E.S.TR.A. S.p.A.
Registered office in Via Ugo Panziera Prato (PO)
Share capital € 228,334,000.00 fully paid-up
Tax code and entry number in the Register of Companies of Prato 02149060978,
Rea no. 0505831

MANAGEMENT REPORT ON THE

CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2018

OFFICERS

Board of directors
Chairperson Francesco Macrì
Chief Executive Officer Alessandro Piazzi
General Manager Paolo Abati
Director Roberta De Francesco
Director Chiara Sciascia

Board of Statutory Auditors
Athos Vestrini (Chairperson)
Saverio Carlesi
Patrizia Berchiatti

Independent Auditors
EY S.p.A.

1. HIGHLIGHTS OF THE YEAR

In 2018 the Estra Group made consolidated total revenues of € 843.0 million (715.9 in 2017[1]), up compared to the previous year owing mainly to higher volumes of business, an increase in the price of energy commodities and expansion of the scope.

The Gross operating margin (EBITDA) came out at € 71.2 million (87.7 in 2017) and the Operating profit (EBIT) was € 28.0 million (44.7 in 2017), down compared to the previous year as a result of the lower results achieved by the business of natural gas and electricity sales, despite the increase in marginality recorded in all the remaining business sectors (in particular, gas distribution and electricity production from renewable sources). The operating profit of the natural gas sales sector was affected, not only by the effects deriving from the sale at the end of 2017 of approximately 36 thousand customers in the context of an operation for the reorganisation of the industrial portfolio and acquisition at the same time of total control over the company Estra Elettricità S.p.A., but also by the contraction of margins on gas sales at fixed price in the second and third quarter 2018, characterised by an atypical upward trend of the natural gas market. Thanks to the commercial development policies and the business combinations carried out, at the end of the financial year the Group had a portfolio of approximately 774 thousand customers, up by approximately 49 thousand customers compared to the end of the previous year.

The results of the 2018 income statement were affected by certain income components of a non-recurring nature which do not represent the normal business activity with negligible effects on the operating income, but with a negative impact on the net profit of € 3.9 million, related to financial expenses linked to liability management operations and write-downs of assets held for sale. The 2018 adjusted net profit was € 11.6 million (18.8 in 2017) and, as a result of the acquisitions of minorities completed at the end of 2017, the Group's share of net profit went up from 73% in 2017 to 97% in 2018.

Consolidated shareholders' equity at 31/12/2018 reached € 325.3 million (331.9 in 2017), while at the same date Net Financial Debt was € 263.1 million (216.9 in 2017), up compared to the end of the previous year owing to the significant investments made.

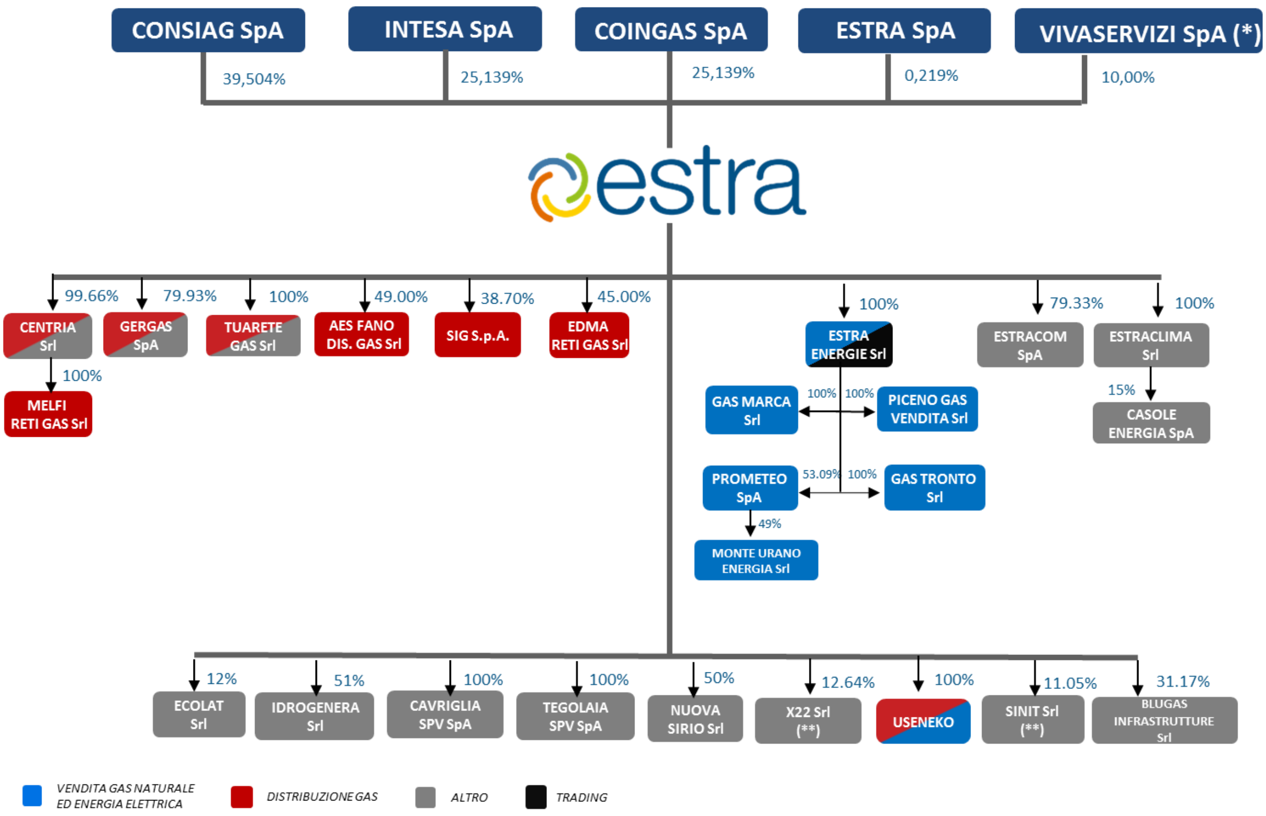
In 2018 Estra made investments of approximately € 70 million, carrying on the strategy of growth in the country and consolidating its role as energy utility of reference in the Centre and South of Italy also through acquiring companies. In particular in the financial year the Group acquired 100% of Metania S.r.l. and Gas Marca S.r.l. (companies operating in the electricity and gas sales sector with respective portfolios of approximately 22,000 customers located mainly in Molise, Campania, Lazio and Abruzzo and approximately 16,000 customers located in Le Marche) and Melfi Reti Gas S.r.l., a company operating in gas distribution with approximately 16,000 points of delivery (PODs) and 580 km of network in the minimum territorial areas (hereinafter MTAs) of Campobasso, Isernia and L'Aquila.

In continuity with the strategic approach adopted in the last few years, the Group continued with the investments, as well as in the core sectors, also in the other business areas. In 2018, the ultra-broad band fibre-optic networks were extended and the 5G testing project continued. The latter was awarded to the Company in 2017, in collaboration with other telecommunications operators of national importance.
In the energy efficiency sector, Estra carried out projects as an ESCo and developed project financing in the public lighting field. Again in the field of energy savings and in particular in the context of electric mobility, 2018 was distinguished by the installation of electric vehicle charging stations in the territories of a number of shareholder Municipalities.

[1] 2017 pro-form revenues, for comparative purposes, in order to take into account the effects deriving from application of IFRS 15 in force from 01 January 2018.

2. GROUP STRUCTURE

The chart below includes the companies directly or indirectly controlled by Estra which are part of the Estra Group, with an indication of the equity interests held in each of them.



Notes:
(*) Multiservizi during 2018 changed its company name to VIVA SERVIZI SpA
(**) Company currently in liquidation

The Group is structured according to a model that provides for a Parent Company with activities of coordination and centralised management of corporate functions (strategic and organisational planning, financial and budget planning, marketing goals and policies, human resource management policies, strategies and practices, production scheduling, planning and control of business management), and special purpose entities operating in the following operating sectors:

- natural gas and electricity sales at the national level;
- natural gas distribution mainly in the regions of central Italy;
- trading of natural gas on Italian and foreign platforms;
- technical and operational management of telecommunication networks and marketing of telecommunication services, technical and operational management of LPG distribution networks and marketing of the same, production of electricity from renewable sources (in particular, photovoltaic), management of district heating plants and heat management, requalification and energy efficiency activities.

In addition, the Group's activities can be distinguished between regulated or semi-regulated activities, and free-market activities:

(a) "regulated and semi-regulated activities", that is activities performed only by entities in possession of a concession or authorisation on the basis of which they are performed, until expiry, at economic and contractual conditions which are, entirely or mainly, defined on the basis of criteria established by the competent authority. The Group performs the regulated activity of natural gas distribution and semi-regulated activities of LPG distribution and marketing and production of electricity from renewable sources;

(b) "free-market activities", that is activities performed by all operators in the sector in possession of the requisites provided for in the applicable legislation, at economic and contractual conditions which are mainly defined on the basis of free negotiation between the parties. The Group performs the free-market activities of sale of natural gas and electricity, trading of natural gas, technical and operational management of telecommunication networks and marketing of telecommunication services, management of heating plants owned by third parties and activities of heat management, requalification and energy efficiency.

The Group has consolidated its presence in Tuscany, Umbria, Abruzzo, Lazio, Marche and Molise, operating on a national basis in the sale of natural gas and electricity. With specific reference to the regions of Marche and Abruzzo, the Group performs the activities of sale and distribution of natural gas also through investee companies.

3. SIGNIFICANT EVENTS OF THE YEAR 2018

3.1 APPLICATION FOR ADMISSION TO LISTING ON THE STOCK EXCHANGE

At the session on 5 March 2018, the Shareholders' Meeting approved (i) the draft application for admission to listing of the Estra shares on the Mercato Telematico Azionario (Electronic Share Market) managed by Borsa Italiana S.p.A. and (ii) the draft application to CONSOB for authorisation to publish the Prospectus and (iii) the adoption of the new regulation for the workings of the Shareholders' Meeting, with effectiveness subordinated to the beginning of trading in Estra shares on the MTA.
During this session, the extraordinary Shareholders' Meeting also approved the adoption of a new text of the articles of association for the purposes of compliance with the current legislation on companies with shares listed on the Mercato Telematico Azionario, with effectiveness subordinated to the beginning of trading in Estra shares.

On 29 May 2018, Estra S.p.A., after noting the unfavourable conditions on the financial markets, decided to postpone the stock exchange listing operation, withdrawing the application for authorisation to publish the prospectus.

The listing was postponed until better market conditions return.

3.2 PARTIAL REPURCHASE OF BONDS

On 3 March 2018 Estra concluded a partial repurchase of securities related to the bond loan known as "E.S.TR.A. S.p.A. Euro 80,000,000, 2.45 per cent. Guaranteed Notes due 2023 (private placement)" guaranteed by the subsidiary Centria S.r.l. and issued on 28/11/2016, subscribed by institutional investors and listed on the regulated market of the Dublin Stock Exchange.

Estra repurchased Bonds with a nominal value of € 30 million, through a transaction of a total amount of € 31.5 million, in addition to interest accrued and not yet paid of € 189 thousand.

Following the repurchase, the total amount of the Bonds in circulation is now a nominal value of € 50 million, representing 62.5% of the total nominal amount of the originally issued Bonds.

3.3 ACQUISITION OF METANIA S.R.L. AND MELFI RETI GAS S.R.L.

On 6 April 2018, Estra S.p.A. finalised the acquisition from the Alexa Group of Isernia of 100% of the shares of Metania s.r.l., a company operating in the sector of sales of electricity and gas, and of Melfi Reti Gas s.r.l., operating in gas distribution, at a price, respectively, of € 15,250 thousand and € 9,000 thousand.

With this operation, Estra continued its process of growth in the country along internal and external lines, consolidating its business in central Italy and strengthening its presence in the regions of the south, in particular in Molise, Campania and Abruzzo.
In 2017 Metania s.r.l. sold gas volumes of 19 million m^3 and 16 GWh of electricity, earning in 2017 total revenues of € 12 million. It has a portfolio of approximately 22,000 customers in the sale of gas and electricity, mainly in Molise, Campania, Lazio and Abruzzo, as well as 4 offices open in the area.
Melfi Reti Gas s.r.l., with revenues in 2017 of € 2.3 million, operates in gas distribution with approximately 16,000 PODs and 580 km of network in the MTAs of Campobasso, Isernia and L'Aquila, where it distributed approximately 19 million m^3 of gas in 2017.

At the same time as purchasing the equity investments, Estra also acquired for a price of € 2,250 thousand the full ownership of the property complex located in the Municipality of Pettoranello del Molise, the headquarters of the two companies, as well as three photovoltaic plants for a total power of 72.7 kWp.

During the year the company Metania S.r.l. was incorporated into Estra Energie S.r.l.

The accounting effects of the business combination are described in the paragraph "Business combinations and acquisitions of non-controlling interests" in the Notes to the Statements, to which you are referred.

3.4 ACQUISITION OF GAS MARCA S.R.L.

With a deed of 18 June 2018, Estra Energie S.r.l., which already held a 49% stake, acquired from ATAC Civitanova S.p.A., the remaining 51% of the shares of Gas Marca S.r.l., based in Civitanova Marche (MC) for a price of € 6,679 thousand.

The company has approximately 16,000 customers located in the provinces of Macerata and Fermo.

The accounting effects of the business combination are described in the paragraph "Business combinations and acquisitions of non-controlling interests" in the Notes to the Statements, to which you are referred.

3.5 SALE OF THE EQUITY INVESTMENT IN SANGRO SERVIZI S.R.L.

On 7 March 2017, the subsidiary Coopgas, now merged by incorporation into Estra Energie, had acquired from the Municipalities of Atessa, Paglieta and San Vito Chietino, a 49% stake in the capital of Sangro Servizi S.r.l., following the award of a tender on which, however, an appeal was pending. This had been lodged by HeraComm against the decision of the Abruzzo RAC of 22 February 2017 which had accepted the appeal lodged by Coopgas against exclusion from the public call for tenders launched by the Municipality of Atessa owing to alleged unsuitability of the requisites required by the call.

In the appeal, HeraComm also asked for a precautionary measure to be issued; this was accepted at the hearing of 06 April 2017 by the Council of State which, as a result, suspended enforcement of the judgement appealed.

With it judgement of 11 January 2018, the Council of State accepted the appeal by Hera Comm S.r.l. and consequently rejected the introductory appeal by Coopgas.

While awaiting the decision of the Council of State, on 03 April 2017, Hera Comm presented an appeal to the Abruzzo RA for cancellation of the deeds of acceptance of the Municipalities of Atessa, Paglieta and San Vito Chietino of the contract for sale of shares of the company Sangro Servizi to Coopgas, signed on 07 March 2017, of the resolutions of the said Municipalities in the part in which completion of the execution deeds was authorised and, consequently, for a declaration of ineffectiveness of the share sale contract, also reserving the right to compensation for damages in a future lawsuit.

During the first quarter of 2018, the parties (Estra Energie, Hera Comm S.r.l., Municipalities of Atessa, Paglieta and San Vito Chietino), also in order to comply with the aforementioned judgement of the Council of State, on 20 March 2018 signed a deed of dissolution by mutual consent of the deed of sale of the company's shares of 7 March 2017 and of sale at the same time of the said equity interest to Hera Comm, as the entity awarded the definitive contract.

As a result of the dissolution of the original deed of purchase, the Group was repaid by the Municipalities involved the amounts that it had previously paid.

3.6 WINNING OF THE DISPOSAL PROCEDURE LAUNCHED BY 2I RETE GAS OF THE GAS DISTRIBUTION PLANTS OF THE MTAS OF FOGGIA 1 NORTH AND BARI 2 SOUTH

On 06 July 2018, the Group, through the subsidiary Centria s.r.l., won the disposal procedure for the activity of natural gas distribution launched by 2i Rete Gas in the MTAs of Foggia 1-North and Bari 2-South.
The operation was completed after the end of the year with acquisition, on 01 April 2019, of 100% of the shares of Murgia S.r.l., a company newly set up by 2i Rete Gas to which it contributed the business unit of the Bari 2 MTA related to the concessions for the distribution service in the Municipalities of Conversano, Putignano, Rutigliano, Triggiano and Valenzano the business unit of the Foggia 1 MTA related to the concessions for the distribution service in the Municipalities of Chieuti, Lesina, San Severo, Serracapriola and Torremaggiore.
The acquisition was made for a total price of € 42 million (subject to adjustment).

As a result of the operation, the Estra Group will manage approximately 544 km of distribution network (302 km related to Bari 2 and 242 km to Foggia 1), for a total number of Points of Delivery (PODs) of approximately 66 thousand.

3.7 ACQUISITION OF ECOLAT

On 26 June 2018, Estra S.p.A. acquired 12% of the shares of Ecolat S.r.l., by subscribing a share capital increase of € 124 thousand. The acquisition transaction was completed in February 2019 through sale by ETH S.r.l. of the remaining 88% stake at a price of € 6,380 thousand.

The acquisition represents for the Group entry into the integrated waste cycle, as the company, as well as holding an equity investment in SEI Toscana S.r.l., is the owner of a plant for the selection and processing of waste coming from separate collection in the provinces of Grosseto, Arezzo, Prato and Florence and operator in the same area of the Collection Centre of the Municipality of Grosseto and of a platform for the storage of recoverable municipal waste.

3.8 RATIONALISATION AND SIMPLIFICATION OF THE GROUP STRUCTURE

The process of rationalisation and simplification of the Group’s corporate structure, already launched in previous years, continued during 2018. In particular, we can note the following operations carried out in financial year 2018:

- The incorporation of ETA 3 S.p.A. into Estra S.p.A. with effect from 3 August 2018;
- The incorporation of Esta Elettricità S.p.A. into Estra Energie S.r.l. with effect from 01 October 2018.
- The incorporation of EDMA S.r.l. into Estra S.p.A. with effect from 18 October 2018;
- The incorporation of Solgenera S.r.l. into Estra S.p.A. with effect from 28 December 2018;
- The incorporation of Metania S.r.l. into Estra Energie S.r.l. with effect from 31 December 2018;

4. MARKET SCENARIO

Macroeconomic context 2018

During 2018 the global economy continued to grow according to the forecasts published by the OECD. In 2018 global GDP grew by 3.7%, one tenth of a point more compared to 2017. Despite the growth reported, world trade recorded a lower increase: according to the Bank of Italy estimates in 2018 international trade increased by 4.4%, with a lower increase compared to what was recorded in 2017 (+5.6% compared to 2016)[2].
The commercial tensions at the global level intensified during 2018. In particular the introduction of protectionist measures by the United States produced greater uncertainty about the prospects of global

[2] *Bollettino economico* (*Economic Bulletin*) – Bank of Italy 1/2019

economic policies, which could have contributed in turn to the deceleration of world trade in the second and third quarters of the year. In the major advanced countries economic growth followed differentiated trends. In the United States the growth rate remained strong, driven above all by domestic demand and accompanied by an increase in employment; in Japan the economy shrank in the third quarter of 2018 (-2.5%) owing to the natural calamities that hit the country (the Osaka earthquake in June, the floods in Hiroshima and Kurashiki in July, the Jebi typhoon in September), but towards the end of the year, the economy began to grow again[1].
The expansion of economic activity in the United Kingdom slowed down slightly in the first three months of the year before coming back to growth in the second half of the year. Global prospects are overshadowed by risks related to a negative outcome of the commercial negotiations between the United States and China, to the possible worsening of financial tensions in the emerging countries and to the uncertainty connected with the outcome of the Brexit negotiations.

As regards the emerging countries the level of GDP growth is still high in India (+7.5%, 2018 forecast compared to 2017), although with a more limited rate towards the end of the year compared to the early months of 2018, while China, although with forecast GDP growth of 6.6% (2018 forecast compared to 2017), has been seeing a slowdown of economic activity since the beginning of 2018; the government's fiscal stimulation measures - such as the reduction of the obligatory reserve ratios of banks to increase liquidity - have had little effect. The macroeconomic scenario of Brazil (forecast +1.2%) and that of Russia (forecast +1.6%) remain stable[1].

The economy of the euro area grew at a moderate rate (forecast +1.9%), supported by improvements in domestic demand and, to a lesser extent, in investments[1]. In the third quarter the GDP of the euro area increased less compared to the previous quarter (respectively +0.2% and +0.4%): this slowdown was due mainly to drops recorded in Germany (-0.2%) and Italy (-0.1%), while Spain showed substantial stability and France an acceleration. The lower growth in Italy and Germany was in part due to entry into force of the new legislation on emissions (Worldwide Harmonised Light Vehicle Test Procedure -WLTP)[3]: this legislation caused a stall in both the production and the registration of motor vehicles and had a particularly severe impact in Italy and Germany owing to the high proportion of the industry and related sectors in these countries.
Again at the European level, the confidence of manufacturing businesses recorded an improvement associated with more optimistic production expectations and industrial production stabilised in the fourth quarter of 2018. Favourable conditions were recorded on the labour market (employment +0.2% in the 3rd quarter compared to the previous one) together with an increase in wages. Inflation remained on positive figures, but it declined as a result of the slowdown of energy prices[4].

