amounts due from Valle Dora Energia (€ 21,344 thousand), Acos (€ 5,467 thousand), Nove (€ 4,883 thousand) and Acquaenna (€ 3,832 thousand). There was also a loan asset of € 817 thousand with the associate ALGA which was completely impaired.

Non-current financial receivables from related-party shareholders

Receivables from related parties amounted to € 96,458 thousand (€ 92,954 thousand at 31 December 2020) and related to receivables from the City of Turin and refer to:

- the non-current portion of the amount, including interest, related to the current account which governs transactions between the subsidiaries AMIAT S.p.A., Iren Smart Solutions S.p.A., and the Municipality of Turin (€ 64,072 thousand);
- the application of the financial asset model provided for by IFRIC 12 to the efficiency project ("Torino LED") for the Public Lighting service operated by Iren Smart Solutions S.p.A. under concession in the city of Turin, consisting of the non-current portion (€ 32,386 thousand). The recognition of the discounted financial asset is a result of the vesting of the unconditional right to receive the contractually-agreed cash flows, which coincided 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 assets form part of an overall position, totalling € 176,781 thousand, and are divided among various accounting items according to their classification by type and due date: 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.

The directors have classified trade receivables as current and non-current on the basis of a forecast of their collection times, also considering the outcome of the agreement signed by the Municipality of Turin and the Iren Group in 2018.

	thousands of euro	
	30/06/2021	31/12/2020
Non-current trade receivables	17,746	32,717
Invoices issued for services	28,179	43,770
Invoices to be issued for services	27,980	8,150
Supply of electricity and other	2,385	1,948
Provisions for impairment of trade receivables	(173)	(69)
Total current trade receivables	58,371	53,799
Non-current portion of current account financial assets	64,072	63,076
Non-current portion of service concession financial assets	32,386	29,878
Total non-current financial assets	96,458	92,954
Current portion of current account financial assets	-	2,343
Current portion of accrued interest income	2,809	2,855
Current portion of service concession financial assets	1,397	1,246
Total current financial assets	4,206	6,444
Total	176,781	185,914

Non-current financial assets with others

They include the non-current portion of the amount due on the 2019 sale of the business unit related to the management of the integrated water service of two municipalities in ATO Veronese's catchment area and the amount arising from the application of the financial asset model provided for by IFRIC 12 to the efficiency project related to the Public Lighting service operated under concession in the cities of Vercelli, Biella and Fidenza.

Fair value of derivatives – non-current portion

The fair value of derivative contracts refers to instruments in the portfolio to hedge against the risk of fluctuations in interest rates on variable-rate loans and commodity prices.

Securities other than equity investments

This item amounted to € 73 thousand (€ 24 thousand at 31 December 2020) and related to securities valued at amortised cost.

Other financial assets

They consist of:

- € 25,228 thousand from the variable portion of the sale price of the investment in OLT Offshore LNG Toscana and the related loan. These assets are measured at fair value and any changes are recognised in profit or loss for the period
- € 30,000 thousand for certificates of deposit signed with Banca Alpi Marittime and measured at amortised cost.

NOTE 9_OTHER NON-CURRENT ASSETS

These are as follows:

	thousands of euro	
	30/06/2021	31/12/2020
Guarantee deposits	11,068	11,042
Tax assets after 12 months	58,470	47,475
Other non-current assets	5,066	5,508
Non-current accrued income and prepaid expenses	2,301	2,645
Total	76,905	66,670

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 refer mainly to deductions on work done in order to improve the energy efficiency of buildings (ecobonus) and to VAT assets for which claims for refund have been made.

Prepaid expenses mainly include the non-current portion of prepaid costs for energy service contracts of the subsidiary Iren Smart Solutions S.p.A.

NOTE 10_DEFERRED TAX ASSETS

This item amounted to € 379,154 thousand (€ 369,375 thousand at 31 December 2020) and related to deferred tax assets arising from costs that will be deductible in future years. They mainly concern the tax effect of temporary differences between the carrying amount and tax base of non-current assets, provisions for risks, the loss allowance, deferrals of connection fees and the fair value of derivative financial instruments. They also include the tax effect of adjustments for the adoption of the IFRS.

CURRENT ASSETS

NOTE 11_INVENTORIES

Inventories, measured at weighted average cost, primarily comprise natural gas and consumables for maintenance and construction of the Group plants.

Contract work in progress mainly refer to activities performed for the Municipality of Turin.

The table below summarises the amounts of the item in the periods in question:

	thousands of euro	
	30/06/2021	31/12/2020
Raw materials	87,680	70,990
Inventory write-down provision	(4,994)	(5,348)
Carrying amount	82,686	65,642
Contract work in progress	1,295	964
Total	83,981	66,606

The change in raw materials for the period is due mainly to increases in gas stocks.

The inventory write-down provision was set up and used to cover inventories that are technically obsolete and slow-moving.

At 30 June 2021 no inventories were pledged against liabilities.

NOTE 12_TRADE RECEIVABLES

These are as follows:

	thousands of euro	
	30/06/2021	31/12/2020
Trade receivables from customers	923,187	1,007,564
Trade receivables from joint ventures	95	142
Trade receivables from associates	21,051	20,554
Trade receivables from related-party shareholders	93,041	75,986
Trade receivables from other related parties	2,857	3,503
Total gross trade receivables	1,040,231	1,107,749
Provision for impairment of receivables	(249,687)	(232,088)
Total	790,544	875,661

At 30 June 2021, factoring transactions with derecognition of the trade receivable totalled € 37,048 thousand (€ 40,094 thousand as of 31 December 2020).

Trade receivables, gross of provisions for impairment of receivables, are broken down by due date as follows:

	thousands of euro	
	30/06/2021	31/12/2020
Not yet due	652,695	739,742
0 to 3 months past due	128,980	125,508
3 to 12 months past due	99,249	99,293
More than 12 months past due	159,307	143,206
Total	1,040,231	1,107,749

Amounts not yet past due include invoices to be issued for € 404,362 thousand (€ 482,315 thousand at 31 December 2020), which include the estimated revenue accrued for supplies made between the date of the last recording of actual consumption and the reporting date.

Trade receivables from customers

These mainly relate to amounts due for electricity, gas, water and heat supplies, waste management services and sundry services.

Trade receivables from joint ventures

This item includes amounts due from the Group's joint ventures consolidated using 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.

Trade 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.

Trade receivables from related-party shareholders

Trade receivables from related-party shareholders refer to trade transactions performed at arm's length with the territorial authorities classified as related parties (Municipalities of Genoa, Parma, Piacenza, Reggio Emilia and Turin) and, marginally, with the company FSU. For further details, please see the table of related-party transactions shown in the annex.

Trade receivables from other related parties

These regard amounts due from the companies controlled by the territorial authorities that are owners (Municipalities of Genoa, Parma, Piacenza, Reggio Emilia and Turin) and refer to normal trade transactions carried out at arm's length.

Provision for impairment of receivables

This changed as follows:

	31/12/2020	Impairment losses for the period	Utilisations	30/06/2021
Loss allowance	232,088	32,849	(15,250)	249,687

thousands of euro

The impairment losses for the period were set aside to adjust the amount of the loss allowance to the expected credit losses determined on the basis of the simplified model provided for in the standard IFRS 9, where "loss" means the present value of all cash shortfalls, considering forwardlooking information.

NOTE 13_CURRENT TAX ASSETS

These amounted to € 4,527 thousand (€ 9,622 thousand at 31 December 2020) and included amounts due from the tax authorities for IRES and IRAP.

NOTE 14_OTHER RECEIVABLES AND OTHER CURRENT ASSETS

These are as follows:

	30/06/2021	31/12/2020
Government land tax/UTIF	758	26,041
VAT asset	69,980	84,622
Other tax assets	23,946	24,133
Tax assets within 12 months	94,684	134,796
Receivables from Cassa Servizi Energetici e Ambientali (CSEA)	53,473	77,258
Receivables for green certificates	41,435	33,997
Advances to suppliers	16,682	11,468
Other current assets	49,643	46,731
Other current assets	161,233	169,454
Accrued income and prepaid expenses	40,862	12,832
Total	296,779	317,082

thousands of euro

At 30 June 2021, factoring transactions of the VAT asset with derecognition were carried out for a total of € 12,151 thousand (€ 93,484 thousand as of 31 December 2020). At 31 December 2020, there were also factoring transactions of the asset for energy efficiency securities with derecognition for a total of € 27,912 thousand.

The change in the tax assets for government land tax is due to the dynamics of payments on account and balance, which are influenced by the invoicing volumes of the reporting period and the previous year.

The companies that take part in the Group VAT scheme for 2021, in addition to the parent Iren S.p.A., are as follows: Iren Energia S.p.A., IRETI S.p.A. (and the merged company Busseto S.r.l.), Iren Mercato S.p.A. (and the merged company SET S.r.l.), Iren Ambiente S.p.A. (and the merged companies CMT S.p.A. and Ferrania S.r.l.), AMIAT S.p.A, Iren Smart Solutions S.p.A., Iren Acqua Tigullio S.p.A., Iren Acqua S.p.A. (and the merged company Immobiliare delle Fabbriche S.r.l.), Iren Laboratori S.p.A., Bonifica Autocisterne S.r.l., ASM Vercelli S.p.A., Atena Trading S.r.l, ACAM Ambiente S.p.A., ACAM Acque S.p.A., ReCos S.p.A., Studio Alfa S.p.A. (and the merged company Coin Consultech S.r.l.), TRM S.p.A, San Germano S.p.A., Maira S.p.A., Formaira S.p.A., Montequerce S.c.a.r.l., Territorio e Risorse S.r.l. and Rigenera Materiali S.r.l.

With regard to amounts due from the Cassa Servizi Energetici e Ambientali (CSEA), a portion of the amounts shown may not be recoverable within the next 12 months; their reduction is due to the lower tariff contributions recognised against the reduction in the obligations for Energy Efficiency Certificates (White Certificates) in 2020, which electricity and natural gas distributors are required to fulfil, introduced by the Decree of the Ministry of Ecological Transition of 21 May 2021.