According to the Istat preliminary estimate, in 2018 Italian GDP increased by 0.8% compared to the previous year, although the last two quarters of the year showed a reduction of the same[5]: in the summer quarter GDP decreased by 0.1% in quarterly terms, interrupting the expansion in progress since the end of 2014, and also towards the end of 2018 it fell by 0.2% compared to the previous period. These figures mostly reflect the decrease in value added in the segment of agriculture, silviculture and fishing and in that of industry and substantial stability of services. Domestic demand recorded a contraction which was the result in particular of the slowdown in production and commercial activity of the automobile sector caused by the introduction of new legislation on emissions.
Household consumption, after a slight increase in the early months of 2018 (0.4% compared to the previous period) recorded a gradual slowdown during the year: in the summer quarter it fell by 0.1% and in this context the propensity to save increased, coming out at 8.1%[6]. The cause of this trend can in part be found in the not very encouraging signals coming from the labour market: according to the INPS data employment in the private sector saw a slowdown in the first 10 months of 2018 compared to the same period of the previous year; the drop was due to the reduction in the temporary contracts component, while the balance between recruitments and terminations of permanent relationships improved. In the third quarter of 2018 the total number of people employed fell by 0.3%, while the hours worked continued to increase throughout the year.
During 2018 industrial production in Italy was stagnant: it fell in the first quarter, remained weak in the second and after a stationary phase fell again in November (the contraction was 1.6% from the previous

[3] Worldwide Harmonized Light Vehicle Test Procedure – the European legislation (Regulation (EU) 2017/1151 of 01/06/2017) changes the methods of detecting the emissions of automobiles. The changes are aimed at an indication as accurate as possible of consumption and emissions. It is therefore more difficult for motor manufacturers to remain below the CO2 limits set by the European Union.
[4] Euro zone Economic Outlook 1/2019 - Istat
[5] Preliminary estimate of GDP – ISTAT - 31 January 2019
[6] *Bollettino economico* (*Economic Bulletin*) – Bank of Italy 1/2019

month), as besides happened in all the main euro area countries[7]. The growth of manufacturing activity slowed: from 3.1% in 2017 it came down to 1.7% in 2018. Exports, after stagnation in the 2nd quarter, in the summer months recorded a significant recovery (1.1% in volume, from 0.6% in the previous period), with an increase in the goods component of 1.2%. The trend in exports was more favourable towards markets within the European Union and at the segment level the most significant contribution came from the sectors of engineering and to a lesser extent, from electrical appliances and electronics. After a drop at the beginning of the year and a period of weakness in the spring, according to the Bank of Italy data, in October and November exports of goods to non-EU markets increased, as the exchange rate fell[7].
The surveys of businesses carried out at the end of the year recorded a drop in confidence with respect to the general economic situation in all business segments, owing above all to the uncertainty connected with economic and political factors[8].

Monetary policy

During 2018 the American central bank raised interest rates four times, and at the end of the year they were in a range of between 2.25% and 2.50%. The aim was to reduce the supply of money in circulation increasing its cost and thus limiting the growth of inflation.
As regards monetary policy in the euro zone, in December the Governing Council of the European Central Bank (ECB) put an end to monthly purchases of securities in the context of quantitative easing[9] and extended the reinvestment of the principal repaid of securities reaching maturity for an indefinite period, for at least as long as it is necessary to maintain favourable liquidity conditions and a high level of monetary accommodation[10]. On the same occasion, the ECB confirmed the level of interest rates, which will remain unchanged at least until the summer of 2019: the main rate remains at 0%, that on marginal lending at 0.25% and that on deposits at -0.40%[11]. The Council also announced that it will implement all necessary measures to ensure for the banking system the liquidity necessary for correct operation of the monetary policy transmission mechanism over the next few years.

Trends in the energy market

In 2018 the oil price (Brent Dated) showed figures higher than those of 2017 (54.2 dollars/barrel), coming out at an annual average of 72 dollars/barrel, 18 dollars more compared to the previous year, or +33% compared to 2017. During the year a first peak was recorded in May (77.8 dollars/barrel), driven mainly by the announcement of the United States that it intended to withdraw from the Iran nuclear deal and therefore by expectations of a reduction of supply on the oil market, and a second one in October (86.41 dollars/barrel), boosted by the announcement of the American Administration that it intended to impose new sanctions on Iran.
The last part of the year was characterised by a sharp fall in the price (56.83 dollars/barrel), determined by more supplies compared to the expectations, remedied then by the OPEC Plus decision to cut production by 1.2 million barrels a day[12]. The "OPEC Plus" agreement signed at the end of 2016 by 24 countries (of which 10 non-OPEC), has the objective of stabilising oil prices and involves almost twice the number of countries compared to those of the OPEC[13].

In 2018 total energy consumption in Italy is estimated to have been 162.7 million TOE, with a reduction of 0.4% compared to 2017, due to both the slowdown in the economy and the milder weather that characterised the year.
Gas and oil were confirmed as the first two energy sources of the country with a contribution respectively of 36.7% and 36.2% to meeting the demand for energy in Italy; gas contributed to the demand for energy with 59.7 million TOE and oil with 58.8 million TOE. The picture of Italian energy sources is completed by

[7] Our processing of data from Bollettino economico (Economic Bulletin) – Bank of Italy 2/3/4/2018
[8] *Bollettino economico* (*Economic Bulletin*) – Bank of Italy 1/2019
[9] Instrument with which the central bank puts liquidity into the financial system, through the purchase of Government securities and other bonds, supporting economic growth in the entire euro area and contributing to a return of inflation at levels less than but close to 2%. Source: ECB official website
[10] Bollettino economico (Economic Bulletin) of the Bank of Italy 1/2019
[11] European Central Bank press release 13/12/2018
[12] "Preconsuntivo Petrolifero 2018" – Unione Petrolifera
[13] Currently the OPEC is made up of 14 countries: Iran, Saudi Arabia, Venezuela, Nigeria, Iraq, Kuwait, Libya, Angola, Ecuador, United Arab Emirates, Algeria, Congo, Gabon and Equatorial Guinea. The OPEC Plus agreement includes all the OPEC countries with the addition of Azerbaijan, Bahrain, Brunei, Kazakhstan, Malaysia, Mexico, Oman, Russia, Sudan and South Sudan.

renewables (+1.6 compared to 2017 and 16.7% of the total), solid fuels (-12% compared to 2017 and 5.6% of the total) and imports of electricity (+19% compared to 2017 and 4.8% of the total)[14].
The increase in the prices of several energy sources entailed for 2018 an estimate of the energy invoice, that is of the cost that the country incurs for procuring abroad, of around € 40.2 billion, up by approximately 5.5 billion compared to 2017, with a proportion of GDP of approximately 2.3% compared to the 2% of the previous year.

As regards the power exchange, in 2018 the purchase price of energy (prezzo unico nazionale [single national price] - PUN) rose to 61.31 €/MWh, (+13.6% compared to 2017) continuing the rise from the record low of 42.78 €/MWh reached in 2016. The rise occurred in particular between the end of February and October, with a particular peal in September; the annual trend was affected by gas prices on the Italian PSV (punto di scambio virtuale - virtual exchange), which saw a similar trend and a level of domestic purchases that, with few exception, came out at the maximum of the last five years[15].
Electricity trades on the Day Ahead Market, after the record low of 2014, continue to rise coming out at 295.6 TWh (+1.2% from 2017); the volumes traded on the exchange reached the highest figure since 2009, at 212.9 TWh (+1.0%).

Finally, the price of natural gas on the Italian virtual exchange (PSV) confirmed the growth that began in 2017 and rose to its maximum of the last 5 years, reaching 24.55 €/MWh, up by 4.61 €/MWh from the previous year and by 8.70 €/MWh compared to its lowest level, reached in 2016. In a European context in which also the prices of the main hubs follow rising trends, the Italian one again had the highest price, reducing however compared to 2017 the spread with the price on the Dutch TTF (title transfer facility) to 1.65 €/MWh[16] (in 2017 it was 2.63 €/MWh).

Overview of the Italian markets

The natural gas market

Natural Gas Balance Sheet[17]			
NATURAL GAS (Million m^3)	**Financial year 2018**	**Financial year 2017**	**Changes %**
Imports	67,432	69,222	-2.6
Domestic production	5,123	5,239	-2.2
Delivery from storage	11,534	11,234	+2.7
Total issued	**84,089**	**85,695**	**-1.9**
Services and domestic use	32,294	32,682	-1.0
Industrial use	14,221	14,313	-1.0
Thermoelectric use	23,390	25,410	-8.1
Exports, third-party networks and system consumption*	2,221	2,281	-1.7
Total demand	**72,126**	**74,686**	**-3.4**
Injections into storage	11,963	11,009	+8.7

** includes linepack variation, losses, consumption and unaccounted for gas*

In 2018 natural gas consumption in Italy broke off the rising trend of the last three years, declining by 3.4% compared to 2017 and coming out at 72,126 million m^3 (763.3 TWh), remaining however at much higher levels (+18%) compared to the minimum reached in 2014 (61,390 million m^3)[18].

The sharpest drop can be found in the thermoelectric sector, the consumption of which decreased by 8.1%; this is closely connected to the recovery of electricity production from renewable sources, in particular from hydroelectric plants and to the higher imports of gas from the northern border.
The reduction in consumption in the residential and industrial sectors was less significant; it fell by 1%, while exports were down 1.7%.
Bucking the trend were injections into the storage systems, which rose to record high levels, reaching 11,963 million m^3 (+8.7%)

[14] "Preconsuntivo Petrolifero 2018" – Unione Petrolifera
[15] GME Newsletter January 2019
[16] GME Newsletter January 2019
[17] GME Newsletter January 2019 and GME Newsletter January 2018
[18] GME Newsletter January 2019

On the supply side, imports decreased to 67.4 billion cubic metres (-2.6% compared to 2017), in particular the flows of natural gas coming from Africa (Algeria and Libya) fell significantly, but there was also a reduction in imports from Russia at Tarvisio (Udine), which was confirmed however as the entry point with the highest volumes (29.5 billion cubic metres, -2%).
Domestic production fell to record lows (5.1 billion cubic metres, -2.2%), while output from the storage systems reached a record high for the fourth consecutive year (11.5 billion cubic metres, +2.7%).

On the gas spot markets managed by the GME, in the second year of full operation, +24.3% was recorded compared to 2017 in total trades (54.4 TWh in 2018). The increase in trades was driven mainly by deals on DAM-Gas (Day Ahead Market)[19].

The gas distribution market is still in a situation of stasis as regards the preparation of MTA bidding. The tenders issued are still few compared to those provided for in the calendar of the Ministry of Economic Development. At the end of 2018 the situation was:

• 4 tenders sent to ARERA awaiting review: Genoa 1, Turin 1 Modena 1, Florence 1;
• 2 tenders reviewed by ARERA awaiting publication: Rome 1, Forlì-Cesena;
• 5 MTAs with calls for tenders published and procedure open: Milan 1 (call concluded and tender awarded to UnaReti SpA, an A2A Group subsidiary), Turin 2 (call concluded and tender provisionally awarded to Italgas), Belluno (tenders presented by Italgas, Erogasmet, 2IRete Gas, Ascopiave), Aosta (tenders presented by Italgas, Energie Des Alpes, Megareti) and Udine 2;
• 9 calls for tenders published with restricted procedure: Lodi 1, Monza and Brianza 1, Varese 2, Verona 2, Varese 3, Como 1, Bergamo 3, Vicenza 3 and Brescia 1;
• 11 calls for tenders withdrawn or suspended: Alessandria 2, Biella, Massa Carrara, Monza and Brianza 2, Turin 3, Cremona 2 and 3, Venice 1, Udine 1, Udine 3, Perugia 2, Lucca.

ARERA Resoultion 639/2018/R/com updated, to December 2018, the remuneration rate of invested capital for infrastructural services of the gas sector (WACC) only for the year 2019, while awaiting the beginning of the new regulatory period: the remuneration rate for 2019 is increased for gas distribution (6.3%, compared to the 6.1% of the previous regulatory period) as also for gas metering (6.8%, compared to the 6.6% of the previous regulatory period)[20].

The market for electricity and renewable energy sources

In 2018 the demand for electricity was 321.9 TWh, up by 0.4% (320.54 TWh) compared to 2017 (Terna preliminary data).

Electricity Balance Sheet[21]			
Electricity (TWh)	**Financial year 2018**	**Financial year 2017**	**Changes %**
Net production:	280.23	285.27	-1.8
- Thermoelectric	185.05	200.31	-7.6
- Hydroelectric	49.28	37.56	31.2
- Photovoltaic	22.89	24.02	-4.7
- Wind	17.32	17.57	-1.4
- Geothermal	5.71	5.82	-1.9
Net import/export balance	43.91	37.76	16.3
Pumping consumption	2.23	2.48	-9.9
Total demand	**321.91**	**320.55**	**0.4**

In 2018 net production covered approximately 87% of demand for electricity, a lower figure compared to that of the previous two years. Production came out at 280.23 TWh, down by 1.8% compared to 2017.

The hydroelectric component, after the drop in 2017 due to the lower rainfall, rose again, recording +31.2% and arriving at 49.28 TWh. The other renewable components suffered a setback; in particular photovoltaics

[19] The gas Day Ahead Market (DAM-GAS) involves two successive stages; in the first stage the negotiations are carried on according to the continual negotiation method, in the second stage according to the auction method. On the DAM-GAS offers for the purchase and sale of gas are selected in relation to the calendar gas-day subsequent to that in which the auction trading session ends. GME Newsletter January 2019
[20] https://www.staffettaonline.com/articolo.aspx?id=301702
[21] Terna - Monthly Report on the Electrical System (December 2018)

after the significant increase seen in 2017 (+14%) came out at 22.89 TWh, a higher figure however than in 2016.
The net import/export balance was distinguished by a notable increase of 6.15 TWh (+16.3%).

For the trend in the purchase price of energy (PUN - prezzo unico nazionale [single national price]) please see the paragraph "Trends in the energy market".

The energy efficiency market

The twenty-first Conference of the Parties in Paris (COP21) which was held in 2015, was an event that marked a turning point in combating climate change. It was then that the 197 countries involved agreed on the need for a legally-binding global action plan to limit the increase in the average global temperature to below 2°C. The international commitment, confirmed by the Marrakesh Declaration (COP22) of 2016 which indicated the guidelines for monitoring the actions aimed at limiting greenhouse gas emissions (Nationally Determined Contributions), continued also in 2017 with the Conference of the Parties in Bonn (COP23) and subsequently, in December 2018, with the Katowice conference (COP24); on this last occasion the 196 countries participating in the conference signed an implementing regulation (Rulebook) that makes the Paris agreement operational and that includes the scheme of rules on monitoring the future action plan[22].
At the European level in 2018 the Clean Energy Package presented by the European Commission was updated to establish a new objective in relation to the proportion of energy produced from renewable sources at 32% and a 32.5% reduction in energy consumption in the Union[23].
As regards this context, in November 2017 the Italian Government had outlined the National Energy Strategy (NES) 2017, with the objective of making its system more sustainable at the environmental level and stronger at the economic level[24].
In keeping with the national strategic context, in December 2018 Italy presented its proposal for an "*Integrated National Plan for Energy and the Climate"* through which it intends to implement a profound transformation of the economy making it more respectful of people and the environment; in particular the Plan proposes to make use of the great potential for efficiency in the construction industry through construction, seismic, system and aesthetic renovation of buildings and districts and their energy requalification. In addition, on the subject of transport, it intends to promote alternative fuels and the purchase of electric vehicles, as well as implementing policies that would increase collective mobility.
Over the last few years Italy has acted to achieve the energy saving targets set for 2020 by European Directive 2012/27/EU. As of 2017 almost 52% of these targets had been achieved.

Annual energy savings achieved by sector for the period 2011-2017 and expected at 2020 *(final energy, MTEP/year) under the terms of the 2014 Energy Efficiency Action Plan[25]*

Sector	**White certificates**	**Tax deductions**	**Thermal Account**	**Business 4.0**	**Community Regulations and High Speed**	**Italian Legislative Decree 192/05 and 26/6/15**	**Energy savings**		**Target achieved (%)**
							Achieved in 2017	**Expected at 2020**	
Residential	0.71	2.08	-	-	-	0.85	3.64	3.67	99.2
Tertiary	0.15	0.02	0.005	-	-	0.04	0.22	1.23	17.5
Industry	2.1	0.03	-	0.3	-	0.07	2.5	5.1	49.0
Transport	0.01	-	-	-	1.68	-	1.69	5.5	30.7
Total final energy	**2.97**	**2.13**	**0.005**	**0.3**	**1.68**	**0.96**	**8.05**	**15.5**	**51.9**

These energy savings derive for approximately 37% from the mandatory mechanism of white certificates (Titoli di Efficienza Energetica - TEEs [energy efficiency certificates]) or from the obligatory regime of primary energy saving laid down for electricity and natural gas distributors with more than 50,000 customers. The legislative and regulatory framework related to the market for energy efficiency certificates (TEEs) also for 2018 underwent significant developments. In particular a ministerial decree came into force amending some points of the previous decree[26]: it made changes to the 2017-2020 national energy saving

[22] GSE Annual White Certificates Report 2018
[23] GSE Annual White Certificates Report 2018
[24] Ministry of Economic Development – National Energy Strategy
[25] Enea Annual Energy Efficiency Report 2018
[26] Ministerial Decree of 10 May 2018 that amends some points of the Ministerial Decree of 11 January 2017

targets and to the Guidelines for the presentation and assessment of projects presented in this context. As a consequence ARERA, with Resolution 487/2018/R/efr, updated the criteria for determining the tariff contribution payable to distributors, linking its definition also to the prices recorded in the bilateral negotiation and setting a maximum limit of 250 €/TOE.[27] During 2018, the GSE recognised 3.8 million TEEs. The trend of total certificates recognised in 2018 recorded a decrease of approximately 34% compared to 2017, a year in which approximately 5.8 million certificates were recognised. The average price recorded on the organised market in 2018 confirmed the growing trend of the last two years and, with an increase of 14% compared to 2017, reached a record high of 303.60 €/TOE; on the contrary volumes traded on the TEE Market, which since the start of the mechanism have seen a considerable annual increase, reported a drop of 46% and came down to the lowest figure of the last 5 years, of 3.4 million TOE.

Energy efficiency certificates - cumulative data[28]				
Year	Price (€/TOE)			Volumes traded
	Weighted average	Minimum	Maximum	(TOE)
2018	303.60	145.00	489.90	3,371,773

As regards the sector of electric mobility 2018 saw growth in the number of electric cars in circulation (only in the first half of 2018 4,129 electric cars were registered, +89% compared to the same period of 2017), but it was above all the year of mobilisation of all the leading operators for a consolidation of the recharging infrastructure for electric vehicles. In Italy it was estimated at the end of 2017 that there were approximately 2,750 public charging stations, which during 2018 increased thanks to the projects of numerous utilities, also through agreements with public administrations and industrial partnerships with motor manufacturers and other companies linked to the mobility sector.
2018 was also the year that saw the installation of the first charging stations on motorways, and in December ANAS announced a project for the installation of fast electric charging services in services on motorway stretches that it manages, for a total of 41 plants.
The development of the sector in the coming years will be affected by the evolution of the legislative framework (for example new European regulations, such as the Clean Mobility Package, which provides for reducing automobile emissions by 30% at 2030 compared to 2021), by mass media communication, by infrastructural investments and certainly also by technological development: this last will play a fundamental role in increasing the range of batteries and in the challenge of interoperability, understood as the possibility for a vehicle to recharge at all existing types of stations.
Among the opportunities that the electric mobility sector offers, the car sharing service has had considerable success over the last few years, above in large cities.

The telecommunications market

In 2018 the Italian ICT market grew by 0.7% compared to 2017, reaching a value of € 30 billion, with the prospect of a +1.6% increase in 2019. Restricting the field to only Information Technology, which includes Telecommunication services, this grew by 1.6% totalling € 22.8 billion with a trend forecast at +2.3% in 2019. The main driver of this growth is Digital Transformation, on which above all large companies are investing, but also the technologies that involve the so-called "Third Platform" and "Innovation Accelerators", which alone are worth € 18 billion and are growing rapidly: Cloud +25%, Internet Of Things +18%, Artificial Intelligence +31%, Virtual and augmented reality +72%, Wearables + 43%, Big Data and Analytics +26%.[29]
The aforementioned technologies will continue their growth thanks also to the 5G network, which as of today in Italy is in the testing stage. The project launched by the Government on 5G began in 2017 and involves 5 cities: Milan, Prato, L'Aquila, Bari and Matera: Vodafone Italia operates in Milan, Wind Tre and Open Fiber in Prato and L'Aquila (with the participation of Estra for Prato), Telecom Italia, Fastweb and Huawei Technologies Italia in Bari and Matera.[30] The testing will go on until 2020 and will be a new step in the process that will lead to Italy having the technology for fifth-generation mobile networks. 5G is not only an evolution of 4G, but also a platform that opens up new opportunities for development. It is a technology different from those used in the past both as regards the speed and the latency time; it has enormous potential related to the service that can be developed and it can be the driver of growth for the national production system.
In October 2018 the call for tenders was closed for the assignment of the rights to use frequencies for 5G issued by the MED and launched on 13 September: the income achieved with the auction was € 6.55 billion,

[27] GSE Annual White Certificates Report 2018
[28] GSE Annual White Certificates Report 2018
[29] Assintel Report 2018 Press Release
[30] MED (Italian Ministry of Economic Development): Notice of 2 August 2017 - 5G Testing: Rankings of best project proposals and deferment of terms for the negotiated procedure.

over 4 billion more than the € 2.5 billion provided for as the minimum threshold; it was 164% more than the value of the initial offers and 130.5% more than the auction base. The entities that were awarded the various batches of frequencies are Telecom Italia, Vodafone Italia, Wind 3, Iliad Italia and Fastweb[31].
For telecommunication companies in possession of the necessary bandwidth 5G represents a great opportunity for providing new services and increasing efficiency in managing products and it will be possible to create new business models enabled by this technology. 5g will make it possible to have smart objects connected together (IOT - Internet of Things), which exchange a large quantity of data with speed and low latency and that dialogue with sensors, enabling the creation of smart cities.