NOTE 15_ CURRENT FINANCIAL ASSETS

These are as follows:

	thousa006Eds of euro	
	30/06/2021	31/12/2020
Financial receivables from associates	4,081	3,614
Financial receivables from related-party shareholder Municipalities	4,206	6,444
Other accounts receivable	70,726	68,854
Current portion of derivative financial instruments–	61,719	16,444
Total	140,732	95,356

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 mainly refers to loans to Acquaenna (€ 220 thousand), BI Energia (€ 833 thousand), STU Reggiane (€ 487 thousand) and interest from Valle Dora Energia (€ 150 thousand). The remainder regards 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 relate to amounts due from the City of Turin, on which interest accrues in favour of the Group, they amounted to € 4,206 thousand (€ 6,444 thousand at 31 December 2020) and related to transactions between the subsidiaries AMIAT S.p.A. and Iren Smart Solutions and the City of Turin.

For details of the Iren Group's overall position with the Municipality of Turin please see Note 8 "Non-current financial assets".

Other accounts receivable

These refer for € 36,240 thousand to restricted 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 restricted. The remaining balance consists of amounts arising from the implementation of the financial asset model provided by IFRIC 12 for the water purification service acquired in the Marche region, deposits paid to perfect the share buyback program, deposits provided as collateral in connection with transactions in the future commodities markets, the receivable for the price adjustment for the acquisition of control of San Germano and CMT, accrued income and deferred charges of a financial nature and sundry financial receivables.

Current portion of derivative financial instruments

These refer to the positive fair value of derivative contracts entered into to hedge the risk of fluctuations in commodity prices.

NOTE 16_CASH AND CASH EQUIVALENTS

The item “Cash and cash equivalents” is made up as follows:

	thousands of euro	
	30/06/2021	31/12/2020
Bank and postal deposits	720,868	889,870
Cash and similar on hand	94	299
Total	720,962	890,169

Cash and cash equivalents consist of available bank and postal deposits. The Group does not hold cash equivalents, intended as short-term and highly liquid investments 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 and amount to € 1,145 thousand (€ 1,285 thousand at 31 December 2020). This item concerns:

- for € 987 thousand (unchanged from 31 December 2020), the net assets related to the concessions of the integrated water service of four municipalities of the province of Alessandria and two municipalities of Valle d’Aosta for which the takeover of the new operator is being defined;
- for € 158 thousand (unchanged from 31 December 2020) to the associate Piana Ambiente.

In addition, assets held for sale include the equity investment in Fata Morgana, already completely impaired in previous periods.

At 31 December 2020, this item included the investment in the associate Plurigas (€ 140 thousand), whose liquidation process ended in the first half of 2021.

LIABILITIES

NOTE 18_EQUITY

Net equity may be analysed as follows:

	thousands of euro	
	30/06/2021	31/12/2020
Share capital	1,300,931	1,300,931
Reserves and Retained Earnings (Losses)	988,442	855,061
Net profit (loss) for the period	193,238	235,345
Total equity attributable to shareholders	2,482,611	2,391,337
Capital and reserves attributable to non-controlling interests	345,374	342,465
Profit/(loss) attributable to non-controlling interests	15,270	29,749
Total consolidated equity	2,843,255	2,763,551

Share capital

The share capital, unchanged compared to 31 December 2020 amounts to € 1,300,931,377, which is fully paid-up and comprises 1,300,931,377 ordinary shares with a face value of € 1 each.

On 29 April 2020, the Shareholders' Meeting authorised the Board of Directors to purchase treasury shares for eighteen months for a maximum of 65,000,000 shares, equivalent to 5% of the share capital, in accordance with the relevant regulations. At 30 June 2021, 17,855,645 shares were purchased for a total consideration of € 38,740 thousand recorded as a reduction of shareholders' equity within the item "Reserves and Retained Earnings (Losses)".

Reserves and Retained Earnings (Losses)

The breakdown of this item is as follows:

	thousands of euro	
	30/06/2021	31/12/2020
Treasury shares	(38,740)	(34,648)
Share premium reserve	133,019	133,019
Legal reserve	87,216	76,713
Hedging reserve	9,961	(13,493)
Other reserves and retained earnings (losses)	796,986	693,470
Total reserves	988,442	855,061

Hedging reserve

Changes in the fair value of effective hedging derivatives are recognised with a corresponding offsetting item directly in net equity under the cash-flow hedging reserve. These contracts were entered into 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

These comprise mainly the surplus generated from the merger of AMGA into AEM Torino and the subsequent merger of Enia into Iride, from retained earnings and losses carried forward, and the actuarial reserve (for actuarial gains and losses resulting from the measurement of post-employment benefits).

In the first half of 2021, they changed mainly due to the carry-forward of the profit for 2020 (€ 102,950 thousand).

Dividends

On 6 May 2021, the Ordinary Shareholders' Meeting of Iren S.p.A. approved the Company's financial statements at 31 December 2020 and the Directors' Report, and resolved to distribute a dividend of € 0.095 per ordinary share, confirming the proposal made by the Board of Directors. At the ex-dividend date, there were 1,283,075,732 outstanding shares and, consequently, the total amount of dividends distributed was € 121,892,194.54.

For further details, reference should be made to the statement of changes in equity.

NON-CURRENT LIABILITIES

NOTE 19_NON-CURRENT FINANCIAL LIABILITIES

These totalled € 3,747,434 thousand (€ 3,826,378 thousand at 31 December 2020).

Bonds

These amount to € 3,127,054 thousand and are due after 12 months (€ 3,124,430 thousand at 31 December 2020). The item entirely refers to the parent's Public Bond issues, accounted for at amortised cost, for a total nominal amount outstanding at 30 June 2021 of € 3,159,634 thousand (unchanged from 31 December 2020). The details of Public Bonds with maturity after 12 months are as follows:

- Bond maturing November 2022, coupon 2.75%, issue amount € 500 million, outstanding at 30 June 2021 for € 359,634 thousand following tender offers made in 2016 and 2017 (amount at amortised cost € 358,841 thousand);
- Bond maturing November 2024, coupon 0.875%, amount € 500 million, fully outstanding (amount at amortised cost € 496,949 thousand);
- Green Bond maturing October 2027, coupon 1.5%, amount € 500 million, fully outstanding (amount at amortised cost € 493,421 thousand);
- Green Bond maturing September 2025, coupon 1.95%, amount € 500 million, fully outstanding (amount at amortised cost € 495,975 thousand);
- Green Bond maturing October 2029, coupon 0.875%, amount € 500 million, fully outstanding (amount at amortised cost € 495,462 thousand);
- Bond maturing July 2030, coupon 1%, amount € 500 million, fully outstanding (amount at amortised cost € 490,160 thousand);
- Green Bond maturing January 2031, coupon 0.25%, amounting to € 300 million, fully outstanding (amount at amortised cost € 296,246 thousand).

The bonds were subscribed by Italian and foreign institutional investors, are listed on the Irish Stock Exchange and have a Fitch rating.

The change in the total carrying amount compared to 31 December 2020 is due to the recognition of accrued interest expense, calculated using the amortised cost method.

Non-current bank loans

This refers to the portion due after 12 months of non-current loans/financing granted by financial institutions, which amounted to € 527,860 thousand (€ 580,201 thousand at 31 December 2020).

Non-current financing can be analysed by interest rate type (with respective indications of minimum and maximum rates applied) and by maturity date (related to the portion after 12 months), as shown in the table below:

	thousands of euro		
	fixed rate	floating rate	TOTAL
min/max rate	4.095% - 5.151%	0.000% - 0.327%	
maturity period	2022-2028	2022-2036	
1.7.2022 – 30.6.2023	1,205	46,805	48,010
1.7.2023 – 30.6.2024	1,162	54,138	55,300
1.7.2024 – 30.6.2025	1,105	61,176	62,281
1.7.2025 – 30.6.2026	1,168	59,292	60,460
subsequent	3,215	298,594	301,809
Total after 12 months as at 30/06/2021	7,855	520,005	527,860
Total after 12 months as at 31/12/2020	20,192	560,009	580,201

All loans are denominated in €.

The changes in non-current financing during the year are summarised as follows:

	thousands of euro					
	31/12/2020		Changes in consolidation scope		30/6/2021	
	Total after 12 months	Increases		Decreases	Change in amortised cost	Total after 12 months
- fixed rate	20,192	-	-	(12,337)	-	7,855
- floating rate	560,009	5,000	21,206	(66,433)	224	520,005
TOTAL	580,201	5,000	21,206	(78,770)	224	527,860

Total non-current debt at 30 June 2021 decreased overall compared to 31 December 2020, due to the combined effect of:

- grant of a loan of € 5,000 thousand to the parent from CEB (Council of Europe Development Bank) in relation to the investment programme in the integrated water service infrastructure in the Parma and Genoa areas;
- an increase of € 21,206 thousand in non-current loans held by Futura, a company that entered the Group's scope of consolidation in 2021;
- a decrease of € 78,770 thousand due to the voluntary early repayment of the parent's loans and the above-mentioned loans acquired in the consolidation scope, for Liability Management activities, and to the classification of the portions of loans due within the next 12 months as current;
- an increase of € 224 thousand due to the recognition of loans at amortised cost.

Other financial liabilities

This item amounted to € 92,520 thousand (€ 121,747 thousand at 31 December 2020) and refers:

- for € 1,868 thousand (€ 2,013 thousand at 31 December 2020) to payables to associates;
- for € 60,086 thousand (€ 72,547 thousand at 31 December 2020) to the fair value of derivative contracts entered into to hedge the exposure to the risk of fluctuations in interest rates on variable rate mortgages (for comments, reference should be made to the section "Group financial risk management");
- for € 27,559 thousand (€ 28,890 thousand at 31 December 2020) to lease liabilities;
- for € 3,007 thousand (€ 3,434 thousand at 31 December 2020) to lower loans from others, the most significant amounts of which related to loans of certain consolidated companies in which the Group does not hold 100% of the shares, granted by the non-controlling investor.

At 31 December 2020, there were € 14,863 thousand of equity financial instruments issued and interest payables extinguished early in the first half of 2021.

NOTE 20_EMPLOYEE BENEFITS

Changes during the first half of 2021 were as follows:

	thousands of euro				
	31/12/2020	Changes in consolidation scope	Payments during the period	Obligations vested during the period	30/06/2021
Post-employment benefits	96,042	277	(4,422)	481	92,378
Additional salary payments (seniority bonus)	2,677	-	(159)	27	2,545
Loyalty bonus	2,988	-	(33)	53	3,008
Tariff discounts	5,141	-	(85)	-	5,056
Premungas fund	2,179	-	(219)	-	1,960
Total	109,027	277	(4,918)	561	104,947

The column “changes in consolidation scope” refers to the balances acquired during the half-year relating to the company Futura.

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.

Actuarial assumptions

The valuation of the liabilities shown above was performed by independent actuaries in connection with the preparation of the 2020 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 the total number of employees and employee remuneration. Future service represents the amount that would be paid out 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:

- relevant market;
- the measurement date;
- 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 as follows:

Annual discount rate	-0.02% - 0.34%
Annual inflation rate	0.80%
Annual increase rate of post-employment benefits	2.10%

NOTE 21_ PROVISIONS FOR RISKS AND CHARGES

This item amounted to € 407,277 thousand (€ 405,456 thousand at 31 December 2020). These are detailed in the following table, and refer both to the current and non-current portions:

	31/12/2020	Increases	Decreases	Actuarial gains (losses)	Changes in consolidation scope	30/06/2020	Non-current portion
Provision for restoration of third party assets	164,879	3,842	-	738	-	169,459	169,459
Post mortem provisions	72,342	-	(2,496)	3,357	-	73,203	63,323
Provisions for dismantling and reclaiming sites	40,236	-	(9)	2,788	-	43,015	42,978
Provisions for early retirement	15,045	343	(2,488)	-	-	12,900	3,663
Provisions for risks on equity investments	6,565	-	-	-	-	6,565	-
Obligation to cancel ETS allowances	82,527	58,402	(82,527)	-	-	58,402	-
Other provisions for risks and charges	179,834	4,859	(7,932)	-	697	177,458	127,854
Total	561,428	67,446	(95,452)	6,883	697	541,002	407,277

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 2.26%.

The column “changes in consolidation scope” refers to the balances acquired during the half-year relating to the company Futura.

Provision for restoration of third party assets

This provision refers 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 Enia), was transferred to the financial statements of three full publicly-held companies as envisaged in Art. 113 paragraph 13 of T.U.E.L. 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.

Post mortem provisions

These are mainly provisions for future expense for environmental remediation 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 in Parma on which an incinerator was located.

Provisions for early retirement

These 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 early retirement incentives for some employees, on a voluntary basis among the Group’s personnel who are potentially involved. The transaction should 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 individuals.

The incentive, completely chargeable to the Iren Group (in application of Art. 4 of Italian Law 92/2012), will enable the personnel who meet the legal requisites to retire ahead of the date of eligibility, making up in part for the delay in retirement created by the social security reform.

These provisions represent the estimated payment to the employees involved in the Plan, through the social security institution, of a benefit of an amount equal to the pension that would be payable on the basis of the current rules (“early retirement”) with payment of the contribution to the social security institution 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.

During 2019, in order to continue in the programme for professional and demographic rebalancing of the personnel and following agreements with the trade unions, the Group set aside provisions for retirement incentives on a voluntary basis for employees interested and with the requisites introduced by Italian Law Decree 4/2019 containing the so-called “quota 100”. Article 14 of the aforementioned Italian Law Decree 4/2019 introduces starting from 2019 the possibility of retiring once workers meet the requirements of 62 years of age and 38 years of contributions by 31 December 2021.

Provisions for risks on equity investments

This item mainly refers to risks of future charges deriving from management of the investee Sinergie Italiane.

Obligation to cancel ETS allowances

This item refers to obligations related to carbon dioxide emission rights under the Emission Trading Scheme. Changes relate to the estimated costs of the obligation for the period and the cancellation of ETS certificates for having met the prior year obligation.

Other provisions for risks and charges

The amount of the provisions mainly relates to the probable risk of higher charges related to the construction of plants currently completed or yet to be completed, the estimated IMU/ICI to be paid on the value of the plants of the power plants calculated in accordance with Article 1-quinquies of Decree Law No. 44 of 31 March 2005, charges for environmental offsets, regulatory risks and probable charges related to various disputes.

The current portion referring to the provisions described above was presented under “provisions for risks and charges - current portion” (Note 28).

NOTE 22_DEFERRED TAX LIABILITIES

Deferred tax liabilities, amounting to € 180,901 thousand (€ 203,540 thousand at 31 December 2020), are due to temporary differences between the carrying amount and the tax base of assets and liabilities recognised in the statement of financial position. See Note 42_Income taxes for comments on the change from 31 December 2020.

Deferred taxation is calculated with reference to the expected tax rates applicable when the temporary differences will reverse.

NOTE 23_OTHER PAYABLES AND OTHER NON-CURRENT LIABILITIES

This item can be broken down as follows:

	thousands of euro	
	30/06/2021	31/12/2020
Due after 12 months	55,319	54,988
Deferred income for grants related to assets - non current	430,869	429,448
Non-current accrued charges and deferred income	4,209	3,569
Total	490,397	488,006

The item “Due after 12 months” refers to advances paid by users to guarantee water supply, to amounts related to previous years to be paid for the government-sponsored temporary redundancy fund (CIG), for the government-sponsored extraordinary redundancy fund (CIGS) and for furloughs and to tax liabilities for substitute taxes due more than 12 months after the reporting date.

Deferred income for grants related to assets includes the amounts relating to connection grants of € 193,421 thousand and the Fo.N.I. component (Provision for New Investments), amounting to € 57,278 thousand, provided for by the tariff method for the Integrated Water Service, which will be reversed in the income statement more than 12 months after the reporting date. The portion that will be taken to profit or loss in the 12 months following the reporting date amounts to € 9,406 thousand and € 3,264 thousand, respectively, and is included in the item “Sundry liabilities and other current liabilities under deferred income” for grants related to assets.

CURRENT LIABILITIES

NOTE 24_CURRENT FINANCIAL LIABILITIES

All financial liabilities recognised in this item are due within 12 months. The carrying amount of these liabilities approximates their fair value as the impact of discounting is negligible.

Current financial liabilities can be analysed as follows:

	thousands of euro	
	30/06/2021	31/12/2020
Bonds	181,821	181,628
Bank loans	70,003	74,489
Financial payables to associates	1,462	964
Financial payables to related-party shareholders	3,140	3,789
Financial payables to other related parties	1	2
Financial payables for leases	9,340	9,804
Financial payables to others	8,193	4,007
Current derivative liabilities	36	568
Total	273,996	275,251

Bonds

The amounts relate to Public Bond (nominal value € 181,836 thousand) issued in 2014 maturing in 2021 and represent the amortised cost value of the financial instrument.

Bank loans

Current bank loans may be broken down as follows:

	thousands of euro	
	30/06/2021	31/12/2020
Loans - current portion	34,724	49,150
Other current bank loans	4,246	12,558
Accrued financial charges and deferred financial income	31,033	12,781
Total	70,003	74,489

Financial payables to associates

These refer to amounts due to SEI Toscana (€ 1,358 thousand), Amter (€ 68 thousand) and CSAI (€ 36 thousand).

Financial payables to

This item relates to dividends of the company TRM still to be paid to the shareholder Municipality of Turin.

Financial payables to others

These relate to payables arising from the acquisition of the right to use 25% of the total capacity of the TLC network sold to BT Enia (€ 1,579 thousand) and individually less significant amounts and other minor loans.

Current derivative liabilities

These relate to the fair value of derivative contracts entered into to hedge the exposure to the risk of fluctuations in 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	
	30/06/2021	31/12/2020
Trade payables	806,681	923,212
Trade payables to joint ventures	-	233
Trade payables to associates	9,994	19,631
Trade payables to related-party shareholders	7,539	13,767
Trade payables to other related parties	4,210	6,600
Advances due within 12 months	10,084	7,376
Guarantee deposits due within 12 months	7,014	7,077
Charges to be reimbursed within 12 months	10	10
Total	845,532	977,906

NOTE 26_OTHER PAYABLES AND OTHER CURRENT LIABILITIES

All amounts recognised in this item are due within 12 months. The carrying amount of these liabilities approximates their fair value as the impact of discounting is negligible.

	thousands of euro	
	30/06/2021	31/12/2020
VAT liability	740	1,024
Government land tax/UTIF	29,269	960
IRPEF liability	1,909	2,192
Other tax liabilities	27,890	21,298
Tax liabilities due within 12 months	59,808	25,474
Amounts due to employees	61,922	55,050
Payables to Cassa Servizi Energetici e Ambientali (CSEA)	60,965	42,925
Amounts due to social security institutions within 12 months	24,837	24,616
Other current liabilities	129,199	171,230
Other payables due within 12 months	276,923	293,821
Accrued expenses and deferred income	34,701	26,152
Total	371,432	345,447

The change in the government land tax is due to the dynamics of payments on account and balance, which are influenced by the invoicing volumes of the relevant period and the previous year.

The change in amounts due to Cassa per i Servizi Energetici e Ambientali (the Energy and Waste Management Services Fund) in the period is related to the estimates of negative equalisation of electricity and gas.

Other current liabilities mainly refer to the cost estimates for the obligations relating to energy efficiency certificates, payables for tariff components of electricity distribution to be paid to the GSE, payables for purification fees, payables for RAI fees collected in the bill and payables to customers for works invoiced but not yet carried out relating to the energy efficiency of buildings.

The decrease in this item is largely related to the quantitative reduction of the obligations for Energy Efficiency Certificates (White Certificates) in the year 2020, which electricity and natural gas distributors are required to comply with, introduced by the Decree of the Ministry of Ecological Transition of 21 May 2021.

NOTE 27_CURRENT TAX LIABILITIES

The item "Current tax liabilities", amounting to € 19,705 thousand (€ 5,309 thousand as at 31 December 2020), refers to IRES and IRAP, which include the estimated tax liability for the current half-year.