As regards the development of fibre optics, and in particular in the areas where the market has failed, the so-called white areas, in the last three years Infratel has issued public calls for tenders for the award of the concession for the construction and management of an ultra-broadband infrastructure in approximately 7,500 Italian municipalities in 19 regions[32].
The three awards were assigned to Open Fiber, which was awarded the installation of optical fibre in approximately 9.6 million property units scattered all over Italy[33].
Thanks also to the growth of the services offered by Open Fiber, whose lines offered to retail operators increased by more than 230 thousand in one year, in 2018 there were increases in both accesses with FTTC technology (more than 70%) and those in fibre (more than 50%). These latter at the end of September 2018 amounted to approximately 800 thousand units and accesses in FWA also grew (+20.3%).
As regards the land line network an annual drop in accesses of 90,000 lines was recorded; the downward trend in accesses through the copper network continued: -18.9% on an annual basis.
Within land line accesses, according to the data published by Agcom for the third quarter of 2018, broadband accesses reached almost 17 million units, with an increase on an annual basis of 710 thousand units. ADSL lines decreased by 2.15 million units compared to the same period of 2017, coming out at a figure of 9.22 million lines.
In September 2018, more than 73% of broadband lines were sold with a speed of 10 Mbit/s or more and lines with speeds of 30 Mbit/s or more grew by approximately 620 thousand units on a quarterly basis, rising to above 40% of total broadband and ultra-broadband lines. Accesses with speeds of between 10 and 30 Mbit/s fell to just less than 32% of the total (5.4 million units) and accesses with speeds of less than 10 Mbit/s and decreased, by almost 1.23 million units. On an annual basis both accesses with speeds of more than 100 Mbit/s and those with speeds of between 30 and 10 Mbit/s also increased, up respectively by 1.3 and 1.93 million units.
On the mobile telephony front in 2018 the competitive scenario of the Italian market was characterised by the entry of the French operator Iliad, which became the fourth infrastructure operator of the country, after TIM, Vodafone and WindTre.
Total lines recorded an increase of 3.8 million units on an annual basis, due to the gradual diffusion of "M2M" SIM cards.
Observing the trend of data traffic on an annual basis, the number of SIM cards with access to the Internet grew by 8.7% reaching 57.3 million units; total data traffic from the beginning of the year increased by 60% compared to the corresponding period of 2017.

Environment

The waste sector seems very fragmented, with governance that involves several entities, both national and local and very uneven levels of service. The country is organised into 57 Optimal Territorial Areas (OTAs); most Regions have opted for a regional OTA and in others the size of the areas varies from the provincial to the sub-provincial scale.
The market of municipal waste in Italy is worth more than € 12 billion, with 575 operators active of which only 20 exceed € 100 million of turnover and with an employment level of more than 90 thousand workers; the main operators in terms of turnover and waste collected are the listed multiutilities (Hera, A2A, Iren) and Ama Roma, the municipal utility of the city[34].
The updated data on the waste situation in Italy reveal that in 2017 municipal waste production fell by 1.7% compared to 2016, coming out at 29.6 million tonnes, which were managed in 644 plants: 340 dedicated to treatment of the organic fraction, 130 for intermediate mechanical or mechanical/biological treatment, 123 landfill sites, 39 incineration and 12 co-incineration plants. Over the last few years the number of treatment

[31] MED: Press release of 2 October 2018 - 5G Call for Tenders completed: total offers 6,550,422,258.00 euro.
[32] Report on the Telecommunications Supply Chain in Italy 2018 – Digital Innovation Observatories (Milan Polytechnic)
[33] www.corrierecomunicazioni.it/digital-economy/open-fiber-si-aggiudica-la-terza-gara-infratel/
[34] Green Book 2018 – The data on municipal waste management in Italy, edited by Utilitatis

plants has increased at the expense of landfill sites, which in 2017 decreased by 11 units compared to the previous year, while WTE (Waste To Energy) plants remained unchanged[35].
In 2017 separate collection reached a proportion of 55.5%; the highest figures are in the North (66.2%), Central Italy is below the national average (51,8%), and the lowest figures are in the South (41.9%): Veneto is the region with the highest percentage of separate collection at 73.6%, followed by Trentino Alto Adige with 72%, Lombardy with 69.6% and Friuli Venezia Giulia with 65.5%[36].
In waste treatment the North represents an advanced area, in which the recovery of material and energy is maximised, thanks to the widespread use of plants for treating the organic fraction of waste which enable the production of biogas and biomethane and of plants for recovering energy for the residual unseparated fraction.
The waste management system in the South is instead still very dependent on landfills, to which more than 75% of residual unseparated waste is destined, while the Central area has some difficulty in treatment of both the organic fraction and the unseparated residue and sends approximately 1 million tonnes of waste to plants in the North or abroad.
If we concentrate on the Tuscany region we can observe that this is divided into 3 OTAs: South Tuscany, in which the service is managed by SEI Toscana SRL, Central Tuscany, managed by Alia Servizi Ambientali SpA and Coastal Tuscany, which differs from the others for a fragmentation of management of the waste collection and treatment service among 11 different operators. According to the data of the latest ISPRA Municipal Waste Report, in 2017 the Tuscany Region reached 53.9% of separate collection, the highest figure since 2013[37]. The turnover of the main companies operating in the waste management segment in Tuscany is more than € 657 million (2016 data).
There are 48 municipal waste treatment and disposal plants in Tuscany, and over the last few years they have remained more or less unchanged, with the exception of the number of landfills, which have decreased by 4.
The 2018 Budget Planning Law attributed to the Authority (which precisely at this moment took on the name ARERA) regulation tasks also in the waste sector to be exercised with the same powers and principles applied up to then in the sectors already governed by the Authority (electricity, gas, integrated water system and district heating).

5. ALTERNATIVE PERFORMANCE MEASURES

The ESTRA Group uses alternative performance measures (APMs) in order to transmit more effectively information on trends in the profitability of the businesses in which it operates, and on its capital and financial situation.

For a correct interpretation of these APMs we can note the following:

(i) these measures are made up exclusively starting from the Group's historical data and are not indicative of the Group's future performance;
(ii) the APMs must not be considered as replacements for the measures provided for in the accounting standards of reference (IFRSs);
(iii) the definitions of the measures used by the Group, as they do not come from the accounting standards of reference, may not be the same as those adopted by other companies and may therefore not be comparable with them.

In accordance with the guidelines published on 5 October 2015 by the European Securities and Markets Authority (ESMA/2015/1415), the content and the criterion for determining the APMs used in the present financial statements are explained below.

Economic alternative performance measures

- The income components are classified among **Non-Recurring Items**, if significant, when (i) they derive from events or operations whose occurrence is non-recurring, or from operations or events that do not reoccur frequently in the normal course of the activity, under the terms of CONSOB Resolution number 15519 of 27 July 2006 or (ii) they derive from events or operations not representative of the normal business activity, as in the case of expenses connected with the measurement or disposal of assets and extraordinary financial expenses consequent to redemption

[35] "ISPRA Rapporto Rifiuti Urbani 2018" (2018 Municipal Waste Report)
[36] "ISPRA Rapporto Rifiuti Urbani 2018" (2018 Municipal Waste Report)
[37] "ISPRA Rapporto Rifiuti Urbani 2018" (2018 Municipal Waste Report)

and/or early repayment, even if these occurred in previous years or are likely to occur in subsequent ones.

- **Total Revenues** are calculated adding together "Revenues from sales and services" and "Other operating revenues" indicated in the Group's consolidated income statement.
- **Adjusted Total Revenues** corresponds to Total Revenues, defined above, adjusted to exclude non-recurring revenues as defined above.
- **External costs**, calculated adding together costs for "consumption of raw and ancillary materials and goods", "Costs for services", "Costs for the use of third-party assets" and "Other operating costs" indicated in the Group's consolidated income statement.
- **Adjusted External Costs** corresponds to External Costs, defined above, adjusted to exclude Non-recurring items as defined above.
- The **gross operating profit or EBITDA** is a measure of operating performance and is calculated adding to the Net profit, deriving from Estra's consolidated financial statements, the "net profit (loss) of discontinued operations, "income tax for the year", the result of "measurement of equity investments at shareholders' equity", "gains and losses on exchange rates", "financial expenses", "financial income" and "depreciation, amortisation, provisions and impairment losses", deriving from the Group's consolidated financial statements.
- **Adjusted EBITDA** corresponds to EBITDA, defined above, adjusted to exclude significant non-recurring revenues and costs as defined above. This parameter is not identified as an accounting measure in the context of the EU-IFRSs and therefore the determination criterion applied by the Group may not be the same as that adopted by other groups. This measure is used as a financial target in internal presentations and in external ones (to analysts and investors) and represents a measure useful for assessing the Group's operating performance (as a whole and at the business unit level), also through a comparison of the operating profit of the period of reference with that of previous periods. This makes it possible to carry out analyses on the trends and compare the efficiencies achieved in the periods.
- **Adjusted EBIT** corresponds to the Operating profit, coming from the Group's consolidated financial statements, adjusted to exclude significant non-recurring revenues and costs as defined above. This parameter is not identified as an accounting measure in the context of the EU-IFRSs and therefore the determination criterion applied by the Group may not be the same as that adopted by other groups.
- **Adjusted Net profit** corresponds to the Net profit coming from the Group's consolidated financial statements, adjusted to exclude significant non-recurring revenues and costs as defined above. This parameter is not identified as an accounting measure in the context of the EU-IFRSs and therefore the determination criterion applied by the Group may not be the same as that adopted by other groups.

Financial alternative performance measures

- **Fixed assets** are determined as the sum of: property, plant and equipment, intangible assets and goodwill, equity investments and other non-current financial assets.
- **Other non-current assets and liabilities** consist of the sum of the items "other non-current assets/liabilities", deferred tax assets/liabilities", "post-employment benefits" and "provisions for risks and charges".
- **Net trade working capital** is defined by the sum of: inventories; trade receivables and payables.
- **Other current assets and liabilities** consists of the sum of the items"tax receivables/payables", "other current assets/liabilities"
- **Net invested capital** is determined by the algebraic sum of "fixed assets", "non-current assets/liabilities", "net trade working capital" "other current assets/liabilities" and "assets held for resale". This measure is used as a financial target in internal presentations (business plans) and in external ones (to analysts and investors) and represents a measure useful for assessing all the Group's current and non-current operating assets and liabilities, as detailed above.
- **Net Financial Position** is a measure of the financial structure. This measure is therefore determined as the sum of the following items: cash and cash equivalents, portion within 12 months of m/l-term loans, portion beyond 12 months of m/l-term loans, short-term financial payables, other current financial assets/liabilities (such as receivable and payable financial instruments). This measure is used as a financial target in internal presentations (business plans) and in external ones (to analysts and investors) and represents a measure useful for assessing the Group's level of financial debt, also

through a comparison with previous periods. This makes it possible to carry out analyses on the trends and compare the efficiencies achieved in the periods.

- **Capital raised** is obtained from the sum of the net financial position and shareholders' equity. This measure is used as a financial target in internal presentations (business plans) and in external ones (to analysts and investors) and represents the division of the sources of financing between own and third-party funds and is an indicator of the Group's financial independence and solidity.

Financial and capital ratios

- The solvency ratio is defined as the ratio between total non-current assets and total assets.
- The elasticity ratio is defined as the ratio between total current assets and total assets.
- The availability ratio is defined as the ratio between total non-current assets and total current assets.
- The Net Financial Debt / Equity ratio is the ratio between the net financial position and consolidated shareholders' equity.
- The Net Financial Debt / Adjusted EBITDA ratio is the ratio between the net financial position and Adjusted EBITDA. The NFP/EBITDA index, shown as a multiple of EBITDA, is used as a financial target in internal presentations (business plans) and in external ones (to analysts and investors) and represents a measure of the ability of the operating activities to remunerate the net financial debt.
- The short-term ratio is the ratio between Current Financial Debt and Net Financial Debt.
- The long-term ratio is the ratio between Non-Current Financial Debt and Net Financial Debt.

Rotation ratios

- Days sales outstanding are defined as the ratio between Trade receivables and Revenues from sales and services, multiplied by the days of the period of reference.
- Days payable outstanding are defined as the ratio between the sum of Trade payables and the sum of the consumption of raw and ancillary materials and goods, Costs for services, Costs for the use of third-party assets and Other operating costs, multiplied by the days of the period of reference.

Economic performance ratios

- The EBITDA margin is calculated as the ratio between Adjusted EBITDA and Adjusted Total Revenues.
- ROE, that is Return On Equity, is the ratio between net profit and shareholders' equity and is expressed as a percentage. This indicator is used as a financial target in internal presentations (business plans) and in external ones (to analysts and investors) and is intended to measure the profitability obtained by the investors in exchange for risk.
- ROI, that is return on net invested capital, is the ratio between operating profit and net invested capital and is expressed as a percentage. This indicator is used as a financial target in internal presentations (business plans) and in external ones (to analysts and investors) and is intended to measure the ability to produce wealth through operating activities and therefore to remunerate own funds and those of third parties.

6. BUSINESS PERFORMANCE – ECONOMIC DATA

The main income data for the financial years ended 31 December 2018 and 2017 are shown in the table below:

Income statement	Financial year ended 31 December				Changes	
(amounts in thousands of euro)	2018		2017		2018 vs 2017	
	Amount	Proportion	Amount	Proportion	Absolute	%
Total Revenues	**842,973**	**100.4%**	**715,858**	**100.0%**	**127,115**	**17.8%**
External costs	-731,276	-87.1%	-597,132	-83.4%	-134,144	22.5%
Personnel costs	-36,604	-4.4%	-32,650	-4.6%	-3,954	12.1%
Income/(expenses) from commodity risk management	-4,419	-0.5%	1,359	0.2%	-5,778	-425.1%
Portion of income/(expenses) from measurement of equity investments of a non-financial nature with the equity method	558	0.1%	225	0.0%	333	148.2%
EBITDA	**71,233**	**8.5%**	**87,660**	**12.2%**	**-16,427**	**-18.7%**
Depreciation, amortisation and impairment losses	-34,912	-4.2%	-33,185	-4.6%	-1,727	5.2%
Provisions	-8,353	-1.0%	-9,778	-1.4%	1,425	-14.6%
EBIT	**27,969**	**3.3%**	**44,697**	**6.2%**	**-16,728**	**-37.4%**
Financial management	-12,830	-1.5%	-13,933	-1.9%	1,103	-7.9%
Profit before taxes	**15,139**	**1.8%**	**30,764**	**4.3%**	**-15,625**	**-50.8%**
Income tax for the year (net of the tax effects connected with non-recurring items)	-5,108	-0.6%	-14,321	-2.0%	9,213	-64.3%
Net profit (loss) deriving from continuing operations	**10,031**	**1.2%**	**16,443**	**2.3%**	**-6,412**	**-39.0%**
Net profit (loss) from discontinued operations / assets held for sale	-2,320	-0.3%	-377	-0.1%	-1,943	515.4%
Net profit	**7,711**	**0.9%**	**16,066**	**2.2%**	**-8,355**	**-52.0%**

The table below illustrates the Adjusted Consolidated Revenues, the Adjusted EBITDA, the EBITDA and the Operating Profit (EBIT), for the financial years ended 31 December 2018 and 2017.

Adjusted operating Income Statement	Financial year ended 31 December				Changes	
(amounts in thousands of euro)	2018		2017		2018 vs 2017	
	Adjusted	Proportion	Adjusted	Proportion	Absolute	%
Total Adjusted revenues	**839,699**	**100.0%**	**715,858**	**100.0%**	**123,841**	**17.3%**
Adjusted external costs	-728,073	-86.7%	-598,132	-83.6%	-129,941	21.7%
Personnel costs	-36,604	-4.4%	-32,650	-4.6%	-3,954	12.1%
Income/(expenses) from commodity risk management	-4,419	-0.5%	1,359	0.2%	-5,778	-425.1%
Portion of income/(expenses) from measurement of equity investments of a non-financial nature with the equity method	558	0.1%	225	0.0%	333	148.2%
Adjusted EBITDA	**71,162**	**8.5%**	**86,660**	**12.1%**	**-15,498**	**-17.9%**
Adjusted depreciation, amortisation and impairment losses	-34,912	-4.2%	-31,462	-4.4%	-3,450	11.0%
Adjusted provisions	-8,353	-1.0%	-9,778	-1.4%	1,425	-14.6%
Adjusted EBIT	**27,898**	**3.3%**	**45,420**	**6.3%**	**-17,522**	**-38.6%**
Adjusted net gains/(losses) on financial management	-10,711	-1.3%	-10,659	-1.5%	-52	0.5%
Adjusted profit before taxes	**17,187**	**2.0%**	**34,761**	**4.9%**	**-17,574**	**-50.6%**
Income tax for the year (net of the tax effects connected with non-recurring items)	-5,596	-0.7%	-15,603	-2.2%	10,495	-67.3%
Adjusted net profit (loss) deriving from continuing operations	**11,591**	**1.4%**	**19,158**	**2.7%**	**-7,079**	**-37.0%**
Adjusted net profit (loss) from discontinued operations / assets held for sale	0	0.0%	-377	-0.1%	377	-100.1%
Adjusted net profit (loss)	**11,591**	**1.4%**	**18,781**	**2.6%**	**-6,702**	**-35.7%**

The Group's consolidated income statement 2018 and 2017 was affected by a number of income components which (i) derive from events or operations whose occurrence is non-recurring, or from operations or events that do not reoccur frequently in the normal course of the activity or (ii) derive from events or operations not representative of the normal business activity, even if these occurred in previous years or are likely to occur in subsequent ones, described below in detail.

The composition of elements defined by the Company's management as non-recurring, unusual or not representative of the normal business activity for the financial years ended 31 December 2018 and 2017 is presented below:

	Financial year ended	
(amounts in thousands of euro)	**31-Dec 2018**	**31-Dec 2017**
Settlement agreements on sale of Andali Energia S.r.l.	-3,274	
Total non-recurring revenues	**-3,274**	**0**
Accruing to previous years from Gas Settlement	1,387	
IPO extraordinary costs	1,816	
Extraordinary provisions connected with the sale of the gas distribution plant in the Municipality of Prato		-1,000
Total non-recurring costs and revenues with impact on EBITDA	**-71**	**-1,000**
Write-down of property, plant and equipment following impairment test on the trigeneration plant located in the Municipality of Sesto Fiorentino		1,723
Total non-recurring costs and revenues with impact on Operating Profit (EBIT)	**-71**	**723**
Extraordinary financial expenses for redemption of bond loan	2,119	
Extraordinary financial expenses for redemption of leasing advances		629
Extraordinary financial expenses for early settlement of derivatives		2,645
Total non-recurring costs and revenues with impact on Profit before taxes	**2,048**	**3,997**
Adjustment to estimated realisable value of net assets of the subsidiary Useneko	2,320	
Total non-recurring costs and revenues connected with discontinued operations / assets held for sale	**2,320**	**0**
Total non-recurring costs and revenues	**4,368**	**3,997**

In financial year 2018 the following elements can be noted (with a total negative impact on the Group's pre-tax profit of € 4,368 thousand):

- Higher revenues of € 3,274 thousand as a result of the signing of agreements related to the company Andali Energia S.r.l., sold in the previous year, as described in the paragraph of the notes to the statements "Agreements related to the sale of Andali Energia S.r.l.";
- Higher operating costs of € 1,387 thousand after determining the adjustment items deriving from the outcome of the adjustment sessions for the years 2013-2017 governed by the Authority with Resolution 670/2017/R/gas of 5 October 2017, ("settlement") for the newly-acquired company Gas Marca S.r.l.;
- Extraordinary costs of € 1,816 thousand related to the process of admission to listing of Estra shares on the Mercato Telematico Azionario (Electronic Share Market) managed by Borsa Italiana S.p.A. approved by the Shareholders' Meeting on 5 March 2018 and subsequently postponed after noting the unfavourable conditions on the financial markets;
- Extraordinary financial expenses following the operation for a partial repurchase of securities related to the bond loan known as "E.S.TR.A. S.p.A. Euro 80,000,000, 2.45 per cent. Guaranteed Notes due 2023" for a nominal value of € 30 million, carried out on 3 March 2018 for a total of € 2,119 thousand;
- Revision of the probable realisable value of the company held for sale Useneko of € 2,320 thousand.

The adjustments had an effect only on the Group's profit.

In financial year 2017 the following elements can be noted (with a total negative impact on the Group's pre-tax profit of € 3,997 thousand:

- Reversal of the surplus portion of provisions recognised during financial year 2015 (originally for a total of € 3,370 thousand and aimed at coping with possible expenses connected with the sale of the gas distribution plant in the Municipality of Prato) of € 1,000 thousand against the partial revision of the risks possible reductions of the price of the sale;
- Write-down of property, plant and equipment following impairment test on the trigeneration plant located in the Municipality of Sesto Fiorentino, of € 1,723 thousand, recognised under the item depreciation, amortisation, provisions and impairment losses;
- Non-recurring financial expenses connected with early repayment of some leases for € 629 thousand;
- Non-recurring financial expenses connected with early repayment of some derivative financial instruments for € 2,645 thousand.