NOTE 28_PROVISIONS FOR RISKS AND CHARGES - CURRENT PORTION

This item amounted to € 133,725 thousand (€ 155,972 thousand as at 31 December 2020) and refers to the current portion of provisions, broken down as follows:

- provision for environmental offset expenses of € 12,476 thousand;
- provision for charges related to the obligation to cancel ETS allowances for € 58,402 thousand;
- provision for early retirement of € 9,237 thousand;
- provisions for risks on equity investments of € 6,565 thousand, related mainly to the associate Sinergie Italiane;
- provision for dismantling and reclaiming sites and post-mortem provisions of € 9,917 thousand, which are expected to be used within the next 12 months;
- other provisions for risks amounting to € 37,128 thousand.

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 are no liabilities related to assets held for sale at 30 June 2021.

FINANCIAL POSITION

Net financial debt, calculated as the difference between current and non-current financial debt and current and non-current financial assets, can be broken down as follows:

	thousands of euro	
	30/06/2021	31/12/2020
Non-current financial assets	(201,110)	(166,522)
Non-current financial debt	3,747,434	3,826,378
Non-current net financial debt	3,546,324	3,659,856
Current financial assets	(861,694)	(985,525)
Current financial debt	273,996	275,251
Current net financial debt	(587,698)	(710,274)
Net financial debt	2,958,626	2,949,582

Net financial debt with related parties

Non-current financial assets include € 96,458 thousand due from the Municipality of Turin and € 35,763 thousand due from associates.

Current financial assets include € 4,206 thousand due from the Municipality of Turin and € 4,081 thousand due from associates.

Non-current financial debt includes € 1,868 thousand due to associates.

Current financial debt includes € 3,140 thousand due to the City of Turin and € 1,499 thousand due to associates.

Net financial debt according to the structure proposed by ESMA in the document of 4 March 2021 *Guidelines on disclosure requirements under the Prospectus Regulation* and implemented by Consob in its *Attention Reminder No. 5/21 of 29 April 2021* shown below.

	thousands of euro	
	30/06/2021	31/12/2020
A. Cash	(720,962)	(890,169)
B. Cash equivalents	-	-
C. Other current financial assets	-	-
D. Cash and cash equivalents (A) + (B) + (C)	(720,962)	(890,169)
E. Current financial debt (including debt instruments but excluding the current portion of non-current financial debt)	48,111	34,669
F. Current portion of non-current financial debt	225,885	240,582
G. Current financial debt (E + F)	273,996	275,251
H. Net current financial debt (G - D)	(446,966)	(614,918)
I. Non-current financial debt (excluding current portion and debt instruments)	620,380	689,696
J. Debt instruments	3,127,054	3,124,430
K. Trade payables and other non-current debt	-	12,252
L. Non-current financial debt (I + J + K)	3,747,434	3,826,378
M. Total financial debt (H + L)	3,300,468	3,211,460

The following table shows the changes in current and non-current financial liabilities in the half-year.

	thousands of euro
Current and non-current financial liabilities at 31.12.2020	4,101,629
New non-current loans	5,000
Repayment of non-current loans	(93,196)
Liabilities acquired following changes in the scope of consolidation	23,862
Change in lease liabilities	(1,874)
Fair value change in derivatives	(12,992)
Other changes	(999)
Current and non-current financial liabilities at 30.06.2021	4,021,430

VIII. NOTES TO THE INCOME STATEMENT

Unless otherwise stated, the following comments and tables show the figures in thousands of euro.

Since 1 April 2021, the Group's consolidated income statement includes the income statement figures of Futura; the income statement for the first half of 2021 is therefore affected by the inclusion of these figures in the scope of consolidation.

For the purposes of a correct analysis of the income statement, it should also be noted that the items include, over the entire reporting period, the results of the companies Asti Energia Calore, Nord Ovest Servizi, I.Blu and the companies operating in the waste management sector acquired from Unieco. The income statements of these companies were not included in the first half of 2020 as they were consolidated from the second half.

REVENUE

NOTE 30_REVENUE FROM GOODS AND SERVICES

This item amounted to € 1,966,711 thousand (€ 1,742,825 thousand in the first half of 2020) and is broken down by type of revenue in the table below.

	thousands of euro	
	First half of 2021	First half of 2020
Electricity revenue	809,263	686,914
Heat revenue	110,037	102,747
Gas revenue	292,360	309,853
Integrated water service revenue	211,659	209,219
Revenue from waste collection and disposal	364,366	299,552
Revenue from construction services under concession	80,172	83,748
Revenue from other services	98,854	50,792
Total	1,966,711	1,742,825

Other services mainly include revenue for energy efficiency, maintenance and management of traffic lights, public lighting, heating and electrical systems.

For further details on the trend of revenue by business sector, reference should be made to the chapter "Segment reporting" in the Directors' Report and to the tables contained in the following paragraph X "Segment reporting".

NOTE 31_OTHER INCOME

Other income totalled € 38,293 thousand (€ 83,063 thousand in the first half of 2020) and related to grants, revenue from energy efficiency certificates and other income. The tables below show the details of the single items.

Grants

	thousands of euro	
	First half of 2021	First half of 2020
Grants related to assets	6,205	5,814
Connection grants	5,242	5,132
Other grants	2,236	2,229
Total	13,683	13,175

The grants related to assets and connection grants represent the relevant portion of grants calculated in proportion to the depreciation rates of the plants to which they refer.

The connection grants 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 of 2021	First half of 2020
Revenue from Emission Trading	-	-
Revenue from ex-Green Certificates incentive	24,473	28,786
Revenue from Energy Efficiency Certificates (White Certificates)	15,108	27,592
Reduction in tariff contribution for White Certificates from previous years	(33,078)	-
Total	6,503	56,378

The reduction in the tariff contribution relating to White Certificates from previous years originates from the downsizing of the obligations for the year 2020, which electricity and natural gas distributors are required to meet, introduced by the Decree of the Ministry of Ecological Transition of 21 May 2021.

Other income

	thousands of euro	
	First half of 2021	First half of 2020
Revenue from service contracts	1,358	1,180
Lease income	552	671
Capital gains on sale of assets	810	146
Insurance settlements	2,017	220
Sundry reimbursements	2,600	2,155
Other revenue and income	10,770	9,138
Total	18,107	13,510

COSTS

NOTE 32_RAW MATERIALS, CONSUMABLES, SUPPLIES AND GOODS

This item is broken down as follows:

	thousands of euro	
	First half of 2021	First half of 2020
Purchase of electricity	140,557	143,421
Purchase of gas	368,744	254,157
Purchase of heat	121	973
Purchase of water	1,980	1,951
Other raw materials and materials in stock	44,820	41,746
Emission trading	58,392	37,031
White Certificates	40	18,421
Reduction in obligations for White Certificates from previous years	(35,806)	-
Change in inventories	(16,765)	10,671
Total	562,083	508,371

Costs for raw materials, consumables, supplies and goods increased by approximately € 53,712 thousand. The increase in gas purchase costs is related to the price increase during the first half of 2021.

The reduction in obligations for White Certificates from previous years relates to the revision of the estimated costs for the purchase of securities for compliance relating to the year 2020, following the quantitative downsizing of obligations introduced by the Decree of the Ministry of Ecological Transition of 21 May 2021.

The change in inventories was partly due to gas in storage.

NOTE 33_SERVICES AND USE OF THIRD-PARTY ASSETS

Costs for services amounted to € 645,867 thousand (€ 589,955 thousand in the first half of 2020) and are detailed in the table below.

	thousands of euro	
	First half of 2021	First half of 2020
Electricity transport and electricity system expenses	242,518	254,226
Gas carriage	31,609	38,041
Third-party works, maintenance and industrial services	140,609	104,468
Collection and disposal, snow clearing, public parks	125,984	101,629
Expenses related to personnel (meal allowance, training, business travel)	4,894	4,052
Technical, administrative and commercial consulting and advertising expenses	38,870	30,167
Legal and notary fees	1,832	1,506
Insurance	8,534	7,198
Banking costs	4,061	3,432
Telephone costs	3,164	3,607
IT expenses	18,852	15,941
Reading and invoicing services	4,897	4,938
Board of Statutory Auditors fees	531	437
Other purchases of services	19,512	20,313
Total costs for services	645,867	589,955

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.

Use of third-party assets amounted to € 17,442 thousand (€ 16,556 thousand in the first half of 2020). 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. Secondly, this item includes short-term hire or when the underlying asset is of modest value, which the group has decided to exclude from the scope of application of IFRS 16.

NOTE 34_OTHER OPERATING EXPENSES

Other operating expenses amounted to € 34,879 thousand (€ 33,652 thousand in the first half of 2020) and are detailed in the table below:

	thousands of euro	
	First half of 2021	First half of 2020
General expenses	8,513	6,929
Instalments and higher instalments for water shunting	11,344	10,429
Taxes and duties	10,746	10,781
Capital losses on sale of assets	303	269
Other sundry operating expenses	3,973	5,244
Total	34,879	33,652

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 on the Group's plants and buildings and expenses for occupying and reclaiming public land. The item "Other sundry operating expenses" includes adjustments of revenue pertaining to previous years.

NOTE 35 CAPITALISED EXPENSES FOR INTERNAL WORK

Capitalised expenses for internal work amounted to € 20,714 thousand (€ 17,534 thousand in the first half of 2020) and related to increases in assets using internal resources and production factors.

	thousands of euro	
	First half of 2021	First half of 2020
Capitalised personnel expense	(17,925)	(14,602)
Capitalised materials	(2,789)	(2,932)
Total	(20,714)	(17,534)

NOTE 36 PERSONNEL EXPENSE

Personnel expense amounted to € 247,971 thousand (€ 221,584 thousand in the first half of 2020) and is broken down as follows:

	thousands of euro	
	First half of 2021	First half of 2020
Gross remuneration	177,309	157,862
Social security contributions	54,902	50,144
Post-employment benefits	481	400
Other long-term employee benefits	80	98
Other personnel expense	14,232	12,345
Directors' fees	967	735
Total	247,971	221,584

As specified in Note 35, € 17,925 thousand of personnel expense was capitalised.

Other personnel expense includes 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 composition of personnel is shown in the following table.

	30/06/2021	31/12/2020	Average for the period
Executives	102	101	102
Junior managers	336	318	337
White collars	3,806	3,733	3,792
Blue collars	4,593	4,528	4,507
Total	8,837	8,680	8,738

The main changes in the workforce compared to 31 December 2020 were ascribable to:

- the acquisition, in March 2021, of Futura S.p.A. by Iren Ambiente, for a total of 28 resources;
- the company San Germano due to the launch/conclusion of contracted services, including seasonal work;
- continuation of the generational turnover plan, with a considerable number of recruitments on the labour market.

NOTE 37_ DEPRECIATION AND AMORTISATION

Depreciation and amortisation for the period amounted to € 228,507 thousand (€ 206,508 thousand in the first half of 2020).

	thousands of euro	
	First half of 2021	First half of 2020
Property, plant and equipment and investment property	143,990	134,681
Intangible assets	84,517	71,827
Total	228,507	206,508

For further details on depreciation/amortisation, refer to the tables of changes in property, plant and equipment and intangible assets.

NOTE 38_ PROVISIONS AND IMPAIRMENT LOSSES

This item totalled € 37,860 thousand (€ 34,897 thousand in the first half of 2020) and is detailed in the table below:

	thousands of euro	
	First half of 2021	First half of 2020
Provisions for impairment of receivables	33,662	42,523
Provisions for risks and restoration of third-party assets	7,129	8,710
Releases	(3,088)	(16,336)
Impairment losses	157	-
Total net other provisions and impairment losses	4,198	(7,626)
Total	37,860	34,897

Amounts were set aside in the period 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 cash shortfalls, considering forwardlooking information.

The change in provisions for risks and restoration of third-party assets relates to the assessment of risks of liabilities to suppliers, as well as probable charges in the hydroelectric sector, while releases of provisions for the period relate to the revision of estimates of charges set aside in previous years.

Details of changes in provisions are provided in the note to the statement of financial position item “Provisions for risks and charges”.

NOTE 39 FINANCIAL INCOME AND EXPENSE

Financial income

Financial income amounted to € 26,964 thousand (€ 13,777 thousand in the first half of 2020). The details are shown in the following table:

	thousands of euro	
	First half of 2021	First half of 2020
Bank interest income	394	100
Interest income from receivables/loans	1,414	3,662
Interest income from customers	4,197	2,032
Fair value gains on derivatives	4,161	5,010
Capital gain on disposal of financial assets	409	1
Other financial income	16,389	2,972
Total	26,964	13,777

Interest income on loans/receivables mainly referred to interest accrued on current accounts between the Group and the City of Turin (€ 860 thousand) and interest on loans granted to associates (€ 353 thousand). Fair value gains on derivatives refer to the ineffective portion of hedging instruments. Other financial income mainly consists of income from early repayment of financial liabilities, discounting of provisions and change in fair value of financial obligations.

Financial expense

The item amounts to € 41,603 thousand (€ 44,144 thousand in 2020). The breakdown of financial expense is as follows:

	thousands of euro	
	First half of 2021	First half of 2020
Interest expense on loans	897	1,322
Interest expense on bonds	26,171	26,360
Interest expense on bank current accounts	50	36
Other interest expense	496	365
Capitalised borrowing costs	(711)	-
Fair value losses on derivative	-	379
Realised losses on derivatives	7,225	8,194
Capital losses on disposal of financial assets	-	1,828
Interest cost – Employee benefits	-	535
Financial expense on lease liabilities	254	297
Other financial expense	7,221	4,828
Total	41,603	44,144

Interest expense on loans and bonds includes the expenses relating to the measurement at amortised cost. Fair value losses on derivatives in the first half of 2020 included the reversal to profit or loss of the cash flow hedge reserve relating to certain hedging positions that were terminated during the year. Other financial expense mainly includes financial expense for the discounting of provisions.

NOTE 40_SHARE OF PROFIT (LOSS) OF ASSOCIATES ACCOUNTED FOR USING THE EQUITY METHOD

The profit for the period of associates accounted for using the equity method was € 6,276 thousand (€ 5,143 thousand in the first half of 2020). For more details please see Note 5 “Investments accounted for using the equity method”.

NOTE 41_VALUE ADJUSTMENTS ON EQUITY INVESTMENTS

In the first half of 2021 the balance of the item is nil as it includes:

- the impairment of the investment in Rimateria (€ 1,396 thousand) carried out following the declaration of bankruptcy of the company issued by the Court of Livorno on 14 June 2021;
- the income related to the cancellation of the amount previously recognised in the financial statements for the variable portion of the purchase price of the shares of Rimateria (earn-out) as the condition for payment was not met (€ 1,396 thousand).

In the first half of 2020 this item was a negative € 146 thousand and related to the complete impairment of the investment in Rio Riazzone.

NOTE 42_INCOME TAX EXPENSE

Income taxes for the first half of 2021 are estimated to amount to € 34,238 thousand (€ 60,927 thousand in the first half of 2020) and are the result of the best estimate of the expected average tax rate for the entire year, applied to the profit before tax, adjusted to reflect the tax effect of certain items recognised entirely in the period. Therefore, the actual rate in the interim financial statements may be different from the rate estimated by management for the full year.

The Group's effective tax rate for the first half of 2021 is 14.1% (in the first half of 2020 it was 29.5%). The change in the effective tax rate was mainly influenced by the option to realign accounting and tax values pursuant to art. 110 of Decree-Law 104 of 14 August 2020, as amended (“decree no. 104/20”) which, in paragraphs 8 and 8-bis, gives IAS-adopter and OIC-adopter companies the possibility to opt for the realignment of the (lower) tax values to the (higher) carrying amounts of certain tangible and intangible assets (paragraph 8), as well as goodwill and other intangible assets (paragraph 8-bis).

The rule provides that a 3% substitute tax on income taxes and IRAP is payable on the realigned values and that the realignment option is exercised in the tax return for the tax period following the one in progress as of 31 December 2019 (therefore, in the tax return for the 2020 tax year to be filed by 30 November 2021). In addition, the change in the effective tax rate was also affected by the redemption of goodwill and other intangible assets under Article 176 of Presidential Decree 917/1986.

The total misalignment between the tax bases and carrying amounts identified in the consolidated financial statements at 31.12.2020 (the reference date) is € 128.6 million.

Application of the regulation contained in Decree 104/20 therefore resulted in the recognition of net tax income of € 32,258 thousand in the first half of 2021, deriving from the reversal of deferred taxes previously provided for of € 36,219 thousand and the recognition of substitute tax of € 3,961 thousand.

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 2020 includes the following companies, in addition to the consolidating company Iren S.p.A.: IRETI, Iren Mercato, Iren Energia, Iren Acqua and the merged Immobiliare delle Fabbriche, Iren Ambiente, Iren Smart Solution, AMIAT, AMIAT V., ACAM Ambiente, ACAM Acque, Maira, Formaira, Studio Alfa, ReCos, Iren Laboratori, San Germano, Territorio e Risorse, Ri.Ma., ASM Vercelli, Atena Trading, GIA in liquidazione, IAM Parma and IAM Piacenza.

NOTE 43_ NET INCOME FROM DISCONTINUED OPERATIONS

It is not present in either the first half of 2021 or the comparative period.

NOTE 44_ PROFIT (LOSS) FOR THE PERIOD ATTRIBUTABLE TO MINORITY INTERESTS

The profit attributable to minority interests amounted to € 15,270 thousand (€ 12,928 thousand in the first half of 2020) and related to the portion attributable to non-controlling investors of companies that are consolidated but not 100% owned by the Group.

NOTE 45_ PROFIT/(LOSS) PER SHARE

For the purpose of calculating basic and diluted earnings per share, it should be noted that the number of shares in the first half of 2021 represents the weighted average number of shares outstanding during the reporting period in accordance with IAS 33 § 20. The Company has not issued any financial instruments that have the potential to dilute its common stock, therefore diluted earnings per share is equal to basic earnings per share.

	First half of 2021	First half of 2020
Net profit (loss) for the period (thousands of euro)	193,238	132,674
Weighted average number of shares outstanding over the year (thousand)	1,283,537	1,295,161
Basic earnings/(loss) per share (euro)	0.15	0.10

NOTE 46_ OTHER COMPREHENSIVE INCOME

Other comprehensive income was positive for € 24,066 thousand (negative for € 6,051 thousand in the first half of 2020) and related to other comprehensive income that will be reclassified to profit or loss at a later date. In particular they include the following elements:

- the effective portion of fair value gains on cash flow hedging instruments, for € 33,336 thousand, which refers to derivatives stipulated to hedge the variations in interest rates and commodity prices (for the Group, this is gas);
- the portion of other profit/(loss) of companies accounted for using the equity method, related to changes in fair value of cash flow hedging instruments of associates, negative for € 331 thousand;
- the tax effect of other comprehensive income was € 8,939 thousand.