The adjustments had an effect only on the Group's profit.

To improve the comparability with the 2018 data, prepared in accordance with IFRS 15 (for which please see the specific paragraph in the notes to the statements), the results by operating segment at 31/12/2017 were restated in order to present:

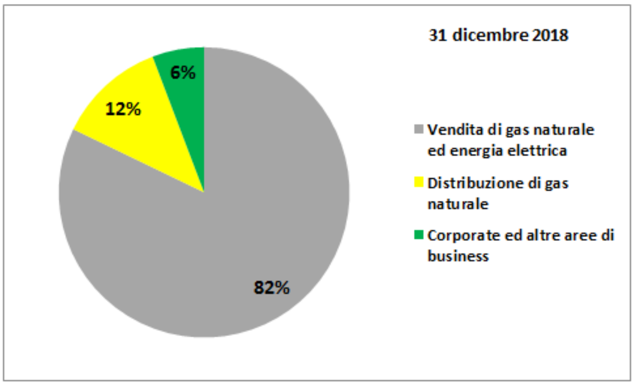
- the net margin of gas trading activity in the operating segment Sale of gas and electricity with consequent reclassification of costs and revenues in the item Income/(expenses) from commodity management;
- revenues for pass-through tariff components net of the related costs in the operating segment Distribution of natural gas;
- revenues for pass-through ancillary services net of the related costs in the operating segment Sale of gas and electricity;
- revenues for personnel seconded to third parties reducing the personnel expenses of the operating segments.

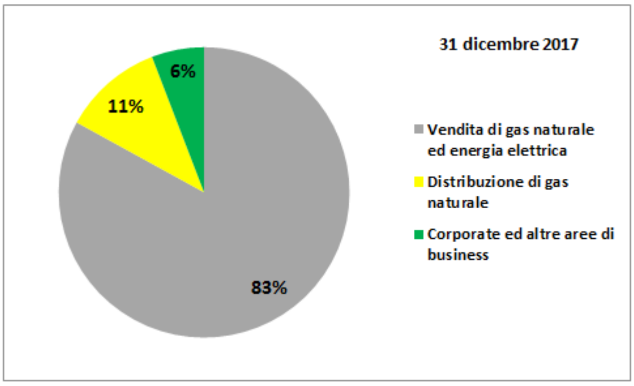
The Group's business model is currently structured on the basis of Strategic Business Units (SBUs) which are attributable to the segments of Sale of gas and electricity, Distribution of natural gas and the SBU "Others" which includes the segments of telecommunications, energy services, renewables and corporate services performed by the parent company. The division into SBUs reflects the reporting used by the Management for the analysis and planning of the businesses managed.
During financial year 2018 the Group carried out an internal reorganisation of the SBU Sale of gas and electricity which places the activities of gas trading and gas delivery to final customers under the same decision-making level in terms of assignment of objectives, allocation of resources and monitoring of results. In consideration of what has been explained the trading results were included in the operating segment Sale of gas and electricity both for financial year 2018 and for 2017.

The table below illustrates the total adjusted revenues, including revenues from sales and services and other revenues and shown net of the non-recurring items of each business area of the Estra Group for the financial years ended 31 December 2018 and 2017, with an indication of the significance, in percentage terms, compared to the Group's total consolidated revenues.

	Financial year ended 31 December				**Change in the period**	
Total Adjusted Revenues (amounts in thousands of euro)	**2018**	**% of Total Adjusted Revenues**	**2017**	**% of Total Adjusted Revenues**	**2018 vs 2017**	**%**
Sale of natural gas and electricity	750,633	89%	653,524	91%	97,109	15%
Distribution of natural gas	110,179	13%	87,954	12%	22,225	25%
Corporate and other business areas	52,728	6%	45,909	6%	6,820	15%
Adjustments and eliminations	-73,841	-9%	-71,528	-10%	-2,313	3%
Total Adjusted Revenues	**839,699**	**100%**	**715,858**	**100%**	**123,841**	**17%**

The chart below shows the breakdown of revenues by SBU gross of eliminations for transactions among the various SBUs. For more information on performance, please refer to the chapter on analysis by business area.





Trend of 2018 Operations compared to 2017

At 31 December 2018 the Group had achieved total adjusted revenues of € 839.7 million, an increase of 17.3% compared to 2017. The growth in revenues involved all segments, owing both to expansion of the activities managed, above all in Gas distribution and in the SBU Others with growth of activities on TLC and Renewables and to the 'increase in average sale tariffs recorded in the SBU Sales as well as an increase in volumes sold. The breakdown of the Group's revenues is in line with the previous year; the revenues of Sale of gas and electricity were again more than 80% of total revenues gross of intra-group eliminations.

The reduction of the margins of Sale of gas and electricity led to an increase in the proportion of adjusted external costs out of total adjusted revenues which went up from 83.6% to 86.7%.

The increase in adjusted personnel expenses which went up from € 32.6 to 36.6 million was due mainly to acquisitions of companies in the SBU Sale of gas and electricity (Metania, Gas Marca) and in the SBU Gas distribution (Tua Reti, Melfi Reti Gas), and to the consolidation and subsequent merger of Edma into the parent company Estra SpA, which occurred at the end of 2017.

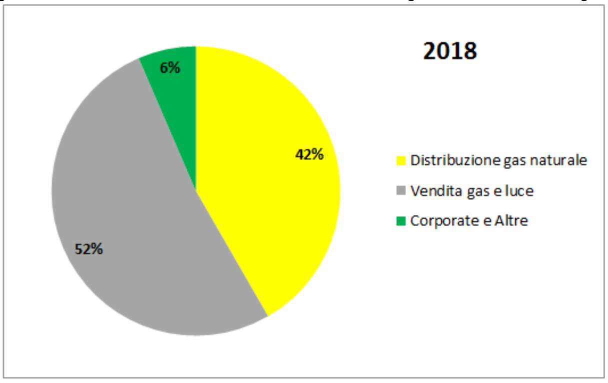
Commodity risk management expenses recorded, in financial year 2018, a figure of € 4.4 million compared to income of € 1.4 million of the previous year owing mainly to the change in the fair value of the commodity swaps used in the gas marketing activity which do not meet the conditions, including formal ones, required by IAS 39 for accounting at equity, as "cash flow hedging" instruments.

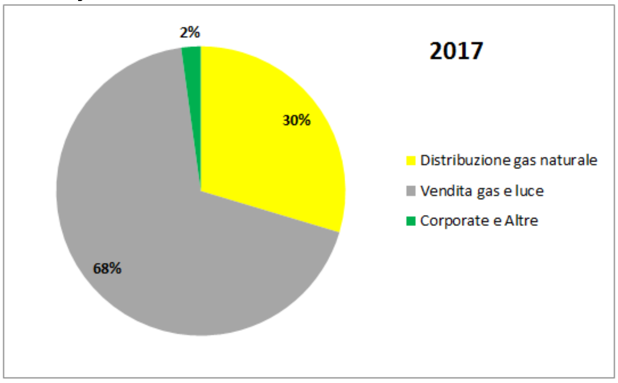
Income from measurement of equity investments of a non-financial nature, € 558 thousand in 2018 (€ 225 thousand in 2017) are related to the result for the year of the company Edma Reti Srl.

Against the increase in revenues, the Group recorded a reduction in gross operating profit of € 15.5 million which, as better described in the paragraph below on analysis by SBU, is referred to the segment Sale of gas and electricity, down by € 22.2 million. This contraction was in part mitigated by the increase in margins of Gas distribution (€ 4 million), and of the activities of the SBU Other (€ 2.7 million).

The adjusted EBITDA was € 71.2 million (€ 86.7 million in 2017) with a proportion of revenues down from 12.1% to 8.5%.

Details are provided below of the breakdown of Adjusted EBITDA, among the various SBUs for the financial year ended 31 December 2018, compared with the previous year:





Adjusted depreciation, amortisation and impairment losses amounted to € 34.9 million, up compared to the figures of the previous year (€ 31.4 million) for new investments, above all in the gas distribution segment and for the company acquisition operations.

As a result of all of the above, the Adjusted EBIT went down from € 45.4 million in 2017 to € 27.9 million in 2018 with a negative change of € 17.5 million.

Adjusted financial management presented a negative balance of € 10.7 million in line with the figures of the previous year.

The adjusted profit before taxes came out at € 17.2 million (€ 34.8 million in 2017).

Adjusted income taxes amounted to € 5.6 million with a tax rate of 32.6%, down compared to the 44.9% of 2017.

The adjusted net profit for the year was € 12.1 million, down compared to the € 18.8 million of financial year 2017. As a result of the acquisitions of minorities completed last year, the share of third parties in the result went down from 31.5% to 4.9%.

7. BUSINESS PERFORMANCE - STATEMENT OF FINANCIAL POSITION

The main financial position data at 31 December 2018 and 2017 are provided below.

Reclassified Balance Sheet	**Financial year ended 31 December 2018**		**Financial year ended 31 December 2017**	
(amounts in thousands of euro)	**Amount**	**Proportion**	**Amount**	**Proportion**
Intangible fixed assets	425,883	72.39%	364,333	66.38%
Property, plant and equipment	84,778	14.41%	82,033	14.95%
Equity investments and non-current financial assets	34,986	5.95%	39,083	7.12%
Fixed assets	**545,647**	**92.74%**	**485,449**	**88.45%**
Other non-current assets and liabilities	(43,389)	-7.37%	(28,451)	-5.18%
Net working sales capital	109,332	18.58%	106,896	19.48%
Other current assets and liabilities	(23,903)	-4.06%	(17,306)	-3.15%
Assets and Liabilities held for sale	650	0.11%	2,255	0.41%
Net Invested Capital	**588,337**	**100.00%**	**548,843**	**100.00%**
Shareholders' Equity	**325,253**	**55.28%**	**331,920**	**60.48%**
Net current financial debt	(109,993)	-18.70%	(151,317)	-27.57%
Non-current financial debt	373,077	63.41%	368,240	67.09%
Net Financial Position	**263,084**	**44.72%**	**216,923**	**39.52%**
Total sources of financing	**588,337**	**100.00%**	**548,843**	**100.00%**

7.1 2018 FINANCIAL MEASURES COMPARED WITH 2017

With reference to the financial year ended 31 December 2018, fixed assets went up from € 499.5 million to € 545.6 million. As well as the result of reclassifying contributions for connections to non-current contractual liabilities carried out in application of IFRS 15 (€ 14 million), fixed assets recorded an increase as a result of the investments and business combinations that occurred in financial year 2018, among which we can note the acquisitions of Melfi Reti Gas in the Gas distribution segment and of Metania and Gas Marca in the Sale of gas and electricity segment, net of sales, depreciation and amortisation.

Excluding the above reclassification, the other non-current assets and liabilities remained substantially unchanged.

The trade working capital remains substantially in line owing to the combined effect deriving from the reduction in inventories of gas in storage and from the increase in trade receivables and payables for sale of gas and electricity, following the expansion of the company perimeter and the increase in the commodity prices.

The increase in other current assets/(liabilities) is mainly related to the lower VAT credit compared to the end of the previous year.

The net invested capital amounts to € 588.3 million, showing an increase of 7.5% compared to 2017.

Shareholders' equity at 31 December 2018 amounted to € 325.2 million (€ 330.2 million in 2017). The changes that occurred in the year are attributable to the net profit for the period and to the distribution of dividends. The proportion of shareholders' equity to capital raised was 55.3%, down compared to the 60.4% of 2017.

The net financial debt was € 263.1 million (€ 216.9 million in 2017), with a proportion of capital raised up from 39.6% to 44.7%, owing mainly to the cash absorption of investing activities.

7.2 FINANCIAL STRUCTURE 2018 COMPARED WITH 2017

Details of the breakdown of net financial debt at 31 December 2018 and 2017 are presented below. These figures derive from the consolidated financial statements for the financial years ending on the same dates, in accordance with the recommendation "ESMA update of the CESR recommendations. The consistent implementation of Commission Regulation (EC) No 809/2004 implementing the Prospectus Directive" of 20 March 2013 (formerly CESR Recommendation 05-054b of 10 February 2005).

	(amounts in thousands of euro)	**Period ended Dec-18**	**Period ended Dec-17**
1	Cash	15	20
B.	Cash equivalents	228,678	229,754
C.	Securities held for trading		
D.	**Liquidity (A) + (B) + (C)**	**228,693**	**229,774**
E.	Current financial receivables	17,422	12,259
	- current derivative financial instruments	16,974	11,635
	- Due from banks for interest income	448	625
F.	Current bank debts	10,528	10,322
G.	Current part of non-current debt	104,780	67,263
H.	Other current financial payables	20,814	13,131
	- current derivative financial instruments	20,814	13,131
I.	**Current financial debt (F) + (G) + (H)**	**136,122**	**90,717**
J.	**Net current financial debt (I) - (E) - (D)**	**(109,993)**	**(151,317)**
K.	Non-current banks debts	210,724	137,782
L.	Bonds issued	147,584	213,922
M.	Other non-current payables	14,769	16,535
	- payables to other lenders for leases	5,094	5,425
	- payables to shareholders for loans	9,675	11,110
No.	**Non-current financial debt (K) + (L) + (M)**	**373,077**	**368,240**
O.	**Net financial debt (J) + (N)**	**263,084**	**216,923**

At 31 December 2018 net financial debt was € 263.1 million, up compared to € 216.9 million in financial year 2017. The main changes in the composition of net financial debt are related to the increase in current financial debt which went up from € 90.7 to € 136.1 million owing to the reclassification as short-term of the bond loan maturing in 2019 of a remaining € 35.7 million.
The non-current financial debt went up from € 368.2 to € 373.1 million owing to the combined effect deriving from an increase in non-current banks debts which went from € 137.8 to 210.7 million due to the opening of new loans and to the reduction in medium/long-term bonds owing both to the above reclassification and to the partial repurchase of € 32.2 million of the bond loan of an original € 80 million.

7.3 MAIN FINANCIAL MEASURES 2018 AND 2017

The main financial measures are presented below on the basis of the consolidated financial statements at 31 December 2018 and 2017:

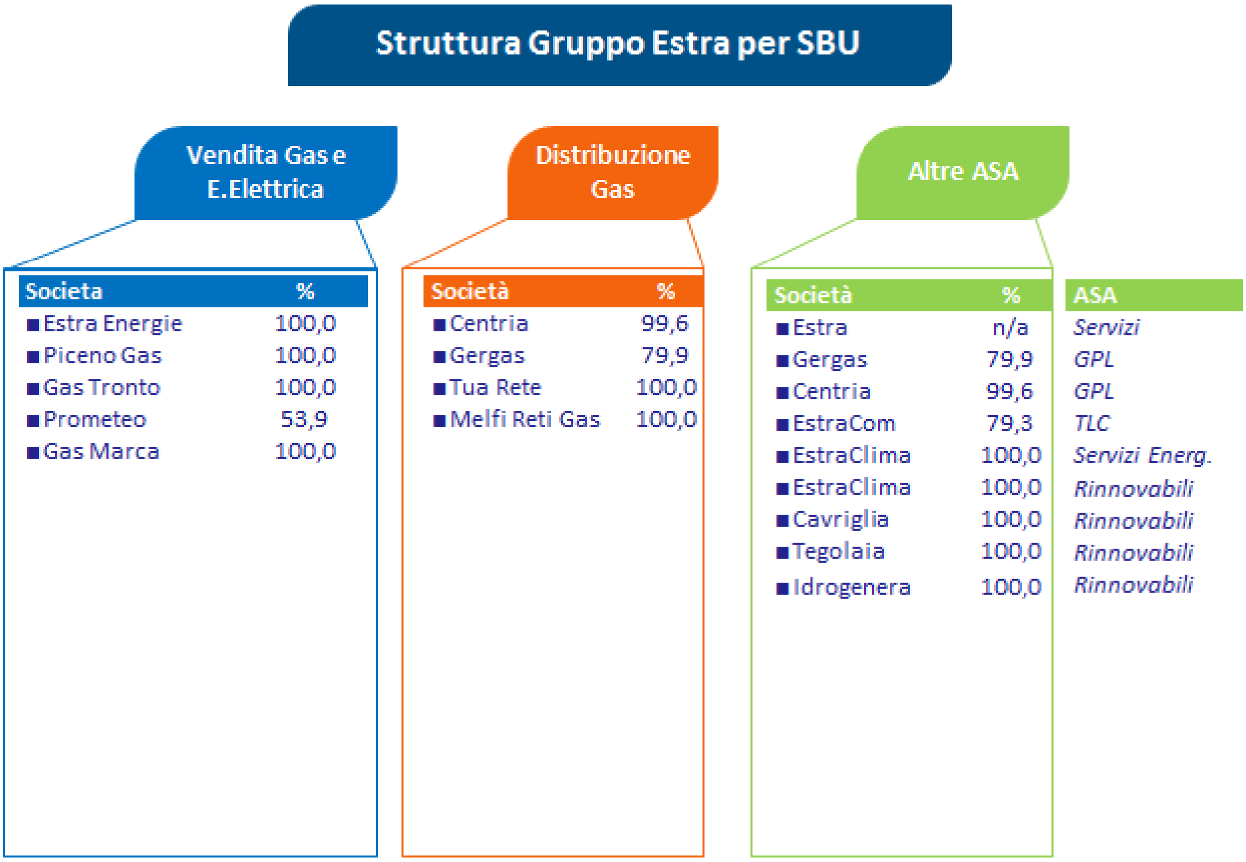
Consolidated financial measures	Financial year ended 31 December	
	2018	**2017**
Solvency ratio (total non-current assets / total assets)	47.18%	46.30%
Elasticity ratio (total current assets / total assets)	52.74%	53.49%
Availability ratio (total non-current assets / total current assets)	89.46%	86.56%
Net Financial Debt /Equity Ratio - (Leverage)	0.8	0.7
Net Financial Debt /Adjusted EBITDA Ratio	3.7	2.5
Short-term Financial Debt Ratio	0.5	0.4
Long-term Financial Debt Ratio	1.4	1.7

The main economic measures are presented below on the basis of the consolidated financial statements at 31 December 2018 and 2017:

Economic measures	Financial year ended	
	31-Dec 2018	**31-Dec 2017**
EBITDA margin	8.5%	12.1%
ROE	3.7%	5.7%
ROI	4.7%	8.3%

8. BUSINESS PERFORMANCE – ANALYSIS BY STRATEGIC BUSINESS UNIT (SBU)

The chart below represents the Estra Group, with details of the companies that operate within the Strategic Business Units (SBUs), or operating segments, with an indication of the related percentage of possession by the Parent Company Estra S.p.A.:



Below are the income statements for the financial years ended 31 December 2018 and 2017 divided among the various strategic business units.

The income statements include the economic transactions between the business areas, measured at market prices.

Operating segments 2018 **(amounts in thousands of euro)**	**Distribution of natural gas**	**Sale of gas and electricity**	**Corporate and Others**	**Adjustments and Eliminations**	**Total**
Total Adjusted Revenues	110,179	750,633	52,728	-73,841	839,699
Adjusted external costs	-67,738	-698,450	-35,725	73,841	-728,073
Adjusted personnel costs	-12,790	-10,870	-12,945	0	-36,604
Income/(expenses) from commodity risk management	0	-4,419	0	0	-4,419
Portion of profit/(loss) of associates and joint ventures of a non-financial nature	0	0	558	0	558
Adjusted EBITDA	**29,651**	**36,895**	**4,616**	**0**	**71,162**
Adjusted depreciation and amortisation	-13,066	-12,492	-9,354	-	-34,912
Adjusted provisions	-62	-8,225	-65	-	-8,353
Adjusted EBIT	**16,523**	**16,177**	**-4,803**	**0**	**27,898**

Operating segments 2017 (amounts in thousands of euro)	Distribution of natural gas	Sale of gas and electricity	Corporate and Others	Adjustments and Eliminations	Total
Total Adjusted Revenues	87,954	653,524	45,909	-71,528	715,858
Adjusted external costs	-51,591	-585,535	-32,539	71,534	-598,132
Adjusted personnel costs	-10,698	-10,241	-11,706	-5	-32,650
Income/(expenses) from commodity risk management	0	1,359	0	0	1,359
Portion of profit/(loss) of associates and joint ventures of a non-financial nature	0	0	225	0	225
Adjusted EBITDA	**25,664**	**59,107**	**1,889**	**0**	**86,660**
Adjusted depreciation and amortisation	-9,696	-14,118	-7,648	0	-31,462
Adjusted provisions	-129	-9,463	-186	0	-9,778
Adjusted EBIT	**15,839**	**35,526**	**-5,945**	**0**	**45,420**

8.1 DISTRIBUTION OF NATURAL GAS

The table below presents the main economic data related to the Estra Group's activity of distribution of natural gas for the financial years ended 31 December 2018 and 2017.

Distribution of Natural Gas	Financial year ended 31 December					Change in the period	
Income statement of the operating segment (amounts in thousands of euro)	2018	% of Total Adjusted Revenues	2017	% of Total Adjusted Revenues	% of Total Adjusted Revenues	2018 vs 2017	%
Total Adjusted Revenues	**110,179**	**100%**	**87,954**	**100%**	**100%**	**22,225**	**25%**
Adjusted external costs	-67,738	-61%	-51,591	-59%	-59%	-16,147	**31%**
Personnel costs	-12,790	-12%	-10,698	-12%	-12%	-2,092	**20%**
Adjusted EBITDA	**29,651**	**27%**	**25,664**	**29%**	**29%**	**3,987**	**16%**
Depreciation, amortisation and write-downs	-13,066	-12%	-9,696	-11%	-11%	-3,370	35%
Provisions	-62	0%	-129	0%	0%	67	**-52%**
Adjusted EBIT	**16,523**	**15%**	**15,839**	**17%**	**17%**	**684**	**4%**

The table below shows the main operating data of the Estra Group related to the distribution of natural gas for the financial years ended 31 December 2018 and 2017.

	Financial year ended 31 December		Change in the period	
Operating measures	2018	2017	2018 vs 2017	%
Gas input into the network (Mln m^3)	654	578	76	13.1%
Active PODs ('000)	447	400	47	11.8%
Km of network	6,378	5,418	961	17.7%

Trend of 2018 compared to 2017

At 31 December 2018 the SBU Distribution of natural gas showed revenues from transmission tariffs of € 57.5 million, up compared to the previous year (€ 51.4 million), mainly as a result of the start of operation of approximately 30 thousand PODs in the Municipalities of Rieti, Magione and Mosciano S.Angelo beginning on 1 January 2018 following the contribution an Estra capital increase by Viva Servizi S.p.A. of the company Tua Reti Srl and the acquisition of the company Melfi Reti Gas Srl which operates approximately 16 thousand PODs in Molise, consolidated starting from the second quarter of 2018. Revenues increased owing to investments in internal works that went up from € 13.7 million to € 19.7 million. There was a considerable increase in revenues for trading of energy efficiency certificates owing to an increase in unit prices, which went up from € 17.7 million to € 25.1 million with a corresponding increase in purchase costs. Adjusted EBITDA went up from € 25.7 million to € 29.7 million with a proportion of consolidated adjusted EBITDA of 42% (30% in 2017). The adjusted EBIT was € 16.5 million, up by 2% compared to the previous year with a proportion of adjusted revenues of 15%.
The main operating data related to gas input into the network, active PODs and km of network all went up, thanks to the expansion of the perimeter managed and to new investments made during financial year 2018.

8.2 SALE OF GAS AND ELECTRICITY

The table below presents the main economic data related to the Estra Group's sale of gas and electricity activity for the financial years ended 31 December 2018 and 2017.

Sale of gas and electricity	Financial year ended 31 December				Change in the period	
Income statement of the operating segment (amounts in thousands of euro)	**2018**	**% of Total Adjusted Revenues**	**2017**	**% of Total Adjusted Revenues**	**2018 vs 2017**	**%**
Total Adjusted Revenues	**750,633**	**100%**	**653,524**	**100%**	**97,109**	**15%**
External costs	-698,450	-93%	-585,535	-90%	-112,915	19%
Personnel costs	-10,870	-1%	-10,241	-2%	-628	6%
Income/(expenses) from commodity risk management	-4,419	**-0**	1,359	**0**	-5,778	**-4**
income/(expenses) from equity investments of a non-financial nature	-	**-**	-	**-**	-	**-**
Adjusted EBITDA	**36,895**	**5%**	**59,107**	**9%**	**-22,212**	**-38%**
Depreciation, amortisation and write-downs	-12,492	-2%	-14,118	-2%	1,626	-12%
Provisions	-8,225	-1%	-9,463	-1%	1,237	-13%
Adjusted EBIT	**16,177**	**2%**	**35,526**	**5%**	**-19,349**	**-54%**

The tables below show the main operating data of the Estra Group related to the sale of natural gas and electricity for the financial years ended 31 December 2018 and 2017.

	Financial year to 31 December				**Change in the period**	
Number of gas PODs	**2018**	**% of TOT**	**2017**	**% of TOT**	**2018 vs 2017**	**%**
Free final market	328,074	51.0%	273,860	44.3%	54,214	19.8%
Protected final market	315,387	49.0%	344,322	55.7%	-28,935	-8.4%
TOTAL	**643,461**	**100.0%**	**618,182**	**100.0%**	**25,279**	**4.1%**

Gas volumes (Mln m³)	Financial year ended 31 December 2018	% of TOT	2017	% of TOT	Change in the period 2018 vs 2017	%
Free final market	1,201	81.0%	1,011	77.5%	189	18.7%
Protected final market	282	19.0%	293	22.5%	-11	-3.7%
TOTAL	**1,483**	**100.0%**	**1,304**	**100.0%**	**178**	**13.7%**

Number of ee PODs	Financial year to 31 December 2018	% of TOT	2017	% of TOT	Change in the period 2018 vs 2017	%
Free final market	110,598	84.6%	86,762	80.9%	23,836	27.5%
Protected final market	20,146	15.4%	20,418	19.1%	-272	-1.3%
TOTAL	**130,744**	**100.0%**	**107,180**	**100.0%**	**23,564**	**22.0%**

Ee volumes (Gwh)	Financial year ended 31 December 2018	% of TOT	2017	% of TOT	Change in the period 2018 vs 2017	%
Free final market	604	93.0%	604	92.1%	-1	-0.1%
Protected final market	45	7.0%	52	7.9%	-6	-12.6%
TOTAL	**649**	**100.0%**	**656**	**100.0%**	**-7**	**-1.1%**

Trading	Financial year ended 31 December 2018	2017	Change in the period 2018 vs 2017	%
Volumes traded	1,013	1,482	-469	-31.6%

Trend of 2018 compared to 2017

Revenues of the sale of gas and electricity segment recorded an increase of € 97.1 million due, mainly, to the gas sales sector owing to the increase in volumes sold and the increase in commodity prices. Revenues of gas sales to customers are approximately 84% of total revenues of the SBU.
Revenues of electricity sales were stable compared to the previous year.
The EBITDA of the SBU Sale of Gas and Electricity fell sharply, by € 22,2 million compared to the previous year. This change was mainly due:

i) to the atypical performance of the natural gas market in financial year 2018 which, after a first quarter of price growth driven by the drop in temperatures and the reductions in capacity of certain infrastructures in Northern Europe, saw a continuation of this upward trend also in the second and third quarters of the year driven by the upward trend observed on the oil market.
   In this context the Group suffered a contraction of its margins, mainly on sales at fixed price with delivery April – September 2018 in reference to which hedges of the price risk were only partially in place; these are normally achieved by the Group through procurement at fixed price for related volumes and/or financial instruments. This phenomenon was then accentuated by the physiological delay in the alignment of the variable price sale tariffs compared to the corresponding variable purchase prices;
ii) to the sale, with consequent loss of margins, of approximately 11,000 thousand gas customers and 25,500 electricity contracts to Canarbino S.p.A. completed in December 2017 as part of an operation for reorganisation of the industrial portfolio and acquisition at the same time of total control over the company Estra Elettricità S.p.A..

The change was also affected by:

- the positive impact on the 2017 comparative data of reversal of payable items of previous years;
- the negative change in financial year 2018 of the fair value of commodity swaps related to the gas marketing activity which, although entered into for hedging purposes, do not meet the conditions, including formal ones, required by IAS 39 for accounting at equity, as “cash flow hedging” instruments (€ 3,435 thousand).

The EBITDA of the SBU Sale of Gas and Electricity accounted for 52% of consolidated EBITDA (68% in 2017).

Depreciation, amortisation and impairment losses, which amounted to € 12.5 million, down compared to the figures of the previous year (€ 14.1 million at 31 December 2017), declined, as did provisions which went down from € 9.5 to € 8.2 million. The adjusted EBIT was € 16.2 million (€ 34.8 million in 2017), with a proportion down from 5% to 2%.
Trading activity decreased with revenues of € 228.6 million compared to € 288 million in 2017 with a reduction at the same time in volumes traded which went down from 1,482 million in 2017 to 1,013 million in 2018.
The development of the commercial activity and the acquisitions of the companies Metania and Gas Marca enabled an increase in customers in both the gas and the electricity segment with an increase in the volumes sold.

8.3 CORPORATE AND OTHER ACTIVITIES

The segment "Corporate and Other Activities" includes the services of the telecommunications, energy (heat and cogeneration) and renewables segment, and the activities performed by the holding in terms of coordination and centralised management of corporate business functions for the other Group companies.
The table below presents the main economic data related to the Estra Group's other SBUs for the financial years ended 31 December 2018 and 2017.

Corporate and Others	**Financial year ended 31 December**				**Change in the period**	
Income statement of the operating segment **(amounts in thousands of euro)**	**2018**	**% of Total Adjusted Revenues**	**2017**	**% of Total Adjusted Revenues**	**2018 vs 2017**	**%**
Total revenues	**52,728**	**100%**	**45,909**	**100%**	6,820	**15%**
External costs	-35,725	-68%	-32,539	-71%	-3,186	10%
Personnel costs	-12,945	-25%	-11,706	-25%	-1,240	11%
Income/(expenses) from commodity risk management	0	0%	0	0%	0	-
Portion of profit/(loss) of associates and joint ventures of a non-financial nature	558	1%	225	0%	334	149%
Gross operating margin (EBITDA)	**4,616**	**9%**	**1,889**	**4%**	**2,728**	**144%**
Adjusted Depreciation, Amortisation and Impairment Losses	-9,354	-18%	-7,648	-17%	-1,706	22%
Adjusted provisions	-65	0%	-185.68	0%	121	-65%
Adjusted EBIT	**-4,803**	**-9%**	**-5,945**	**-13%**	**1,143**	**-19%**

Trend of 2018 compared to 2017

The increase in revenues of the SBU Other is due to the renewable segment for operation over the entire period of the plants of the companies Cavriglia and Tegolaia consolidated starting from the 4th quarter of 2017. At 31 December 2018 the adjusted EBITDA of the SBU Others was € 4.6 million compared to € 1,9 million in the previous year. The increase can be attributed to activities on Renewables and to the growth of margins of Telecommunications, while the operating segments of Energy Services and GPL were stable. The costs of the Corporate segment increased owing to extraordinary marketing campaigns carried out in 2018 during the activities for listing on the stock market subsequently postponed owing to the unfavourable conditions on the markets.
The adjusted EBIT was a negative € 4.8 million compared to the negative result of € 5.9 million of 2017.

9. RECONCILIATION BETWEEN THE GROUP PROFIT/(LOSS) FOR THE PERIOD AND SHAREHOLDERS' EQUITIES WITH THE ANALOGOUS FIGURES OF THE PARENT COMPANY

The reconciliation statement between the Group profit/(loss) for the period and shareholders' equity is presented below with the analogous figures of the parent company under the terms of Communication no. DEM/6064293 of 28-7-2006.

	Financial year 2018	
(thousands of Euro)	Group profit for the year	Total shareholders' equity
Shareholders' equity and profit for the year as shown in the holding company's financial statements	**18,055**	**418,751**
Income and elimination of book value of fully consolidated companies	19,701	13,752
Reversal of write-downs of equity investments	(6)	382
Elimination of effects on intercompany capital gains	3,858	(126,340)
Consolidation Accounts, Equity Method	1,378	1,150
Other	0	(145)
Depreciation/amortisation of consolidation differences	(3,606)	(13,058)
Elimination of effects of intercompany mergers	1,964	2,867
Elimination of intercompany dividends	(34,013)	(610)
Group profit for the year and shareholders' equity as shown in the consolidated financial statements	**7,331**	**296,748**
Profit and shareholders' equity attributable to minority interests	380	28,505
Profit for the year and shareholders' equity as shown in the consolidated financial statements	**7,711**	**325,253**

10. SUBSEQUENT EVENTS

After the reporting date we can note:

- The acquisition, on 01 April 2019, of 100% of the shares of **Murgia S.r.l.**, a company newly set up by 2i Rete Gas to which it contributed the business unit of the Bari 2 MTA related to the concessions for the distribution service in the Municipalities of Conversano, Putignano, Rutigliano, Triggiano and Valenzano the business unit of the Foggia 1 MTA related to the concessions for the distribution service in the Municipalities of Chieuti, Lesina, San Severo, Serracapriola and Torremaggiore.
  The acquisition occurred after the Group, through Centria S.r.l., won the disposal procedure launched by 2i Rete Gas on 29 March 2018.
  The acquisition was made for a total price of € 42 million (subject to adjustment).

  As a result of the operation, the Estra Group will manage approximately 544 km of distribution network (302 km related to Bari 2 and 242 km to Foggia 1), for a total number of Points of Delivery (PODs) of approximately 66 thousand.

- The acquisition of 88% of **Ecolat S.r.l.**, of which Estra held 12% at 31 December 2018. The company, as well as holding an equity investment in SEI Toscana S.r.l., is the owner of a plant for the selection and processing of waste coming from separate collection in the provinces of Grosseto, Arezzo, Prato and Florence and operator in the same area of the Collection Centre of the Municipality of Grosseto and of a platform for the storage of recoverable municipal waste. The acquisition occurred in February 2019 through sale by ETH S.r.l. at a price of € 6,380 thousand.

11. BUSINESS OUTLOOK

The Group is focused on maintaining the strong territorial positioning acquired, on improving its operating performance and on continuing on its path of growth also in external directions mainly with reference to the segment of regulated activities.

In particular, the following assume particular significance at the beginning of 2019: the operations for the acquisition of the natural gas distribution activity of 2i Rete Gas in Apulia in the Foggia 1-North and Bari 2-South MTAs and of 100% of Ecolat, owner of a plant for the selection and processing of waste coming from separate collection in the provinces of Grosseto, Arezzo, Prato and Florence and holder of a minority stake in SEI Toscana S.r.l.. With this last operation, the Group made its entry into the waste management implementing one of the strategic prospects that it had set itself already in the previous business plan.

As well as by the implementation of its strategies, the Group's results may naturally be affected by other changes in the business conditions such as, in particular, any new tariff measures issued by the Regulatory Authority, changes in the market context, the evolution of consumption, the trends in supplies, price and policies for the procurement of commodities.

12. INDUSTRY REGULATIONS

The following is a summary of the highlights of legislative changes in 2018 in relation to the various areas of Estra Group business.

Natural gas sales

RESOLUTION 28 DECEMBER 2017 - 925/2017/R/gas; RESOLUTION 29 MARCH 2018 - 189/2018/R/gas; RESOLUTION 28 JUNE 2018 - 365/2018/R/gas; RESOLUTION 27 SEPTEMBER 2018 - 477/2018/R/gas. Quarterly update of the economic conditions of supply of natural gas for the protection service. These measures update, for each quarter of 2018, the economic conditions of the supply of natural gas to the protected customer.
RESOLUTION 27 SEPTEMBER 2018 - 488/2018/R/gas. Rules on the subject of centralised management of metering data in the context of the Integrated Information System, with reference to the gas sector. This measure contains rules functional to the centralised management of metering data in the context of the Integrated Information System with reference to the gas sector.

CONSULTATION 16 OCTOBER 2018 - 516/2018/R/gas. Compliance with Council of State Judgement 4825/2016, cancelling Resolution ARG/gas 89/10 - Guidelines on the methods of settling economic items between vendors and final customers
The consultation document illustrates the Authority's guidelines on the subject of methods of settling payments consequent to the redetermination of the coefficient k, made with Resolution 737/2017/R/gas, functional to the determination of the price of the raw material gas of the protection service in the two years 1 October 2010 - 30 September 2012 for compliance with Council of State Judgement 4825/2016.
RESOLUTION 05 December 2018 - 631/2018/R/gas. Adoption of the Amended Text on Monitoring of the Natural Gas Wholesale Market (Testo integrato del monitoraggio del mercato all'ingrosso del gas naturale - TIMMIG). With this measure the Amended Text on Monitoring of the Natural Gas Wholesale Market (TIMMIG) is approved.
RESOLUTION 27 December 2018 - 707/2018/R/gas. Update of the QVD (Quota Vendita al Dettaglio - Retail Sales) component of the economic conditions of the protection service for natural gas and of the UG2 component for the year 2019. This measure defines the values of the QVD component to cover the costs of marketing the natural gas sales service to customers who use the protection service in force from 1 January 2019. The values of the UG2 component are also updated.

Electricity sales
RESOLUTION 28 DECEMBER 2017 - 924/2017/R/eel; RESOLUTION 29 MARCH 2018 - 188/2018/R/eel; RESOLUTION 28 JUNE 2018 - 364/2018/R/eel; RESOLUTION 27 SEPTEMBER 2018 - 478/2018/R/eel.
Quarterly update of the economic conditions of sale of electricity in greater protection. These measures update, for each quarter of 2018, the economic conditions of the supply of electricity in higher protection.
RESOLUTION 28 DECEMBER 2017 - 921/2017/R/eel. Implementing provisions for recognition of discounts for companies with high electricity consumption pursuant to the decree of the Ministry of

Economic Development of 21 December 2017. Update of the TISDC (Testo integrato dei sistemi di distribuzione chiusi-Amended text on closed distribution systems) and the TISSPC (Testo integrato dei sistemi semplici di produzione e consumo - Amended text on simple production and consumption systems) in relation to the new rules on companies with high electricity consumption. The resolution adopts the rules necessary to implement the new mechanism of discounts to companies with high electricity consumption, governed by the decree of the Ministry of Economic Development of 21 December 2017, in keeping with the tariff structure of the new groups of general electrical system expenses defined by Resolution 481/2017/R/eel and with urgency in relation to first implementation which runs from 1 January 2018. The Amended TISSPC and TISDC are also updated to take into account the new rules on companies with high electricity consumption.

RESOLUTION 22 FEBRUARY 2018 - 96/2018/R/eel. Update of measures of the Authority following the definition of the new structure of tariff components to cover the general system expenses. This measure updates certain measures of the Authority following the definition of the new structure of tariff components to cover the general system expenses.

RESOLUTION 11 APRIL 2018 - 264/2018/R/com. Urgent actions on transitional measures on the subject of invoicing and metering in the electricity retail market, adopted with the Authority's Resolution 97/2018/R/com. This measure defines urgent actions on transitional measures following Resolution 97/2018/R/com on the subject of management of invoicing and payments of the transport service in the cases of objection to negative prescription raised by the final customer for reasons attributable to the distribution company.

RESOLUTION 13 SEPTEMBER 2018 - 449/2018/R/eel. Completion of the rules for SIMILAR Protection: PLACET offer to be applied on occasion of renewals subsequent to the first for customers under SIMILAR Protection. This measure completes the rules on SIMILAR Protection identifying the offer to be applied, after 24 months have passed since the date of activation of the supply under SIMILAR Protection, in the absence of a different choice on the part of the final customers.

RESOLUTION 05 DECEMBER 2018 - 626/2018/R/eel. Further deferment of completion of the reform of the tariff components to cover the general system expenses for domestic electricity customers, pursuant to Authority Resolution 582/2015/R/eel. This measure provides for deferment for a year of the elimination of the residual progressiveness of the rates to cover the general expenses applied to domestic users. This measure also provides for elimination of the progressiveness from the DISPbt (dispatching) component applied to domestic customers served under enhanced protection.

RESOLUTION 27 DECEMBER 2018 - 706/2018/R/eel. Update of the RCV (remunerazione commercializzazione e vendita - sales and marketing remuneration) and DISPbt components and of the PCV (Prezzo commercializzazione e vendita - sales and marketing cost) fee related to marketing of electricity and changes to the TIV (Testo integrato vendita - Amended text on sales). This measure defines the values of the RCV and DISPbt components and of the PCV fee related to the activity of marketing the electricity sales service in force starting from 1 January 2019.

__Natural gas and electricity sales__

There follows a description of the main regulatory changes that have simultaneously affected sales of natural gas and electricity.

RESOLUTION 01 FEBRUARY 2018 - 39/2018/R/com. Amendments and simplifications to Part III of the Amended Text on Regulation of the Commercial Quality of Electricity and Natural Gas Sales Services. The measure amends the Amended Text on Regulation of the Commercial Quality of Electricity and Natural Gas Sales Services (Testo Integrato della regolazione della qualità commerciale dei servizi di vendita di energia elettrica e gas naturale -TIQV) with reference to the frequency of the customer satisfaction survey for the quality of the call centres and corrects a material error.

RESOLUTION 01 FEBRUARY 2018 - 51/2018/R/com. Establishment of the Portal for the publication of offers aimed at domestic final customers and small enterprises in the electricity and natural gas retail markets, pursuant to Italian Law 124/2017. This measure defines the rules for the creation and management of the Portal for the publication of offers aimed at domestic final customers and small and medium-sized enterprises in the electricity and natural gas retail markets, provided for in article 1, paragraph 61 of Italian Law 124/17.

RESOLUTION 08 FEBRUARY 2018 - 77/2018/R/com. Reform of the switching process in the natural gas retail market. This measure establishes with reference to the gas sector, the regulation of switching through use of the Integrated Information System, together with the management of contractual termination and the activation of last resort services.

RESOLUTION 08 FEBRUARY 2018 - 81/2018/R/com. Further extraordinary and urgent measures on the subject of tariff discounts and payment in instalments for the populations affected by the seismic events that occurred on 24 August 2016 and subsequently. This measure implements the provisions pursuant to article 2 bis of Italian Law Decree 148/17, updating the current rules on the subject of suspension of the terms of payment for unusable utilities and payment in instalments. In particular, to this end it extends the terms of suspension of payments for the said utilities up to 31 May 2018 and extends the minimum period of payment in instalments of the invoices from twenty-four to thirty-six months.

RESOLUTION 15 FEBRUARY 2018 - 89/2018/R/com. Approval of the forms for the general conditions of supply of offers at Free Price At Equivalent Protection Conditions (Prezzo Libero A Condizioni Equiparate di Tutela – P.L.A.C.E.T. offers). Amendments to Authority Resolution 555/2017/R/com. This measure approves the forms for the general conditions of supply of offers at Free Price At Equivalent Protection Conditions (P.L.A.C.E.T. offers) and the amendments of Resolution 555/2017/R/com.