IX. GUARANTEES AND CONTINGENT LIABILITIES

Guarantees relate to:

- a) Sureties and other guarantees for own commitments amounting to € 689,379 thousand (€ 793,584 thousand as at 31 December 2020); the most significant items relate to sureties and commitments in favour of
- Revenue Agency for € 124,838 thousand for the VAT refund request;
 - ARPAE for € 64,271 thousand for waste transfer and operating and post-mortem management of plants subject to A.I.A.;
 - Province of Turin/Metropolitan City for € 58,457 thousand for waste transfer and post-mortem management of plants subject to A.I.A.;
 - Unieco for € 46,000 thousand to guarantee the acquisition of the “Unieco Waste Management Division”;
 - ATO-R, for € 44,335 thousand, as definitive guarantees in the Amiat/TRM tender procedure;
 - the Electricity Market Operator (GME) for € 29,718 thousand to guarantee the energy market participation contract;
 - CONSIP for € 28,610 thousand for electricity supply contracts;
 - City of Turin Municipality for € 28,539 thousand definitive guarantees for the AMIAT/TRM acquisition procedure;
 - Ministry of the Environment for € 26,204 thousand for various authorisations;
 - Customs authorities for € 21,996 thousand as a guarantee of the regular payment of taxes and municipal and provincial surtaxes on electricity consumption and gas excise duties;
 - Province of La Spezia for € 20,249 thousand for contributions and management of plants;
 - ATERSIR for € 19,066 thousand for agreements and tenders in progress relating to the Integrated Water Service and the Urban Waste Management Service;
 - Province of Parma for € 17,136 thousand as a guarantee for authorisations to operate various plants;
 - Region of Puglia for € 12,714 to guarantee permits for landfills and plants;
 - SNAM Reti Gas for € 10,091 thousand to guarantee contracts and network codes;
 - Consorzio di Bacino Basso Novarese for € 6,989 thousand to guarantee the contract for the collection and disposal of urban waste;
 - Terna, for € 6,742 thousand to guarantee injection and withdrawal dispatching contracts and to guarantee the electricity transport service contract;
 - Rimateria for € 6,108 thousand as a guarantee for sureties;
 - SETA SpA for € 5,850 thousand to guarantee regular execution of post-closure activities at the Chivasso 0 landfill site;
 - Province of La Spezia for € 5,441 thousand for contributions and management of plants;
 - AMIU Genova for € 4,445 thousand as a guarantee for the project finance relating to the Scarpino Biological Mechanical Treatment plant;
 - San Martino Polyclinic Hospital for € 4,415 thousand for plant maintenance and upgrading;
 - Province of Piacenza for € 4,378 thousand to guarantee authorisations for waste treatment plants.

The most relevant amounts, related to guarantees granted on behalf of associates, related to Sinergie Italiane in liquidation and in particular to guarantees for bank credit lines and letters of patronage for € 23,999 thousand (unchanged compared to 31 December 2020). The liquidators concluded the main procurement contracts and, therefore, since 1 October 2012 the Company's operating activity concerns 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), there is 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.

CONTINGENT LIABILITIES

Disclosure on the Inspection Report of 26 July 2019 served on Iren Mercato S.p.A.

On 20 February 2019, Agenzia delle Entrate - Regional Revenue Authority Department of Liguria initiated a tax audit, for the 2013 and 2014 tax years, against the company Iren Mercato S.p.A. which concluded in the notification of the official tax audit report (OTAR) of 26 July 2019: the audit concerned mainly the business relationships between the company and the investee Sinergie Italiane, in implementation of the contract for the purchase of natural gas signed on 20 March 2013.

The Office with the aforementioned OTAR, for IRES and IRAP purposes, claimed that the company applied undue deduction, in breach of Art. 109 of the Consolidated Income Tax Act (TUIR), of part of the price of the gas paid to Sinergie Italiane (for the part constituted, in fact, of the mark-up applied by the latter on its natural gas purchase price), for a total of € 4,274,009 for 2013 and € 3,748,010 for 2014.

In the OTAR, the Office also contested the undue deduction (in violation of Article 19, paragraph 1, of Presidential Decree No. 633/1972) of VAT (applied at a 10% rate) paid by the company in relation to the invoices issued by Sinergie Italiane.

In relation to the transactions covered by the accusation, Iren Mercato produced, during the audit, briefs with which ample clarifications were provided on the nature of the commercial transactions that occurred between the two companies.

In addition, the company - although convinced of the legitimacy of its actions and for the sole purpose of benefiting from the criminal non-punishability cause introduced by Article 39, paragraph 1, of Legislative Decree No. 124/2019 - on 6 February 2020, carried out the so-called "voluntary correction of the tax return" (in relation to the Mark-up irregularity) for the years 2015, 2016, and 2017, through the submission of supplementary statements and simultaneous payment of taxes, interest and penalties.

As of today, the Office has not yet served on the company any notice of assessment.

With regard to the aforementioned findings, during 2020, an invitation to provide relevant data and information and subsequently an invitation to a cross-examination were notified in relation to the 2015 tax year, which did not result in any definition. On 23 March 2021, a notice of VAT assessment was served in relation to this year in which the invoicing method for the supply by Sinergie Italiane is contested, with an appeal to the Provincial Tax Commission of Genoa.

The risks connected with the Agency's findings did not lead to any provisions in the present financial statements as they are estimated as "potential" in application of the international accounting standards, considering that there are a series of factual circumstances and considerations on points of law in support of the legitimate operation of the company. The absence of assessments for the years included in the Formal Notice of Assessment makes it uncertain how to quantify the risk; at the current state of knowledge this could amount to approximately € 10 million, including penalties and interest.

On the other hand, the risk associated with the possibility of not obtaining a refund of the amounts paid for the voluntary correction for the 2015, 2016 and 2017 tax periods, is estimated as "probable", and a provision has therefore been made as a write-down of the receivable recognised in relation to the amounts assessed to act on the aforementioned voluntary correction.

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 SEGMENTS

The Group's operating segments 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, Thermolectric Production, Public Street Lighting, Global services, Energy efficiency services)
- Market (Sale of electricity, gas, heat)
- Other services (Laboratories, Telecommunications and other minor services).

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 following tables show the net invested capital by operating segment compared to 31 December 2020 and the income statement (up to the operating profit) for the current period by operating segment compared to the restated figures for the first half of 2020.

Reclassified statement of financial position by operating segment at 30 June 2021

	millions of euro						
	Networks	Waste Management	Energy	Market	Other services	Non-allocable	Total
Non-current assets	3,016	1,260	1,918	215	35	180	6,624
Net Working Capital	(13)	132	(15)	(79)	-	-	25
Other non-current assets and liabilities	(604)	(201)	(62)	(20)	39	-	(848)
Net invested capital (NIC)	2,399	1,191	1,841	116	74	180	5,802
Equity							2,843
Net financial debt							2,959
Own funds and net financial debt							5,802

Reclassified statement of financial position by operating segment at 31 December 2020

millions of euro

	Networks	Waste Management	Energy	Market	Other services	Non-allocable	Total
Non-current assets	2,980	1,234	1,953	202	35	178	6,582
Net Working Capital	(101)	63	20	58	2	-	42
Other non-current assets and liabilities	(601)	(207)	(86)	(18)	1	-	(911)
Net invested capital (NIC)	2,278	1,090	1,887	242	38	178	5,713
Equity							2,763
Net financial debt							2,950
Own funds and net financial debt							5,713

Income statement by operating segment for the first half of 2021

millions of euro

	Networks	Waste Management	Energy	Market	Other services	Non-allocable	Total
Total revenue and income	442	436	715	1,159	10	(757)	2,005
Total operating expenses	(252)	(337)	(581)	(1,066)	(9)	757	(1,488)
Gross Operating Profit (EBITDA)	190	99	134	93	1	-	517
Net amortisation, depreciation and impairment losses	(96)	(55)	(70)	(44)	(1)	-	(266)
Operating profit (EBIT)	94	44	64	49	-	-	251

Income statement by operating segment for the first half of 2020 restated

millions of euro

	Networks	Waste Management	Energy	Market	Other services	Non-allocable	Total
Total revenue and income	490	350	551	1,073	11	(648)	1,826
Total operating expenses	(311)	(270)	(424)	(987)	(10)	648	(1,353)
Gross Operating Profit (EBITDA)	179	80	127	86	1	-	473
Net amortisation, depreciation and impairment losses	(98)	(48)	(54)	(41)	(1)	-	(241)
Operating profit (EBIT)	81	32	73	45	-	-	232

XI. ANNEXES TO THE CONDENSED CONSOLIDATED INTERIM REPORT

LIST OF CONSOLIDATED COMPANIES

LIST OF JOINTLY CONTROLLED ENTITIES

LIST OF ASSOCIATES

LIST OF EQUITY INVESTMENTS IN OTHER COMPANIES

DETAILS ON TRANSACTIONS WITH RELATED PARTIES

RECONCILIATION OF IFRS FINANCIAL STATEMENTS WITH RECLASSIFIED FINANCIAL STATEMENTS (Consob Communication no. 6064293 of 26 July 2006)

LIST OF CONSOLIDATED COMPANIES

Company	Registered office	Currency	Share/quota capital	% ownership	Owner 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	3,000,000	100.00	Iren Ambiente
AMA S.p.A.	Reggio Emilia	Euro	1,800,000	100.00	UHA
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
Asti Energia e Calore S.p.A.	Asti	Euro	120,000	62.00	Iren Energia
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
Bio Metano S.r.l. (1)	Reggio Emilia	Euro	20,000	100.00	UHA
Borgo Ambiente S.c.a.r.l.	Reggio Emilia	Euro	100,000	51.00	Unirecuperi
Consorzio GPO	Reggio Emilia	Euro	20,197,260	62.35	Ireti
Energy Side Srl (1)	Florence	Euro	88,729	100.00	Iren Ambiente Toscana
Formaira S.r.l.	San Damiano Macra (CN)	Euro	10,000	100.00	Maira
Futura S.p.A.	Florence	Euro	7,000,000	40.00	Iren Ambiente Toscana
				20.00	Iren Ambiente
Gheo suolo e Ambiente S.r.l.	Reggio Emilia	Euro	100,000	100.00	UHA
I. Blu S.r.l.	Pasian di Prato (UD)	Euro	9,001,000	80.00	Iren Ambiente
Iren Acqua S.p.A.	Genoa	Euro	19,203,420	60.00	Ireti
Iren Acqua Tigullio S.p.A.	Chiavari (GE)	Euro	979,000	66.55	Iren Acqua
Iren Ambiente Parma S.r.l.	Parma	Euro	4,000,000	100.00	Iren Ambiente
Iren Ambiente Piacenza S.r.l.	Piacenza	Euro	4,000,000	100.00	Iren Ambiente
Iren Ambiente Toscana S.p.A.	Florence	Euro	15,934,370	100.00	UCH Holding
Iren Laboratori S.p.A.	Genoa	Euro	2,000,000	90.89	Ireti
Iren Smart Solutions 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
Manduriambiente S.p.A.	Manduria (TA)	Euro	4,111,820	95.28	UHA
Monte Querce S.c. a r.l.	Reggio Emilia	Euro	100,000	60.00	Iren Ambiente
				40.00	Unirecuperi
Nord Ovest Servizi S.p.A.	Turin	Euro	7,800,000	45.00	Ireti
				30.00	Amiat
Picena Depur S.r.l.	Ascoli Piceno	Euro	46,000	99.90	UHA
Produrre Pulito S.r.l.	Sesto Fiorentino (FI)	Euro	25,721	100.00	Iren Ambiente Toscana
ReCos S.p.A.	La Spezia	Euro	1,000,000	99.51	Iren Ambiente
Rigenera Materiali S.r.l.	Genoa	Euro	3,000,000	100.00	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
Scarolino Energia S.p.A.	Scarolino (GR)	Euro	1,000,000	89.54	Scarolino Holding
Scarolino Holding S.r.l.	Florence	Euro	90,000	100.00	Iren Ambiente Toscana
Scarolino Immobiliare S.r.l.	Florence	Euro	10,000	72.22	Scarolino Holding