RESOLUTION 22 FEBRUARY 2018 - 97/2018/R/com. Urgent implementation of the provisions of Italian Law 205/2017 on the subject of invoicing and metering in the electricity retail market and launch of the proceeding for complete implementation of the aforesaid provisions in the electricity and natural gas sectors. This measure defines the steps for first implementation of Italian Law 205/17 (budget law) on the subject of invoicing and metering for the electricity sector and launches a proceeding for complete implementation of the provisions of the aforesaid law in the energy sectors.

RESOLUTION 17 MAY 2018 - 288/2018/R/com. Requirements on vendors for the purposes of monitoring offers at Free Price At Equivalent Protection Conditions (P.L.A.C.E.T. offers)
This measure establishes the obligations on vendors to transmit data instrumental to the monitoring of PLACET offers under the terms of Resolution 555/2017/R/com.
RESOLUTION 01 JUNE 2018 - 312/2018/R/com. Further extraordinary and urgent measures on the subject of electrical, gas and integrated water services for the populations affected by the seismic events of 24 August 2016 and later. This measure implements the provisions pursuant to article 1, paragraph 6 of Italian Law Decree 55/18, updating the current rules on the subject of suspension of the terms of payment for unusable utilities. In particular, to this end it extends the terms of suspension of payments for the said utilities up to 1 January 2019.

RESOLUTION 26 JULY 2018 - 406/2018/R/com. Entry into force of the rules on the compensation system in the context of the Integrated Information System, for the electricity and natural gas sectors. This measure identifies the effective dates for the rules on the compensation system separately for the electricity and natural gas sectors and starting from which the transactions and related processes are exclusively managed in the context of the IIS (integrated information system).

ITALIAN LAW NO. 108 OF 21 SEPTEMBER – converting Law Decree no. 91 of 25 July 2018, containing an extension of the terms provided for in several legislative measures. The measure contains, among the other provisions, the extension to 1 July 2020 of the date established by Italian Law no. 124 of 4 August 2017, for superseding the rules on price protection for domestic and small enterprise electricity customers and domestic gas customers.
CONSULTATION 09 OCTOBER 2018 - 493/2018/R/com. Annual report on processing of complaints and resolution of disputes: indicators and comparative publication. The present consultation document presents the Authority’s guidelines on the subject of indicators and comparative publication of the data referred to written complaints and written requests for information received from vendors in the Annual report on processing of complaints and resolution of disputes provided for in article 39 of the TIQV.

RESOLUTION 13 NOVEMBER 2018 - 569/2018/R/com. Provisions for strengthening protections to the advantage of final customers in cases of invoicing of amounts referred to consumption dating back more than two years. This resolution approves action to strengthen protections in the case of invoicing containing amounts related to consumption dating back more than two years with reference to the measures introduced by the 2018 Italian Budget Law. In particular, it identifies the subjective perimeter in relation to which the actions to strengthen the protections are applied, and it defines the disclosure obligations on vendors and the forms of presentation and management of any complaints of final customers.

RESOLUTION 27 DECEMBER 2018 - 711/2018/R/com. Update, from 1 January 2019, of the tariff components destined to cover the general expenses and of further components of electrical sector and the gas sector. This measure provides for the update, starting from 1 January 2019, of the tariff components destined to cover the general expenses and of further tariff components related to the electricity and gas sectors. The figures of the compensation amounts of the electrical and gas bonus are also updated.

RESOLUTION 27 DECEMBER 2018 - 712/2018/R/com. Actions following the provisions of Italian Law 205/2017 on the subject of electronic invoicing as regards the Bill 2.0, the Standard Network Code for the electricity transport service and the Standard Network Code for the distribution of natural gas. This measure lays down the first provisions on the subject of the summary bill for final customers and the documents accounting for the service of distribution of natural gas and transport of electricity, functional to a substantial coordination of the current regulation of the Authority with the legislative innovations on the subject of electronic invoicing pursuant to the 2018 Italian Budget Law, aimed at guaranteeing the achievement of the purposes underlying the regulation of the sector, in compliance with the new legislative obligations.

<u>Distribution of natural gas</u>

RESOLUTION 15 MARCH 2018 - 148/2018/R/gas. Redetermination of tariffs of reference for the services of distribution and metering of gas, for the years 2009-2016. This measure redetermines the tariffs of reference for the services of distribution and metering of gas for the years 2009-2016, on the basis of requests for correction of data received by 15 February 2018.

RESOLUTION 15 MARCH 2018 - 149/2018/R/gas. Determination of the definitive tariffs of reference for the services of distribution and metering of gas, for the year 2017. This measure approves the definitive tariffs of reference for the services of distribution and metering of gas for the year 2017, on the basis of the provisions of article 3, paragraph 2, of the RTDG (Regolazione delle Tarriffe dei Servizi di Distribuzione e Misura del Gas - Regulation on Rates for Gas Distribution and Measuring Services), considering the requests for correction of data presented by 15 February 2018 and applications for tariff redetermination presented by four distributor companies.

RESOLUTION 29 MARCH 2018 - 177/2018/R/gas. Determination of the provisional tariffs of reference for the services of distribution and metering of gas, for the year 2018. This measure approves the provisional tariffs of reference for the services of distribution and metering of gas for the year 2018, on the basis of the provisions of article 3, paragraph 2, of the RTDG, considering the requests for correction of data presented by 15 February 2018.

RESOLUTION 29 MARCH 2018 - 190/2018/R/gas. Supplement to the detailed rules for the assessment of applications for partial payment or exoneration from payment of the amount provided for in cases of lack of physical disconnection from points of delivery provided in the default distribution service. This measure supplements the detailed rules for the assessment of applications for partial payment or exoneration from payment of the amount provided for in cases of lack of physical disconnection from points of delivery provided in the default distribution service defined with Resolution 513/2017/R/gas.

RESOLUTION 26 JULY 2018 - 397/2018/R/com. Compensation of revenues for gas and electricity distribution companies, consequent to the reduction in the number of points served following the seismic events that occurred on 24 August 2016 and subsequently. The resolution defines mechanisms of compensation of revenues for gas and electricity distribution companies, consequent to the reduction in the number of points served following the seismic events that occurred on 24 August 2016 and subsequently.

RESOLUTION 09 OCTOBER 2018 - 498/2018/R/com. Launch of proceeding for updating the remuneration rate of invested capital for the infrastructural services of the electrical and gas sectors, for the period 2019-2021. This resolution launches a proceeding for implementation of the provisions related to updating the basis parameters of the WACC provided for in article 5 of the TIWACC.

RESOLUTION 23 OCTOBER 2018 - 529/2018/R/gas. Launch of proceeding for the formation of measures on the subject of tariffs and quality, related to the gas distribution and metering service, for the fifth regulatory period. This measure launches a proceeding for the purpose of the formation of measures on the subject of tariffs and quality for provisions of gas distribution and metering services, in the fifth regulatory period, which will begin after 31 December 2019.

RESOLUTION 06 DECEMBER 2018 - 639/2018/R/com. Update of the remuneration rate of invested capital for the infrastructural services of the electrical and gas sectors, for the years 2019-2021. This measure introduces the intra-period update of the basic parameters of the WACC common to all regulated infrastructural services of the electrical and gas sectors, under the terms of article 5 of the TIWACC, and of the level of gearing, according to the provisions of article 6 of the TIWACC. The same measure approves the

WACC figures for the regulated infrastructural services of the electrical sector, for the three years 2019-2021, and for the regulated infrastructural services of the gas sector, for the year 2019.

RESOLUTION 18 DECEMBER 2018 - 667/2018/R/gas. Update of the tariffs for the services of distribution and metering of gas, for the year 2019. This measure approves the obligatory tariffs for the natural gas distribution, metering and marketing services, pursuant to article 40 of the RTDG, the different gas tariff options, pursuant to article 65 of the RTDG, and the amounts of bi-monthly equalisation in advance related to the natural gas distribution service, pursuant to article 45 of the RTDG, for the year 2019. The same measure approves the maximum amount of the recognition of higher expenses deriving from the presence of concession fees, pursuant to article 59 of the RTDG, for distribution companies that have presented and application and provided suitable documentation.

RESOLUTION 18 DECEMBER 2018 - 669/2018/R/gas. Update of the obligations on putting smart gas meters (G4-G6) into service. This measure completes obligations on putting smart gas meters of class G4-G6 into service for distribution companies with more than 50,000 final customers, for which these obligations have already been partially defined.

The definition of the said obligations for distributor companies with less than 50,000 final customers is postponed to a subsequent measure, to be adopted following the definition of the Authority's 2019-21 strategic plan.

<u>Supply, transportation and storage of natural gas</u>

Gas Settlement

RESOLUTION 08 FEBRUARY 2018 - 72/2018/R/gas. Reform of the rules on the subject of gas settlement. This measure approves provisions related to the new rules on gas settlement contained in the "Amended Text of Provisions for the Regulation of Physical and Economic Items of the Natural Gas Balancing Service (TISG)" which comes into force from 1 January 2020.

RESOLUTION 05 APRIL 2018 - 223/2018/R/gas. Provisions on the subject of determination of the variance fees for the period 2013-2019. This measure approves provisions on the subject of adjustment of the variance fees in the context of the adjustment sessions, for the previous period that is from the year 2013 and up to entry into force of the new rules on gas settlement, set at 1 January 2020.

CONSULTATION 02 AUGUST 2018 - 429/2018/R/gas. Definition of the parameters for incentives pursuant to article 9 of the Amended Text on Balancing (Testo Integrato del Bilanciamento TIB) starting from 1 October 2018. This document puts forward some changes to the parameters of the system of incentives to SNAM Rete Gas for efficient management of balancing, valid starting from 1 October 2018.

CONSULTATION 20 SEPTEMBER 2018 - 462/2018/R/gas. Guidelines on the subject of procurement and management of the in-out delta of distribution networks and the physical items for the operation of the transport network. The consultation document follows Resolution 72/2018/R/gas with which the Authority approved the new rules on the subject of gas settlement, postponing to a subsequent measure the regulation of the procurement activity by the Balancing Manager of volumes to cover the difference between quantities input at the distribution plant and those withdrawn by the final customers served by the same. The document also illustrates the Authority's guidelines in relation to the connected evolutions of the balancing rules and of incentives to the Balancing Manager, and of the provisional balancing.

RESOLUTION 27 SEPTEMBER 2018 480/2018/R/gas Definition of the parameters for incentives pursuant to article 9 of the Amended Text on Balancing (TIB), valid from 1 October 2018. The resolution defines the numerical parameters of the incentives pursuant to Article 9 of the Amended Text on Balancing (TIB) for the period 1 October 2018 – 31 December 2019 (third incentive period).

RESOLUTION 18 DECEMBER 2018 - 676/2018/R/gas. Provisions on the subject of methods and times for disbursing adjustments related to the variance fees determined at the end of the settlement sessions. This measure approves further provisions on the subject of adjustments of the variance fees following the determination of the adjustment sessions defining methods and times for disbursement.

Transport of natural gas

CONSULTATION 29 MARCH 2018 - 182/2018/R/gas. Methodology of reference prices and criteria for cost allocation related to the natural gas transport service for the fifth regulatory period - Initial guidelines. This document is part of the proceeding launched with the resolution of the Regulatory Authority for energy, networks and the environment of 23 February 2017, 82/2017/R/gas, for the formation of measures on the subject of tariffs and quality for the natural gas transport service for the fifth regulatory period (5TRP). It contains the Authority's initial guidelines on the subject of methodology of reference prices and criteria for allocating the cost recognised.

RESOLUTION 01 JUNE 2018 - 306/2018/R/gas. Approval of the natural gas transportation and dispatching fees for 2019. This resolution approves the tariff proposals for the natural gas transportation and dispatching service for the year 2019.
CONSULTATION 21 JUNE 2018 - 347/2018/R/gas. Criteria for determining the revenues recognised in relation to the natural gas transport service for the fifth regulatory period - Initial guidelines. This document is part of the proceeding launched with the resolution of the Regulatory Authority for energy, networks and the environment of 23 February 2017, 82/2017/R/gas, for the formation of measures on the subject of tariffs and quality for the natural gas transport service for the fifth regulatory period (5TRP), and contains the Authority's initial guidelines on the subject of criteria for determining the revenues recognised for the natural gas transport service.

RESOLUTION 19 JULY 2018 - 390/2018/R/gas. Definitive determination of the revenues recognised for the natural gas transportation and dispatching service, for the year 2018. This resolution determines definitively the revenues recognised for the natural gas transportation and dispatching service for the year 2018, in order to take into account the final figures related to the year 2017.

CONSULTATION 16 OCTOBER 2018 - 512/2018/R/gas. Criteria for tariff regulation for the service of transport and metering of natural gas for the fifth regulatory period (5TRP). This document is part of the proceeding launched with the resolution of the Regulatory Authority for energy, networks and the environment of 23 February 2017, 82/2017/R/gas, for the formation of measures on the subject of tariffs and quality for the natural gas transport service for the fifth regulatory period (5TRP), and contains the Authority's final guidelines on the subject of criteria for tariff regulation for the service of transport and metering of natural gas for the 5PRT.

Natural gas storage
RESOLUTION 08 FEBRUARY 2018 - 68/2018/R/gas. Launch of proceeding for the formation of measures on the subject of tariffs and quality of the natural gas storage service for the fifth regulatory period (5SRP) and extension of the current criteria to the year 2019. This resolution launches a proceeding for the formation of measures on the subject of tariffs and quality of the natural gas storage service for the fifth regulatory period and, at the same time, extends to the year 2019 the regulation criteria in force for the regulatory period 2015-2018
RESOLUTION 01 MARCH 2018 - 121/2018/R/gas. Provisions for the storage services for thermal year 2018 – 2019. This measure governs the methods of organising auction procedures for the conferment of storage capacity for the year 2018/2019.

RESOLUTION 21 JUNE 2018 - 350/2018/R/gas. Provisions on the regulation of economic items related to storage services, for the thermal year 2018-2019. This measure governs the criteria for defining provisions on the regulation of economic items related to the storage service, for the thermal year 2018-2019, aimed at ensuring, for storage companies, a flow of revenues substantially equivalent to that obtainable with the application, to the capacities allocated through auctions, of the tariff fees

<u>Renewable energy systems</u>

FER 1 DECREE
The decree on incentives for renewable sources (the so-called FER 1), after being submitted to the attention of ARERA and of the Regions in Unified Conference and after undergoing several revisions, is now being reviewed by the European Commission, the last step before formal approval. Among the changes that the measure will introduce there will be new provisions on the subject of incentives for mini-hydro and photovoltaic plants.

<u>Energy and Energy Efficiency Services</u>

RESOLUTION 25 JANUARY 2018 - 32/2018/R/efr. Determination of the average sale price of electricity for 2017, for the purposes of quantification, for the year 2018, of the value of the incentives replacing green certificates. This measure determines, for the purposes of quantification, for the year 2018, of the value of the incentives that replace green certificates, the annual average figure recorded in the year 2017 of the selling price of electricity, equal to 53.14 €/MWh.

RESOLUTION 08 MARCH 2018 - 139/2018/R/efr. Approval of the urgent update of rules governing the operation of the energy efficiency certificates (white certificates) market. This document approves the update of the Rules of the TEE market prepared urgently by the GME under the terms of article 3, paragraph 8, of the Rules previously in force. The Rules are already effective from the date of their publication by the GME.

MINISTERIAL DECREE 10 MAY 2018 ON THE SUBJECT OF ENERGY EFFICIENCY CERTIFICATES (TEEs), published in Official Journal no. 158 of 10 July 2018: Amendment and update of the decree of 11 January 2017, concerning the determination of the national quantitative energy saving targets that must be pursued by electricity and gas distribution companies for the years from 2017 to 2020 and for the approval of the new Guidelines for the preparation, execution and assessment of energy efficiency projects.

Compared to the previous rules, the main changes introduced by this Ministerial Decree were:
• the introduction of the maximum recognition value for each TEE of 250 €. The new provision applies to the obligatory sessions after 1 June 2018 and until the sessions valid for the fulfilments of the national obligation set for 2020;
• the possibility of the GSE issuing, starting from 15 May of each year
White Certificates not deriving from the creation of energy efficiency projects (virtual TEEs), at a unit value equal to the difference between € 260 euro and the value of the definitive tariff contribution related to the year of obligation. In any case the said amount may not exceed € 15. The “virtual” TEEs, distinguished as a specific type and accounted for separately by the GSE, may not be sold by the recipients, will be issued and at the same time cancelled in the first useful session for the purposes of achieving the obligation related to the entity that has requested them and will not have the right to coverage of the expenses;
• the extension from 1 to 2 years of the flexibility period within which an entity, if it achieves a quota of the obligation pertaining to it of less than 100%, but in any case of more than 60%, may offset the residual quota without incurring sanctions;
• the introduction of the reference to the value of bilateral trades, if they are made at price of less than € 250/TEE, in the determination of the tariff contribution.

EU DIRECTIVE 2018/844 - 30 MAY 2018. The Directive amends the EPBD (Energy Performance of Buildings Directive). The measure, the result of the negotiation of a package of rules, Clean Energy for all Europeans, published in November 2016 by the Commission, strengthens and simplifies the current provisions and aims at achieving the Union’s objective for energy and climate at 2030.
CONSULTATION 12 JULY 2018 - 385/2018/R/efr. Guidelines related to the definition of the tariff contribution in the context of the mechanism of energy efficiency certificates. This consultation document presents the Authority’s guidelines on the subject of updating the criteria for determining the tariff contribution paid to distributors that fulfil the energy saving obligations pursuant to resolution 435/2017/R/efr. This update became necessary in consideration of the changes introduced by the inter-ministerial decree of 10 May 2018, updating the inter-ministerial decree of 11 January 2017, previously in force.
RESOLUTION 27 SEPTEMBER 2018 - 487/2018/R/efr. Definition of the tariff contribution to cover costs incurred by electricity and natural gas distributors subject to the obligations in the context of the mechanism of energy efficiency certificates, under the terms of the inter-ministerial decree of 10 May 2018. This measure updates the criteria for determining the tariff contribution paid to distributors that fulfil the energy saving obligations, previously the subject of Resolution 435/2017/R/efr, the effects of which come to an end with obligation year 2017. This update became necessary in consideration of the changes introduced by the inter-ministerial decree of 10 May 2018, updating the inter-ministerial decree of 11 January 2017, previously in force.
RESOLUTION 09 OCTOBER 2018 - 501/2018/R/efr. Approval of the update of the Regulation on bilateral transactions and Rules on the operation of the energy efficiency certificates market. This document approves the update of the Regulation on bilateral transactions and Rules of the TEE market prepared by the GME with the methods provided for in the same documents under the terms of Resolution 487/2018/R/efr. The Rules are already effective from the date of their publication by the GME, which occurred following the above resolution, while the Regulation comes into force after this resolution.
RESOLUTION 13 NOVEMBER 2018 - 574/2018/R/efr. Provisions on the subject of disclosure obligations for entities operating in the district heating and district cooling sector. This measure defines the disclosure obligations for entities operating in the district heating and district cooling sector on the subject of Operator Database and Territorial Database and the methods of presenting applications for exclusions of the networks from regulation by the Authority.
RESOLUTION 05 DECEMBER 2018 - 633/2018/R/efr. Approval of the fees, related to the year 2019, for operation of the organised markets and registration platforms of bilateral trades of guarantees of origin and energy efficiency certificates managed by the energy markets manager, Gestore dei Mercati Energetici S.p.A. This measure approves the fees, related to the year 2019, for operation of the

Organised Markets and Registration Platforms of bilateral trades of guarantees of origin and energy efficiency certificates.
CONSULTATION 05 DECEMBER 2018 - 637/2018/R/efr. Provisions on the subject of transparency in the district heating and district cooling service. General framework and first guidelines. This consultation document presents the first guidelines on the subject of transparency of the district heating service, with reference to supply contracts, prices for providing the service, invoicing documents, information on the subject of commercial quality, environmental performance and monitoring of prices for the service by the Authority.
RESOLUTION 11 DECEMBER 2018 - 661/2018/R/efr. Regulation of the commercial quality of the district heating and district cooling services, for the regulatory period 1 July 2019 - 31 December 2021. The resolution defines the regulation of the commercial quality of the district heating service for the regulatory period 1 July 2019 - December 2021 and provides for the launch of a proceeding for revaluation of the rules on the subject of exercising the right of withdrawal established by the TUAR and a number of amendments to the same.

Telecommunications

- AGCOM RESOLUTION OF 15/02/2018 - 34/18/CIR. Approval of the offers of reference of Telecom Italia related to the service of disaggregated wholesale access to the metal networks and sub-networks and to the co-location services for the year 2017. The main changes regard the economic conditions, for the year 2017, of the services subject to orientation to the cost, namely one-off contributions and co-location services (spaces, power supply and conditioning).
- AGCOM RESOLUTION OF 26/03/2018 - 62/18/CIR. Approval of the offer of reference of Telecom Italia for the year 2017 related to the Wholesale Line Rental (WLR) service. The main changes regard the economic conditions of the services subject to orientation to the cost, revalued in the light of the hourly labour cost approved by the Authority for 2017 with Resolution no. 623/15/CONS and taking into account the cost models of the ULL activation and cessation contributions pursuant to Resolution no. 34/18/CIR.
- AGCOM RESOLUTION OF 08/05/2018 - 231/18/CONS. Procedures for assignment and rules for use of the frequencies available in the bands 694-790 MHz, 3600-3800 MHz and 26.5-27.5 GHz. On completion of the public consultation launched with Resolution no. 89/18/CONS, this resolution establishes the procedures for assignment and rules for use of the frequencies available in the bands 694-790 MHz, 3600-3800 MHz and 26.5-27.5 GHz for terrestrial electronic communication systems in order to encourage transition to 5G technology.

AGCOM RESOLUTION OF 28/05/2018 - 87/18/CIR. Approval of the offers of reference of Telecom Italia for bitstream services on copper network and for NGA bitstream services, VULA service and the related ancillary services, for the year 2017. The main changes regard the economic conditions, for the year 2017, of the services that, in the context of the market analysis pursuant to Resolution no. 623/15/CONS, are subject to orientation to cost (one-off contributions, band – ATM and Ethernet - and ancillary services).

AGCOM RESOLUTION OF 28/05/2018 - 88/18/CIR. Measure that approves the results of the public consultation related to applicability of the mechanism for distribution of the net cost of the Universal Service for the years 2008 and 2009, launched with Resolution no. 133/17/CIR. This measure approves the results of the public consultation related to applicability of the mechanism for distribution of the net cost of the Universal Service for the years 2008 and 2009, launched with Resolution no. 133/17/CIR.

AGCOM RESOLUTION OF 28/05/2018 - 89/18/CIR. Consultation launched in the context of the enquiry proceeding concerning "renewal of the proceeding related to applicability of the mechanism for distribution and measurement of the net cost of the universal service for the years 2006 and 2007. This national public consultation is launched on the subject of the Authority's assessment and the reports of the auditor appointed to check the calculation of the net cost of the universal service for the years 2006 and 2007.

AGCOM RESOLUTION OF 28/05/2018 - 90/18/CIR. Approval of the offer of reference of Telecom Italia for the year 2017 related to the services of collection, termination and transit of calls in the fixed public telephone network. The main changes regard the economic conditions of the services subject to orientation to the cost for which, apart from the service of invoicing calls to premium price numbers which is increasing, unchanged or lower prices compared to those of 2016 were approved.

AGCOM RESOLUTION OF 27/06/2018 - 117/18/CIR. Approval of the offers of reference of Telecom Italia for the NGAN access services, for the End-to-End access service and for the backhaul services for the year 2017. The main changes regard the economic conditions, for the year 2017, of the services that, in the context of the market analysis pursuant to Resolution no. 623/15/CONS, are subject to orientation to cost (one-off contributions and ancillary services).

AGCOM RESOLUTION OF 25/07/2018 - 395/18/CONS. Overall revision of the system of Key Performance Indicators of non-discrimination. Measure of overall revision of the system of Key Performance Indicators (KPIs) of non-discrimination, in accordance with the principles of simplification, non-contradiction and uniformity and in compliance with the indications of the European Commission recommendation on non-discrimination and costing methodologies of 11 September 2013.

AGCOM RESOLUTION OF 12/12/2018 - 215/18/CIR. Launch of a public consultation for regulation of the procedures for passage of customers of fixed network operators that use FTTH networks of wholesale operators other than TIM. This consultation launches the proceeding for regulation of the area of fibre-optic access networks (FTTH) created by wholesale operators alternative to TIM that in turn offer access products used by third operators to provide services to end users.

AGCOM RESOLUTION OF 12/12/2018 - 599/18/CONS. Conclusion of the revision of the analysis of the markets for voice call termination services on single mobile networks. 12 operators are notified; these provide or are about to provide voice call termination services on their mobile networks. Use of the cost model pursuant to Resolution no. 60/11/CONS is confirmed for defining the prices of the termination service for the period 2018-2021, establishing also symmetrical tariffs for all notified operators.

AGCOM RESOLUTION OF 19/12/2018 - 216/18/CIR. Launch of the proceeding and of the public consultation concerning the approval of the technical and procedural conditions of the offers of reference of Telecom Italia. With reference to the economic conditions for the year 2018 not covered by the new analysis of the markets, the consultation involves assessing the price of the one-off contributions for activation of the ULL/SLU/WLR/VULA and bitstream services dependent on the costs of the ancillary services provided by the System companies and of the bitstream Ethernet band on copper network and NGA.

AGCOM RESOLUTION OF 19/12/2018 - 613/18/CONS. Public consultation concerning the coordinated analysis of the markets for services of access to the fixed network under the terms of Article 50-ter of the Code. With this resolution the Authority proposes to identify the Municipality of Milan as a significant market distinct from the rest of the Municipalities in Italy, owing to the significant presence of electronic communication infrastructures alternative to those of TIM and of the level of competition recorded on services of access to the wholesale fixed network.

<u>Environment</u>

CONSOLIDATED LAW ON THE ENVIRONMENT (Italian Legislative Decree 152/2006), as amended. National measure of reference on the subject of environmental impact assessment, integrated environmental authorisation, defence of the soil, protection of waters, waste management, packaging, reclamation of contaminated sites, reduction of atmospheric pollution, compensation for environmental damage.

ITALIAN LEGISLATIVE DECREE NO. 205 OF 3 DECEMBER 2010- Provisions implementing Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste that abrogates a number of directives. This transposes at the national level the framework directive on waste amending Part Four of Italian Legislative Decree 152/2006 – Consolidated Law on the Environment – supplementing it with the principles established by the directive.

DECREE OF THE MINISTRY OF THE ENVIRONMENT OF 7 OCTOBER 2013 - The Italian National Waste Prevention Programme (NWPP) is adopted. With the subsequent decree n° 185 of 08.07.2014, for the purposes of activating and implementing the Plan, the Ministry of the Environment set up a Technical/Scientific Committee which has the function of supporting the Ministry in defining the implementing measures of the Programme in the priority sectors of action.

EUROPEAN UNION ACTION PLAN FOR THE CIRCULAR ECONOMY - COM (2015) 614/2. The action plan defines 54 measures for "closing the circle" of the product life cycle: from production and consumption up to waste management and the market of secondary raw materials. In addition, it identifies priority sectors to accelerate the transition along their value chain (plastics, food waste, essential raw materials, construction and demolition, biomass and biological materials).

ITALIAN LAW 221/2015 - (so-called Law on the Green Economy). This presents an important package of measures aimed at the "green economy", which amend the existing environmental legislation precisely in the direction of a greener and more sustainable economy.

DIRECTIVE (EU) 2018/849; DIRECTIVE (EU) 2018/850; DIRECTIVE (EU) 2018/851; DIRECTIVE (EU) 2018/852. The new Directives of the "circular economy package" amend 6 directives on waste, packaging, landfills, waste of electric and electronic equipment (WEEE), end of life vehicles and batteries: in force since 4 July 2018, they must be transposed by the member states by 5 July 2020.

ARERA Waste Regulations:

RESOLUTION 05 APRIL 2018 - 197/2018/R/rif. Temporary provisions for first management of requests for information, complaints, claims and reports of users of the waste sector, including separated, municipal and assimilated waste, making use of the energy and environment consumer office. This resolution provides for temporary provisions for first management of requests for information, complaints, claims and reports of users of the waste sector, making use of the Energy and Environment Consumer Office at Acquirente Unico S.p.A.

RESOLUTION 05 APRIL 2018 - 225/2018/R/rif. Launch of proceeding for the adoption of tariff regulation measures on the subject of the waste cycle, including separated, municipal and assimilated waste. This measure launches the proceeding for the definition of tariff measures on the subject of the waste cycle and for collecting data and information from Administrations, Regions, local authorities and public and private bodies operating in the sector.
RESOLUTION 05 APRIL 2018 - 226/2018/R/rif. Launch of proceeding for the adoption of service quality measures in the waste cycle, including separated, municipal and assimilated waste. This measure launches a proceeding for the regulation of service quality measures in the waste cycle, including separated, municipal and assimilated waste and for collecting data and information functional to this.

RESOLUTION 27 DECEMBER 2018 - 715/2018/R/rif. Launch of proceeding for the establishment of a tariff monitoring system of the integrated service of waste management, including separated, municipal and assimilated waste and of the single services that make up the management activities for the years 2018 and 2019. This measure launches a proceeding for the establishment of a tariff monitoring system for the years 2018 and 2019 on the subject of the waste cycle, introducing disclosure obligations for service providers and database obligations.

RESOLUTION 27 DECEMBER 2018 - 714/2018/R/rif. Request for information on the subject of the municipal and assimilated waste treatment service. This measure makes a request for information to waste disposal service providers.

Transversal issues

ELECTRONIC INVOICING
The 2018 budget law provided for the obligation to issue only electronic invoices through the Interchange System for sales of goods and performance of services made between subjects resident or established in the country, starting from 1 January 2019, both when sale of the goods or performance of the service is made by two VAT operators (B2B operations), and when the sale/performance is made by a VAT operator to a final consumer (B2C operations).

REGULATION (EU) NO. 2016/679 – GENERAL DATA PROTECTION REGULATION – GDPR (with effect from 25/05/2018). Regulation (EU) 2016/679 of the European Parliament and of the Council, of 27 April 2016, on the protection of natural persons with regard to personal data processing, and to the free circulation of such data and which abrogates Directive 95/46/EC (general data protection regulation).

2019 BUDGET LAW

Energy efficiency
The budget law extends to 31 December 2019 the tax deduction for work on the energy requalification of buildings and building renovation (so-called Eco-bonus) and introduces the energy requalification of properties of the Public Administrations;

Renewables
The budget law provides for the revision of conventions related to plants powered by renewable sources

13. TRANSACTIONS WITH RELATED PARTIES

Estra and the Group companies carry out transactions with related parties based on principles of transparency and correctness. These transactions generally relate to services provided to all customers (supply of gas, electricity, heat, etc.) and are governed by contracts and conditions normally applied in these situations.

If they are not services of the current type, the transactions are in any case governed on the basis of the normal conditions applied on the market.

The information on financial and economic transactions with related-party shareholders and related companies are presented in the notes to the statements (note no. 14 “Related parties”).

14. RISKS MANAGEMENT

Pursuant to art. 2428 paragraph 2, section 6-bis) of the Italian Civil Code, as amended by Legislative Decree no. 394/03, the required information is hereby shown.

- ***Risk related to legislation and regulations***

The Group operates in a strongly regulated sector. Among the risk factors in its operations is therefore the not always foreseeable constant evolution of the laws and regulations applying to the electricity in natural gas sectors as well as the sectors involved in operating environmental services and the production of energy from renewable sources. The effects of changes in the regulatory framework, for example, can involve market operating methods, tariff plans, the quality of service levels required and obligations of a technical-operational nature. Regulatory changes resulting in conditions that are unfavourable for sector operators can have negative effects on the Group’s financial position in terms of lower revenues, reduced margins and/or the abandonment of initiatives already in progress. Given these risk factors, the Group adopts a policy of monitoring and managing legislative risk, in order to mitigate as much as possible its effects, through an articulated monitoring on several levels which provides for collaborative dialogue with the institutions and the government and regulatory organizations of the sector, the active participation in associations and work groups established within these entities, and examination of legislative changes and the provisions issued by the sector Authority.
Moreover, constant dialogue is held with business units interested in the legislative changes, in order to appropriately assess potential impacts. Some of the main areas on which legislative changes focus are listed below:

- the laws regarding assignment of concessions for the gas and electricity distribution service;
- the regulation of economically significant local public services;
- changes in the market regulations regarding Green Certificates;
- the issues set forth in the European Union’s Third Energy Package.

- ***Risks associated with the expiry of gas distribution concessions/contracts held by Estra and other Group companies***

With the exception of trading of natural gas, the performance of these activities in Italy is subject to concessions or authorisations. In particular:

(a) the natural gas distribution activities, and the technical/operational management of LPG distribution networks are performed on the basis of concessions issued by local public authorities;

(b) the sale of natural gas and electricity, the sale of LPG, the production of electricity from renewable sources, the technical/operational management of telecommunication networks and marketing of telecommunication services, the management of heating plants owned by third parties (in particular, heat management services) and heat management, energy requalification and efficiency activities are carried out subordinately to obtaining specific authorisations from the authorities competent each time.

Therefore, the Group is exposed to risks connected with the award, maintenance and loss of concessions and of expired authorisations and concessions.
In particular:

a) *Risks connected with the award, maintenance and loss of concessions and with expired concessions*
It cannot be guaranteed that the concessions that the Group holds will be granted to the Group again when they expire, or that any renewals will be obtained at economic conditions equal to the existing ones. In addition the Group may need to obtain further concessions, permits and/or authorisations, the procedures of which are often long, costly, complex and with unforeseeable results.

b) *Risks connected with the award, maintenance and loss of authorisations*
The activities of sale of natural gas and electricity, sale of LPG and management of photovoltaic plants for electricity production are carried out by the Group subordinately to obtaining specific authorisations from the authorities competent each time. These authorisations are granted on the basis of possession of certain requisites necessary for performing the service. It cannot be guaranteed that the authorisations obtained by the Group will not subsequently be revoked by the competent authorities. In addition the Group may need to obtain further authorisations, the procedures of which are often long, costly, complex and with unforeseeable results.

- ***Risks associated with malfunctioning and/or breakdowns of the network and plant infrastructures***

In the operating sectors of Group companies the normal provision of services depends on properly functioning infrastructures (such as electricity and natural gas transport/distribution networks) and plants (storage, thermoelectric plants, waste-to-energy plants, etc.). Any suspension or restrictions in the operation of these infrastructures (for example, caused by human error, natural disaster, terrorist act, sabotage, judicial/administrative orders) could lead to total or partial stoppage of activities performed by Estra and the other Group companies, or could increase the costs of conducting such activities.

- ***Risks arising from the approval of new tariff systems***

On the basis of the current tariff system, the Group’s revenues are partly updated in accordance with criteria predetermined by ARERA - Autorità di Regolazione per Energia Reti e Ambiente - Regulatory Authority for Energy Networks and the Environment (formerly AEEGSI). We cannot exclude the industry regulatory authorities’ approval of new legislation and/or regulations, which may, possibly negatively, affect the Group’s revenues.

- ***Risk related to competition***

The Group operates in a competitive scenario that places it in competition with Italian and multinational entities, some of which can avail of much greater financial resources. Despite the Group considering it has a competitive edge deriving from its strong local roots if - following expansion of the number of direct competitors - it is unable to retain its competitive strength on the market, it could record a drop in customers and/or see its margins decline, with subsequent negative effects on its activities and growth prospects, as well as on its financial position.

- ***Risks associated with future consumer trends***

With reference to the gas distribution business, on the basis of the current tariff system, the Group’s revenues are partly updated annually in accordance with criteria predetermined by ARERA - Regulatory Authority for Energy Networks and the Environment, which reflect an implicit rate of annual growth of the volumes of natural gas put into the transport network. However, the amounts of natural gas introduced into the Italian transport network depend on factors beyond the Group’s control, such as the price of natural gas compared to other fuels, electricity sector development, economic growth, climatic changes, environmental laws, the continuing availability of natural gas imported from abroad and the availability of sufficient transport capacity through import pipelines. With regard to gas and electricity sales, a negative trend or slow growth in the demand for gas and electricity could have an impact in terms of lower sales volumes of gas and electricity for the Group, subsequently reflected in a decrease in the Group's overall sales margins. Among the activities implemented in this respect, the Group monitors both the electricity load profile and gas consumption trends, at Italian and international macroeconomic scenario levels, based on updates published by the leading economic and financial forecast agencies. The analysis of such data aims to give an indication as far in advance as possible of potential electricity and gas demand trends, and consequently optimise sales accordingly. In addition, the adoption of a marketing diversification strategy counteracts, up to a point, any adverse market situation.

- ***Environmental risks associated with Group activities***

The activities of Estra and other Group companies are subject to Italian and EU regulations on environmental protection and on health and safety, and every activity is performed in compliance with these regulations and with any authorisations requested and obtained. Though Estra's business activities are conducted in compliance with environmental and safety laws, it cannot be excluded however that this and other Group companies might incur costs or be held liable for environmental protection-related situations.

- ***Liquidity Risk***

Liquidity risk is defined as the risk that Estra and the Group may be unable to meet its payment obligations when they fall due. The Group's liquidity could be damaged by inability to sell products and services, unexpected cash outflows, the obligation to pay more guarantees or inability to access the capital markets. This situation may arise due to circumstances beyond the control of the Group, such as a general market disruption or an operational problem affecting the Group or third parties, or even the perception among market participants that the Group or other participants market are experiencing a more severe liquidity risk. The liquidity crisis and loss of confidence in financial institutions can increase the cost of financing the Group and hinder access to some of its traditional sources of liquidity.
Further information is contained in note no. 13 "Objectives and criteria of financial risk management".

- ***Risks associated with debt***

Estra and the Group obtains its financial resources mainly through traditional banking channels and using traditional instruments such as medium/long-term borrowings, mortgages, short-term bank loans and credit facilities, and cash inflows from operations as part of trade relations with borrowers for services provided and with lenders for the purchase of goods and services. The net debt of the Group is affected by the seasonality of the business carried out and consequently undergoes significant fluctuations during the year. Debt refinancing risks are managed by monitoring loan maturities and coordinating borrowings with types of investments, in terms of the liquidity of assets in which the Group companies invest. Estra and the Group enjoy a high standing with the banking system, as confirmed by the A3.1 credit rating assigned by the Cerved Rating Agency after an assessment of the company's creditworthiness. It remains implicit, however, that there is no guarantee that in future Estra and the Group will be able to obtain funding with the same methods, terms and conditions granted thus far. This situation could arise due to circumstances beyond Estra's control, such as general disruption of the reference market.

The existing bonds and loans provide for specific obligations that the Group has undertaken to observe.
In addition, some of the loan contracts signed and bond loans issued by the Group also provide for the Group having to observe, for the entire duration of the loan, certain capital-financial ratios, observance of which is verified, in general, every year (that is with reference to the reporting date of each financial year on the basis of the figures in the related consolidated financial statements or separate financial statements of the borrowing Group company). Failure to observe these parameters could cause the acceleration clause to come into affect and lead to the obligation of early repayment of the loans by the debtor.
These existing loan contracts also provide for a series of default events (in some cases, referable also to companies that are part of the Group).
The Group's ability to fulfil its obligations under the terms of the existing bank loan conditions depends on the Group's future operating and financial performance, which are in turn linked to the Group's ability to implement successfully its business strategy and to other economic, financial, competitive and legislative factors that are out of the Group's control.

The Group must therefore continue to allocate part of its cash flows to serving the financial debts, reducing the financial resources usable for the operating activity and/or for investments and also affecting its ability to distribute dividends.
[At 31 December 2017, the Group was observing the financial parameters provided for in the existing loan contracts.]

Further information is contained in note no. 13 “Objectives and criteria of financial risk management”.

- ***Risks associated with interest rates***

Estra and the Group are exposed to fluctuations in interest rates, especially as regards the extent of financial charges associated with borrowings. They mitigate the risk deriving from floating-rate loans through investments and the use of funds essentially indexed to short-term rates. In addition, the interest rate risk management policy pursues the aim of limiting such volatility by identifying a mix of fixed rate and floating rate medium/long-term loans and the use of IRS contracts signed with financial counterparties of primary standing and which limit interest rate fluctuations. Taking into account the active interest rate risk monitoring policies, any future rise in interest rates should not have particularly negative effects on the financial position of Estra and the Group.
Further information is contained in note no. 13 “Objectives and criteria of financial risk management”.

- ***Risks associated with exchange rates***

At present there is no exposure to risks associated with changes in foreign exchange rates that could have a significant impact on the financial position of Estra and the Group, except as regards the amount reported under commodity price risk.

- ***Risks associated with commodity prices***

In reference to the characteristics of its operating sector, the Group is exposed to commodity price risk, i.e. the market risk associated with changes in energy raw materials prices (electricity and natural gas) and the related exchange rate, given that its purchases and sales are affected by price fluctuations in energy commodities, either directly or through indexing formulas. Group policy is designed to minimise the risk associated with fluctuating commodity prices by aligning the indexing of commodity purchases with commodity sales, the vertical exploitation of the various business chains and recourse to financial markets for hedging purposes.

- ***Risks associated with transactions with Group companies***

The Group has maintained, and still maintains, commercial relations with investee companies and associates. In particular, the main transactions carried out with related parties are attributable to: (I) service contracts in being with Group companies, including those not controlled, and with the shareholders Consiag, Coingas and Intesa; (ii) recharging of costs for personnel seconded by Estra Group companies to the shareholders Consiag and Intesa; (iii) rental contracts for the company offices of Prato, Arezzo and Siena, respectively from the shareholders Consiag, Coingas and Intesa; (iv) loan contracts with Consiag and Coingas; and (v) service contracts with EDMA Reti Gas.
Although the Group believes that the conditions provided for and effectively applied with respect to related party transactions are in line with normal market conditions, there is no guarantee that, if operations to which the related party transactions refer were concluded with third parties, the same would have negotiated and signed the related contracts, or performed the aforesaid operations, with the same conditions and methods.
Further information is contained in note no. 14 “Related parties”.

- ***Risks arising from current judicial proceedings***

Estra and the Group are involved in a number of civil, administrative (mainly related to ARERA (formerly AEEGSI) resolutions/decisions or to public service concessions), tax and labour law proceedings (both as plaintiff and as defendant), relating to ordinary operations in the natural gas distribution sector and the sale of natural gas and electricity, and which are immaterial to the value of Estra and/or the Group. In the presence of current commitments resulting from past events, that could be of a legal or contractual nature or are the result of conduct that could lead to an obligation, Estra and the Group have made reasonable allocations to specific provisions for liabilities and charges over the years that are indicated among liabilities in the financial statements.