Sereco Piemonte S.p.A.	Reggio Emilia	Euro	7,224,000	100.00	UHA
STA Partecipazioni S.r.l.	Reggio Emilia	Euro	2,500	100.00	Iren Ambiente Toscana
Studio Alfa S.p.A.	Reggio Emilia	Euro	100,000	86.00	Iren Smart Solutions
TB S.p.a.	Florence	Euro	2,220,000	58.56	Iren Ambiente Toscana
Territorio e Risorse S.r.l.	Turin	Euro	2,510,000	100.00	Iren Ambiente
TRM S.p.A.	Turin	Euro	86,794,220	80.00	Iren Ambiente
UCH Holding S.r.l.	Reggio Emilia	Euro	15,742,660	64.71	UHA
UHA S.r.l.	Reggio Emilia	Euro	49,324,031	100.00	Iren Ambiente
Uniproject S.r.l.	Maltignano (AP)	Euro	91,800	100.00	Iren Ambiente
Unirecuperi S.r.l.	Reggio Emilia	Euro	323,000	80.80	UHA
Uniservizi S.r.l.	Maltignano (AP)	Euro	64,021	100.00	Iren Ambiente UHA

(1) in liquidation

LIST OF JOINTLY CONTROLLED ENTITIES

Company	Registered office	Currency	Share capital	% ownership	Owner company
Acque Potabili S.p.A. (1)	Turin	Euro	7,633,096	47.546	Ireti

(1) in liquidation

LIST OF ASSOCIATES

Company	Registered office	Currency	Share/quota capital	% ownership	Owner company
A2A Alfa S.r.l. (1)	Milan	Euro	100,000	30.00	Iren Mercato
Acos S.p.A.	Novi Ligure	Euro	17,075,864	25.00	Ireti
Acos Energia S.p.A.	Novi Ligure	Euro	150,000	25.00	Iren Mercato
Acquaenna S.c.p.a.	Enna	Euro	3,000,000	48.50	Ireti
Aguas de San Pedro S.A. de C.V.	S.Pedro Sula (Honduras)	Lempiras	159,900	39.34	Ireti
Aiga S.p.A. (1)	Ventimiglia	Euro	104,000	49.00	Ireti
Amat S.p.A. (1)	Imperia	Euro	5,435,372	48.00	Ireti
Amter S.p.A.	Cogoleto (GE)	Euro	404,263	49.00	Iren Acqua
ASA S.p.A.	Livorno	Euro	28,613,406	40.00	Ireti
Asa S.c.p.a.	Castel Maggiore (BO)	Euro	1,820,000	49.00	Unirecuperi
Astea S.p.A.	Recanati (MC)	Euro	76,115,676	21.32	Consorzio GPO
Asti Servizi Pubblici S.p.A.	Asti	Euro	7,540,270	45.00	Nord Ovest Servizi
Barricalla S.p.A.	Turin	Euro	2,066,000	35.00	Sereco Piemonte
BI Energia S.r.l.	Reggio Emilia	Euro	100,000	47.50	Iren Energia
CSA S.p.A. (1)	Terranuova Bracciolini (AR)	Euro	1,369,502	47.97	Iren Ambiente Toscana
CSAI S.p.A.	Terranuova Bracciolini (AR)	Euro	1,610,511	40.32	Iren Ambiente Toscana
CSP Innovazione nelle ICT S.c. a r.l. (1)	Turin	Euro	600,000	25.00	Iren Energia
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.(1)	Parma	Euro	20,000	30.00	Ireti
Iniziative Ambientali S.r.l.	Novellara (RE)	Euro	100,000	40.00	Iren Ambiente
Mondo Acqua S.p.A.	Mondovi (CN)	Euro	1,100,000	38.50	Ireti
Nove S.p.A.	Grugliasco (TO)	Euro	9,983,505	49.00	Iren Energia
Piana Ambiente S.p.A. (2)	Gioia Tauro	Euro	1,719,322	25.00	Ireti
Rimateria S.p.A. (3)	Piombino (LU)	Euro	4,589,273	30.00	Unirecuperi
SEI Toscana S.r.l.	Siena	Euro	42,236,230	35.64	Iren Ambiente Toscana
Seta S.p.A.	Turin	Euro	12,378,237	48.85	Iren Ambiente
Sienambiente S.p.A.	Siena	Euro	2,866,575	40.00	Iren Ambiente Toscana
Sinergie Italiane S.r.l. (1)	Milan	Euro	1,000,000	30.94	Iren Mercato
STU Reggiane S.p.A.	Reggio Emilia	Euro	12,222,580	30.00	Iren Smart Solutions
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 under assets held for sale

(3) Insolvent company

LIST OF EQUITY INVESTMENTS IN OTHER COMPANIES

Company	Registered office	Currency	Share/quota capital	% ownership	Owner company
Acque Potabili Siciliane S.p.A. (1)	Palermo	Euro	5,000,000	9.83	Iren Acqua
Aeroporto di Reggio Emilia S.p.A.	Reggio Emilia	Euro	2,177,871	0.11	Studio Alfa
AISA S.p.A.	Arezzo	Euro	3,867,640	3.00	Iren Ambiente Toscana
AISA Impianti S.p.A.	Arezzo	Euro	6,650,000	3.00	Iren Ambiente Toscana
Alpen 2.0 S.r.l.	Turin	Euro	70,000	14.29	Maira
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 S.p.A.	Cremona	Euro	30,000,000	1.46	Ireti
C.R.P.A. S.p.A.	Reggio Emilia	Euro	2,201,350	2.27	Ireti
Consorzio CIM 4.0 s.c.a.r.l.	Turin	Euro	232,000	4.30	Iren
CCC-Consorzio cooperative costruzioni	Bologna	Euro	15,637,899	0.06	Unirecuperi
Consorzio Integra	Bologna	Euro	42,548,492	0.02	Unirecuperi
Consorzio Topix	Turin	Euro	1,600,000	0.30	Iren Energia
Enerbrain S.r.l.	Turin	Euro	26,786	10.00	Iren Smart Solutions
Environment Park S.p.A.	Turin	Euro	11,406,780	3.39	Iren Energia
I-TES S.r.l.	Turin	Euro	10,204	7.41	AMIAT
Genera S.c.a.r.l.	Ascoli Piceno	Euro	1,390,361	2.00	Iren Energia
L.E.A.P. S.c. a r.l.	Piacenza	Euro	180,000	1.00	Uniproject
Obiettivo ValdArno Srl	Montevarchi AR	Euro	800,000	8.30	Iren Ambiente Toscana
Parma Servizi Integrati S.c. a r.l.	Parma	Euro	20,000	1.50	Iren Ambiente Toscana
Reggio Emilia Innovazione S.c. a r.l. (1)	Reggio Emilia	Euro	871,956	11.00	Iren Smart Solutions
Re Mat Srl	Turin	Euro	57,750	0.99	Iren Ambiente
Serchio Verde Ambiente S.p.a. (1)	Castelnuovo di Garfagnana (LU)	Euro	1,128,950	9.09	Iren Ambiente Toscana
Smart Mobility S.r.l. (1)	Rome	Euro	14,175	5.14	Iren Mercato
Società di Biotecnologie S.p.A.	Turin	Euro	536,000	1.00	Iren Smart Solutions
Stadio Albaro S.p.A. (1)	Genoa	Euro	1,230,000	2.00	Iren Mercato
T.I.C.A.S.S. S.c. a r.l.	Genoa	Euro	136,000	2.94	Ireti
Valdisieve S.c. a r.l.	Florence	Euro	1,400,000	0.96	Iren Ambiente Toscana

(1) in liquidation

DETAILS ON TRANSACTIONS WITH RELATED PARTIES

	Trade Receivables	Financial receivables	Other assets	Trade Payables	Financial Payables
RELATED-PARTY SHAREHOLDERS					
Municipality of Genoa	700	-	-	3,055	-
Municipality of Parma	13,717	-	-	734	-
Municipality of Piacenza	7,773	-	-	934	-
Municipality of Reggio Emilia	12,299	-	-	854	-
Municipality of Turin	76,290	100,664	57	1,961	3,140
Finanziaria Sviluppo Utilities	16	-	41	-	-
Finanziaria Città di Torino Holding	(8)	-	-	-	-
JOINT VENTURES					
Acque Potabili	95	-	-	-	-
ASSOCIATES					
ACOS	6	5,549	-	-	-
ACOS Energia	-	-	-	(44)	-
Acquaenna	239	4,052	-	-	-
Aguas de San Pedro	1	602	-	-	-
AIGA	207	110	-	99	-
AMAT	72	-	-	-	-
AMTER	7,110	-	-	338	68
ASA	158	-	-	3	-
ASA Livorno	1,047	-	-	-	-
ASTEA	4	681	-	-	-
Asti Servizi Pubblici	(242)	451	-	24	-
Barricalla	474	-	-	3,579	-
BI Energia	31	833	-	-	-
CSAI	605	-	-	3,140	263
CSP - Innovazione nelle ICT	-	-	-	-	-
Fratello Sole Energie Solidali	520	-	-	16	-
GAIA	577	-	-	893	-
Global Service Parma	12	-	-	45	-
Iniziative Ambientali	5	-	-	-	-
Mondo Acqua	180	-	-	-	-
NOVE	4,046	4,883	-	194	-
Piana Ambiente in liquidation	70	-	-	-	-
Rimateria	-	-	-	86	-
SEI Toscana	2,506	126	-	-	2,434
SETA	3,352	453	-	447	-
Sienambiente	-	-	-	169	566
Sinergie Italiane in liquidation	9	-	6,901	71	-
STU Reggiane	(18)	487	-	9	-
Valle Dora Energia	79	21,616	-	924	-
OTHER RELATED PARTIES					
Subsidiaries of Municipality of Turin	1,570	-	766	918	-
Subsidiaries of Municipality of Genoa	157	-	12	331	1
Subsidiaries of Municipality of Parma	1,010	-	6	1,323	-
Subsidiaries of Municipality of Piacenza	11	-	-	571	-
Subsidiaries of Municipality of Reggio Emilia	57	-	-	1,068	-
Others	53	-	-	-	-
TOTAL	134,790	140,507	7,783	21,742	6,472

thousands of euro

	Other liabilities	Revenue and income	Costs and other charges	Financial income	Financial expense
OWNERSRELATED-PARTY SHAREHOLDERS					
Municipality of Genoa	-	883	3,757	-	-
Municipality of Parma	-	16,164	570	-	-
Municipality of Piacenza	-	8,469	889	-	-
Municipality of Reggio Emilia	-	17,795	185	-	-
Municipality of Turin	4	106,743	1,629	858	-
Finanziaria Sviluppo Utilities	-	-	-	-	-
Finanziaria Città di Torino Holding	-	-	-	-	-
JOINT VENTURES					
Acque Potabili	-	25	(236)	-	-
ASSOCIATES					
ACOS	-	18	-	-	-
ACOS Energia	-	2	3	-	-
Acquaenna	-	90	-	34	-
Aguas de San Pedro	-	-	-	-	-
AIGA	-	10	-	-	-
AMAT	-	20	-	-	-
AMTER	-	1,876	280	-	1
ASA	-	156	-	-	-
ASA Livorno	-	107	53	-	-
ASTEA	-	3	5	-	-
Asti Servizi Pubblici	-	-	22	-	-
Barricalla	-	437	3,199	-	-
BI Energia	-	2	-	14	-
CSAI	-	1,342	2,446	-	15
CSP - Innovazione nelle ICT	-	-	49	-	-
Fratello Sole Energie Solidali	-	157	-	-	-
GAIA	-	625	2,235	-	-
Global Service Parma	-	(32)	-	-	-
Iniziative Ambientali	-	3	-	-	-
Mondo Acqua	-	147	-	-	-
NOVE	-	2,462	194	-	-
Piana Ambiente in liquidation	-	-	-	-	-
Rimateria	-	-	1,846	-	-
SEI Toscana	-	2,537	-	-	11
SETA	-	4,770	394	-	-
Sienambiente	-	-	-	-	10
Sinergie Italiane in liquidation	-	42	29,128	-	-
STU Reggiane	-	29	2	6	-
Valle Dora Energia	-	378	869	300	-
OTHER RELATED PARTIES					
Subsidiaries of Municipality of Turin	2	1,776	1,358	-	2
Subsidiaries of Municipality of Genoa	21	998	557	-	-
Subsidiaries of Municipality of Parma	128	1,112	1,490	-	-
Subsidiaries of Municipality of Piacenza	-	123	572	-	-
Subsidiaries of Municipality of Reggio Emilia	-	362	3,452	-	-
Others	-	121	-	-	-
TOTAL	155	169,752	54,948	1,212	39

RECONCILIATION OF IFRS STATEMENT OF FINANCIAL POSITION WITH RECLASSIFIED STATEMENT OF FINANCIAL POSITION (Consob Communication no. 6064293 of 26 July 2006)

thousands of euro

IFRS STATEMENT OF FINANCIAL POSITION		RECLASSIFIED STATEMENT OF FINANCIAL POSITION	
Property, plant and equipment	3,865,809	Property, plant and equipment	3,865,809
Investment property	2,490	Investment property	2,490
Intangible assets	2,362,091	Intangible assets	2,362,091
Goodwill	214,054	Goodwill	214,054
Investments accounted for using the equity method	174,321	Investments accounted for using the equity method	174,321
Other equity investments	5,719	Other equity investments	5,719
Total (A)	6,624,484	Fixed Assets (A)	6,624,484
Other non-current assets	76,905	Other non-current assets	76,905
Other payables and other non-current liabilities	(490,397)	Other payables and other non-current liabilities	(490,397)
Total (B)	(413,492)	Other non-current assets (Liabilities) (B)	(413,492)
Inventories	83,981	Inventories	83,981
Non-current trade receivables	98,279	Non-current trade receivables	98,279
Trade receivables	790,544	Trade receivables	790,544
Current tax assets	4,527	Current tax assets	4,527
Other receivables and other current assets	296,779	Other receivables and other current assets	296,779
Trade payables	(845,532)	Trade payables	(845,532)
Other payables and other current liabilities	(371,432)	Other payables and other current liabilities	(383,908)
Current tax liabilities	(19,705)	Current tax liabilities	(19,705)
Total (C)	37,441	Net working capital (C)	24,965
Deferred tax assets	379,154	Deferred tax assets	379,154
Deferred tax liabilities	(180,901)	Deferred tax liabilities	(180,901)
Total (D)	198,253	Deferred tax assets (Liabilities) (D)	198,253
Employee benefits	(104,947)	Employee benefits	(104,947)
Provisions for risks and charges	(407,277)	Provisions for risks and charges	(407,277)
Provisions for risks and charges - current portion	(133,725)	Provisions for risks and charges - current portion	(121,249)
Total (E)	(645,949)	Provisions and employee benefits (E)	(633,473)
Assets held for sale	1,144	Assets held for sale	1,144
Liabilities related to assets held for sale	-	Liabilities related to assets held for sale	-
Total (F)	1,144	Assets (Liabilities) held for sale (F)	1,144
		Net invested capital (G=A+B+C+D+E+F)	5,801,881
Equity (H)	2,843,255	Equity (H)	2,843,255
Non-current financial assets	(201,110)	Non-current financial assets	(201,110)
Non-current financial liabilities	3,747,434	Non-current financial liabilities	3,747,434
Total (I)	3,546,324	Non-current financial debt (I)	3,546,324
Current financial assets	(140,732)	Current financial assets	(140,732)
Cash and cash equivalents	(720,962)	Cash and cash equivalents	(720,962)
Current financial liabilities	273,996	Current financial liabilities	273,996
Total (L)	(587,698)	Current financial debt (L)	(587,698)
		Net financial debt (M=I+L)	2,958,626
		Own funds and net financial debt (H+M)	5,801,881

Statement regarding the condensed interim report pursuant to Article 154-bis of Legislative Decree No. 58/1998

1. The undersigned Gianni Vittorio Armani, Chief Executive Officer, and Massimo Levrino, Director of Administration, Finance, Control and M&A and Manager responsible for preparing the financial reports of IREN S.p.A., certify, also taking into account the provisions of Article 154-bis, paragraphs 3 and 4 of Legislative Decree No. 58 of 24 February 1998:

- the suitability in respect of the company's characteristics and
- the effective application of the administrative and accounting procedures for the preparation of the condensed interim financial statements during the first half of 2021.

2. It is also hereby certified that:

2.1 the condensed interim financial statements:

a) are prepared in compliance with the applicable IFRS endorsed by the European Community pursuant to Regulation (EC) No. 1606/2002 of the European Parliament and Council, of 19 July 2002;

b) correspond to the figures in the ledgers and accounting records;

c) are suitable to offer 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 directors' report includes a reliable analysis of references to important events that occurred in the first six months of the year and their impact on the condensed interim consolidated financial statements, together with a description of the main risks and uncertainties for the remaining six months of the year. The directors' report also includes a reliable analysis of information on significant transactions with related parties.

3 August 2021

Chief Executive Officer

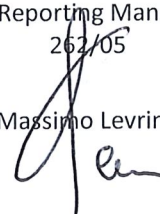
Gianni Vittorio Armani



Administration, Finance, Control
and M&A Manager
and Financial Reporting Manager under Law

262/05

Massimo Levrino





KPMG S.p.A.
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(Translation from the Italian original which remains the definitive version)

Report on review of condensed interim consolidated financial statements

*To the shareholders of
Iren S.p.A.*

Introduction

We have reviewed the accompanying condensed interim consolidated financial statements of the Iren Group, comprising the statement of financial position as at 30 June 2021, the income statement and the statements of comprehensive income, changes in equity and cash flows for the six months then ended and notes thereto. The directors are responsible for the preparation of these condensed interim consolidated financial statements in accordance with the International Financial Reporting Standard applicable to interim financial reporting (IAS 34), endorsed by the European Union. Our responsibility is to express a conclusion on these condensed interim consolidated financial statements based on our review.

Scope of the review

We conducted our review in accordance with Consob (the Italian Commission for Listed Companies and the Stock Exchange) guidelines set out in Consob resolution no. 10867 dated 31 July 1997. A review of condensed interim consolidated financial statements consists of making inquiries, primarily of persons responsible for financial and accounting matters, applying analytical and other review procedures. A review is substantially less in scope than an 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 interim consolidated financial statements.



Iren Group

*Report on review of condensed interim consolidated financial statements
30 June 2021*

Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the condensed interim consolidated financial statements of the Iren Group as at and for the six months ended 30 June 2021 have not been prepared, in all material respects, in accordance with the International Financial Reporting Standard applicable to interim financial reporting (IAS 34), endorsed by the European Union.

Other matters

The 2020 annual and condensed interim consolidated financial statements were respectively audited and reviewed by other auditors, who expressed an unmodified opinion and an unmodified conclusion thereon on 14 April 2021 and 4 August 2020, respectively.

Turin, 4 August 2021

KPMG S.p.A.

(signed on the original)

Roberto Bianchi
Director of Audit



iren