- ***Operational risk***

Operational risk is the risk of losses caused by errors, infringements, interruptions, damages caused by internal processes, employees or systems or caused by external events. Estra and the Group companies, which in any case have developed specific procedures and operating instructions designed to mitigate and reduce operating risks, are however exposed to many kinds of operational risk, including the risk of fraud by employees and external parties, the risk of unauthorised transactions by employees or the risk of operating errors, including those resulting from faults or malfunction of the IT or telecommunications systems. The systems and methods for managing operational risk are designed to guarantee that such risks associated with corporate activities are appropriately kept under control. Any disruption or fault on these systems could have a negative impact on the financial position and operating results of Estra and the Group. These factors, especially during economic and financial crises, could result in the company or Group suffering losses, increased borrowing costs, impairment of assets held, with a potential negative impact on the liquidity of Estra and the Group and on its financial soundness. Legislative Decree 231/2001 introduced the regime of corporate administrative liability of entities to Italian law for certain offences committed in their interest or to their benefit by persons holding senior office positions or persons under their direction and supervision. In order to prevent commission of the offences contemplated in the Decree, Estra has adopted its own organisational, management and control model. The Model forms part of a more wide-ranging policy pursued by Estra and the Group to promote fairness and transparency in conducting its business activities and in its relations with third parties, which includes the Code of Ethics already adopted. Estra has also established a Supervisory Board, with independent powers of initiative and control, assigned to supervision of the functions of and compliance with the Model and to promote its constant updating. The monitoring by the Oversight Committee and the Model adopted make it possible to mitigate the exposure to risks of an operational nature.

- ***Risks associated with losses on receivables***

The credit risk of Estra and the Group is mainly attributable to the total trade receivables deriving from gas and electricity sales, which are not particularly concentrated as they are spread across a vast number of counterparties such as retail, business and public entities. In conducting its business activities the Group is exposed to the risk that, as a result of the financial position of the obligated party in relation to the current overall economic-financial crisis, the receivables may not be paid when due. Consequently the risks are attributable to the increase in the seniority of receivables, insolvency risk and the risk of an increase in receivables subject to bankruptcy proceedings with subsequent impairment that could result in the cancellation, wholly or in part, from the financial statements.

The Group adopts a policy of centralised credit management aimed at governing the assessment of customers' creditworthiness and other financial assets of the same, the monitoring of expected recovery flows, the issue of payment reminders, the granting, if considered necessary or opportune, of extended credit conditions, the request for bank or insurance sureties, the transfer of receivables of discontinued customers to external credit recovery companies and the management of legal disputes involving receivables related to the services provided. The payment terms generally applied to customers are governed by legislation and the standards of the free market; in the event of non-payment, default interest is applied in the amount indicated in the supply contracts and established by the current legislation. Provisions for the impairment of receivables reflect the best estimate of credit risk.
The default of one or more customers or counterparties significant for the Group or any increase in the default rate of customers or counterparties in general could have negative effects on the Group's business and prospects and on its economic, capital and financial situation.
Further information is contained in note no. 13 "Objectives and criteria of financial risk management".

- ***Risks associated with acquisitions carried out by the Group***

Although in preparation for the finalising of operations to purchase companies or business units the Company provides for the performance of due diligence activities on the operation, it cannot be excluded that in future there may emerge liabilities not covered by the contractual guarantees and/or that the transferors will not be able to comply with any requests for compensation.

- ***Risks associated with impairment related to goodwill and to intangible assets with a finite useful life***

Following business combinations completed over time, in accordance with the IFRSs, the Group has recognised in the assets goodwill related to the companies acquired, understood as the surplus of the cost of acquisition compared to the assets and liabilities acquired, and of intangible assets with a finite useful life, in particular gas and electricity customer portfolios, deriving from the business combinations.
If the macroeconomic and financial context changes in a way not in line with the estimates and assumptions formulated on assessment or if the Group finds in future a worsening of its ability to generate cash flows and economic results compared to the forecasts and estimates on which the impairment tests are based, it could become necessary to make adjustments to the carrying amount of the intangible assets recognised in the Group's consolidated financial statements, with the consequent need to book write-downs to the income statement, with negative effects on the Group's assets and prospects and on its economic, capital and financial situation.
Further information is contained in note no. 10.1 .4 "Impairment tests".

- ***Risks associated with the failed or delayed implementation of the industrial strategy***

The Group intends to pursue a strategy of growth and development, focused in particular on its core businesses – the sale and distribution of gas and electricity, telecommunications and energy services. If the Group is unable to effectively implement its strategy or implement it within agreed time frames, or if the basic assumptions underlying the strategy do not prove to be correct, the Group's ability to increase its revenues and profitability could be affected and this could have an adverse effect on the Group's business and growth prospects, as well as on its economic and financial position.

- ***Information technology risks***

Estra and Group activities are managed through complex IT systems that support the main corporate operational, administrative and commercial processes. The inadequacy or failure to update these information systems according to the requirements of the business, their potential unavailability, the inappropriate handling of aspects relating to confidentiality and integrity of the information, represent potential risk factors to which the Group is exposed.
The inadequacy or failure to update these information systems according to the requirements of the business, their potential unavailability, the inappropriate handling of aspects relating to confidentiality and integrity of the information, could entail negative effects on the Group's assets and prospects and on its economic, capital and financial situation.

- ***Cyber Security risks***

In a context of continual technological evolution the subject of cyber security assumes increasing significance together with the associated need to protect the IT systems against attacks that can lead to theft, loss or compromising of data and information with consequent impacts on business operations and the Group's reputation.
For this Estra has provided for, in its organisation, within the structure of the information systems, specific monitoring focused on cyber security and performs periodic activities to test the vulnerability of the systems. In addition Estra, EstraCom and Centria have obtained UNI CEI ISO/IEC 27001 certification.

- ***Risks associated with insurance cover***

The Group companies carry out activities that may expose them to the risk of suffering or causing damage that is sometimes is difficult to predict and/or quantify. Although the administrative bodies have acted to take out insurance policies appropriate to the business carried on, in the case of events that for any reason are not covered by insurance or are capable of causing damage of an amount in excess of the cover, the Group companies would be liable for the charges, with consequent adverse effects on the economic and financial position.

15. USE OF FINANCIAL INSTRUMENTS

The Group holds derivative financial instruments that come within the following categories:

- Non-current financial hedging derivatives, referable mainly to Interest Rate Swap (IRS) contracts hedging the risk of unfavourable changes in interest rates on long-term loans;
- Commodity Swaps entered into for the purpose of financial hedging on prices indices for the volumes sold, in order to limit the price risk deriving from specific operations for gas purchase at fixed price and resale at variable price (or vice versa) at different times;
- futures contracts on commodities purchased or sold that provide for physical delivery of the gas in subsequent years.

For more information on the objectives and criteria of financial risk management (Interest rate risk, sensitivity to the interest rate, credit risk, liquidity risk, default and covenant risk) please see the related paragraph in the notes to the statements.

16. NON-FINANCIAL DECLARATION

2018 is the second year of application of Italian Legislative Decree 254/2016, which imposes a number of disclosure obligations involving non-financial information for large entities of public interest. Estra, having issued on 28 November 2016, an unsecured and non-convertible bond loan on the regulated market of the Dublin Stock Exchange and having the dimensional characteristics in terms of employees, balance sheet and net revenues above the thresholds provided for in art. 2 paragraph 1, is subject to application of Italian Legislative Decree no. 254 of 30 December 2016. The non-financial declaration contains the information on environmental and social subjects, and on matters related to the personnel, to respect for human rights, and to combating active and passive corruption significant for understanding the company's performance, its results, its situation and the impact of its activity.

The Estra Group, in accordance with the provisions of article 5, paragraph 3, letter b, of Italian Legislative Decree 254/2016, has prepared the consolidated non-financial declaration which constitutes a distinct report with respect to that on operations of the consolidated financial statements.

The 2018 consolidated non-financial declaration drawn up according to the GRI "core" reporting standard, approved by the Board of Directors on 17 April 2019, is available on the Group's website."

17. THE MAIN CHARACTERISTICS OF THE EXISTING RISK MANAGEMENT AND INTERNAL CONTROL SYSTEM IN RELATION TO THE PROCESS OF FINANCIAL DISCLOSURE, ALSO CONSOLIDATED (DISCLOSURE UNDER THE TERMS OF ART. 123-BIS PARAGRAPH 2. B) OF ITALIAN LEGISLATIVE DECREE 58/98)

The completeness, correctness and promptness of the financial disclosure is ensured by the adoption of an effective and efficient Group internal control system, the subject of constant improvement and adjustment to the evolution of the corporate activities, the legislative framework and the economic and social context. A stimulation to improve the Internal Control System on Financial Disclosure was given by parliament with Italian Law 262/05.

The incorporation of the principles and rules established by the aforesaid law constitutes for Estra an important opportunity for improvement of its Internal Control System on Financial Disclosure, in order to make it constantly monitored, and methodologically more defined and documented, also to enable the subjects to which the control activity is entrusted to carry out their audits.

The system used for the formation of the 2018 financial statements comprises:

- the identification of the controls that reside in the management processes overseeing the risks on financial disclosure;
- the definition of the information flows that must runs between the Estra Group's units and the Administration and Financial Statements area;
- the codification of the tasks, responsibilities and deadlines of the units tasked with preparing the accounting documents;
- the procedures that define the operating methods adopted by Estra and by the Group companies for the main administrative/accounting processes and for preparing the corporate accounting documents.

As integral parts of the internal control system as a whole, the following components must also be considered:

- the Code of Ethics, containing the principles and general rules that characterise the organisation and that are in keeping with the business and market context;
- the organisation, management and control model adopted in order to ensure the prevention of the crimes contemplated by Italian Legislative Decree 231/2001.
- The rules that govern the activity of the company and the Group in terms of HSE (quality, environment and safety)

The Company has also launched a process of defining the integrated risk management model, which is based on standards recognised at the international level in the field of Enterprise Risk Management (ERM) developed according to the Reference Model generally accepted at the international level in the field of internal control, issued by the Committee of Sponsoring Organizations of the Treadway Commission (known as CoSO Report).
This ERM model is aimed at supporting the Management in identifying the main business risks and the methods through which they are managed, and at defining the methods through which to organise the monitoring system protecting against the aforesaid risks.

18. INFORMATION TECHNOLOGY ORGANISATION

The architecture of Estra's IT system is characterised by a latest-generation software which has as database a management programme, certified at the international level, named SAP which contains the vertical SAP-ISU for managing energy (gas and electricity) customers on a standard DB2 database produced by IBM. The SAP IS-U module enables complete management of all activities related to customer relations (front-office, invoicing, printing of bills, post-invoicing, meter reading forwarding, etc.) and, through parametrisation functions, it can be configured on specific services of the company.
The IT system is based on ERP (Enterprise Resources Planning) software which integrates not only all the classical business functions typical of ERP but also CRM (Customer Relationship Management) functions and is integrated with a Business Intelligence programme named SAP-BW.
Besides the SAP application indicated above other specialised software programmes are used. A group of these programmes is connected to the SAP system through specific Connectors, such as ARXIVAR, document software for the electronic storage of documents coming into the company and for logging.
Other programmes are interfaced with the SAP system through ETL (Extract, Transform, Load, with reference to data in files), technology such as TLQ for the management of treasury flows with banks, integrated with SAP or HR module ADP + Micronterl on a dedicated platform for the production of payslips and for managing the personnel.

In 2018, in particular, data migration projects continued to centralise the IT procedures of the newly-acquired companies and several projects regarding legislative compliance (resolutions of the ARERA (formerly AEEG)) were completed both for the distribution company and for the sales company.

In the sales area the activities of reviewing the institutional portals and WEB business customer area were completed.
Other projects regarded the accounting and management control, budget and planning area, including the project for activation of electronic invoicing.

19. PERSONNEL AND TRAINING

The average workforce in 2018, taking into account seconded personnel, was 707 employees. The table below shows the numbers by category and the comparison with 2017:

Position	31/12/2018	31/12/2017
Managers	21	17
Office workers and middle managers	552	515
Factory workers	134	112
Total	**707**	**644**

For the Estra Group making the most of human resources is a fundamental element closely related to the strategies and objectives of growth, innovation and development, to create business value and ensure high quality and safety standards, with respect for the environment.

In all this training of personnel is an instrument of fundamental importance, not only to ensure the necessary professional preparation for tackling the challenges of the future, but also for encouraging and maintaining a working environment characterised by a positive climate, collaboration and strong corporate identity.
Particular attention is paid to continual training on technical, professional and/or managerial skills, based on legislative obligations and on the analysis of specific individual and corporate training needs.

Training during 2018 totalled 29,996 hours on a wide range of subjects, including accounting and administrative aspects, safety in the workplace, Risk Management, energy efficiency certificates, industry 4.0 and the Organisation, Management and Control Model.

Total number and average number of training hours

	2018	2017
Total number of training hours	29,996	17,526
Average number of training hours per worker	43	27.21

The training was organised by the Human Resources Service and carried out both in and out of the company offices, with the support of internal/external trainers, making use in part of professional funds.

20. QUALITY, ENVIRONMENT AND SAFETY

To achieve the objectives set on the subject of quality, environment and safety, during financial year 2018 Estra SpA and the group companies Estra Energie and Estra Com, finalised their activity through concrete actions to optimise their management system, adopting an Integrated System at the company level for the UNI EN ISO 9001:2015, UNI EN ISO 14001:2015, OHSAS 18001:2007 and UNI CEI ISO/IEC 27001:2014 certifications.

During 2018 the internal audits were regularly carried out as were those planned for maintaining the existing system and/or acquiring new certifications with a positive result.
In detail the certifications are presented for each company:

- Estra SpA - adoption of an integrated system for UNI EN ISO 9001:2015, UNI EN ISO 14001:2015; OHSAS 18001:2007 and UNI CEI ISO/IEC 27001:2014 standards;
- Estra Energie - adoption of an integrated system for UNI EN ISO 9001:2015, UNI EN ISO 14001:2015 and OHSAS 18001:2007;
- Estra Com - adoption of an integrated system for UNI EN ISO 9001:2015, UNI EN ISO 14001:2015; OHSAS 18001:2007 and UNI CEI ISO/IEC 27001:2014 standards;
- Centria - adoption of an integrated system for UNI EN ISO 9001:2015; UNI EN ISO 14001:2015; EMAS Regulation; OHSAS 18001:2007; UNI CEI ISO/IEC 27001:2014; SA 8000:2014; as well as UNI CEI EN ISO 50001:2011; UNI EN ISO 3834-2:2006; UNI 11024:2003; UNI EN ISO 15838:2010 and UNI 11200:2010; UNI ISO 55001:2015; ISO IEC 17025:2005;
- EstraClima - adoption of an integrated system for UNI EN ISO 9001:2015, UNI EN ISO 14001:2015; OHSAS 18001:2007 as well as UNI CEI 11352:2014; Regulation (EC) 303-2008;
- Gergas - adoption of an integrated standard for UNI EN ISO 9001:2015, UNI EN ISO 14001:2015; OHSAS 18001:2007;
- Edma Reti Gas - adoption of an integrated standard for UNI EN ISO 9001:2015, UNI EN ISO 14001:2015; EMAS Regulation; OHSAS 18001:2007.

Mandatory information on personnel

There were no:
- fatal work accidents involving personnel enrolled in the employee register, for which corporate responsibility was positively established;
- serious accidents at work that resulted in serious or very serious injury to personnel enrolled in the employee register, for which corporate responsibility was positively established;
- charges in respect of occupational diseases of employees or former employees and anti-mobbing actions

for which the company was declared ultimately responsible.

Mandatory information on environment

There were no:
- environmental damages for which the company was found guilty in the final judgement;
- final sanctions or penalties imposed on the company for offences or environmental damage;

Information on the preparation and/or updating of the privacy policy document

Regulation (EU) 2016/679 (known as the GDPR, General Data Protection Regulation) on the protection of natural persons with regard to personal data processing, and to the free circulation of such data, was applied in all EU member states from 25 May 2018.
Significant principles were introduced, as well as new formalities for data controllers such as, for example, the principle of accountability or responsibilisation, the principle of privacy by design and privacy by default, the data protection impact assessment (DPIA), the verification and notification of data breaches to the Privacy Authority and communication in the most serious cases to the data subject, the preparation and constant updating of a Processing Register.
In addition, taking into account the indications of Art. 37 of the GDPR, the opportunity was assessed of appointing the figure of the DPO consequently notified, according to the procedures provided for by the Privacy Authority, on 25 May 2018.
We can note that the activity of ensuring compliance with and maintaining observance of the provisions of Regulation (EU) 679/2016, of the subsequent Italian Legislative Decree 101/2018 is carried out through the support of a specific structure of the company Estra S.p.A. and governed by a service contract.

21. RESEARCH AND DEVELOPMENT

Innovation and research in the Estra Group have great relevance in strategic choices and in defining the products and services offered by the Group.

In particular, the Group is investing in research, development and innovation for optimisation, operational efficiency and the introduction of innovative technologies in its processes and products.

In financial year 2018 the Group continued the research activity launched in previous years in the sector of gas distribution in reference to which, with the partnership of Universities, Research Institutes and specialised software production companies a profound process of re-engineering was undertaken involving planning and organisational activities with the prospect of the forthcoming area tenders. The project saw important investments by the Group not only in software development and process innovation activities, but also in the development of the skills of internal personnel.

Among the other important initiatives created in 2018 we can mention E-qube, open meter testing, Marketing and IC Technologies, VLC (Visual Light Comunication) testing and 5G testing. More information is contained in the consolidated Non-Financial Declaration 2018 to which you are referred.

Estra's projects confirm the Group's approach aimed at the constant search for new technological frontiers and at innovation in the field of telecommunications, with a view to natural complementarity with respect to the main activities in the sector of natural gas and electricity and closeness to the local communities in which we operate.

22. TRANSACTIONS WITH SUBSIDIARIES, ASSOCIATES, PARENT COMPANIES AND COMPANIES UNDER THE CONTROL OF THESE LAST

Estra and the Group companies carry out transactions with related parties based on principles of transparency and correctness; they are governed by contracts and conditions normally applied in these situations.

If they are not services of the current type, the transactions are in any case governed on the basis of the normal conditions applied on the market.

The information on financial and economic transactions with related-party shareholders and related companies are presented in the notes to the statements.

23. FURTHER INFORMATION

Treasury shares and shares of parent companies

The Group holds 500,000 treasury shares, through Estra S.p.A., with a nominal value of € 500,000.
The Group does not own any shares/stakes of parent companies, directly or indirectly, or through a trustee.

Company offices

Estra S.p.A. has its registered office and administrative headquarters in Prato at Via Ugo Panziera, 16 and administrative secondary offices in Arezzo at Via Igino Cocchi, 14 and in Siena at Via Toselli 9/A.
The registered, administrative and operating offices of the Group companies are mainly distributed among these offices.

Prato, 17 April 2019

On behalf of the Board of Directors
The Chairperson of the Board of Directors
Francesco Macrì

E.S.TR.A. S.p.A.

Registered office in Via Ugo Panziera, Prato (PO)
Fully paid-up share capital € 228,334,000.00
Tax code and Prato Business Register number 02149060978,
Economic and Administrative Index no. 0505831

CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2018

OFFICERS

Board of Directors
Chairperson Francesco Macrì
CEO Alessandro Piazzi
General Manager Paolo Abati
Director Roberta De Francesco
Director Chiara Sciascia

Board of Statutory Auditors
Athos Vestrini (Chairperson)
Saverio Carlesi
Patrizia Berchiatti

Independent Auditors
EY S.p.A.

Consolidated financial statements schedules

Consolidated Income Statement at 31 December 2018 and 2017

Consolidated Income Statement		**Year ended 31 December**			
		2018		**2017**	
(amounts in thousands of euro)	**Notes**	**Amount**	**of which referring to Related parties (note 14)**	**Amount**	**of which referring to Related parties (note 14)**
Revenue from disposal of goods and services	8.1.1	805,421	4,140	979,126	3,311
Other operating revenue	8.1.2	37,552	773	37,378	2,070
Raw materials, ancillary materials and goods	8.2.1	(481,267)	(114)	(661,404)	(49)
Costs for services	8.2.2	(204,124)	(14,370)	(189,298)	(12,834)
Costs for Rentals and Leases	8.2.3	(14,125)	(2,021)	(12,855)	(2,021)
Personnel costs	8.2.4	(36,604)	627	(34,218)	(12)
Depreciation, amortisation, provisions and write-downs	8.2.5	(43,264)		(42,963)	
Other operating costs	8.2.6	(31,760)	(93)	(31,444)	(23)
Income/(expenses) from commodity risk management	8.3	(4,419)		150	
Portion of income/(expenses) from measurement of non-financial investments using the equity method	8.4	558		225	
Operating result		**27,969**	**(11,058)**	**44,697**	**(9,558)**
Financial income	8.5	2,113	185	3,335	207
Financial expenses	8.6	(15,368)	(366)	(17,548)	(409)
Gains or losses on currency conversions		(2)			
Portion of income/(expenses) from valuation of financial investments using the equity method	8.7	427		280	
Profit before taxes		**15,139**	**(11,239)**	**30,764**	**(9,760)**
Income taxes for the year	8.8	(5,108)		(14,320)	
Net profit/(loss) from continuing operations		**10,031**	**(11,239)**	**16,443**	**(9,760)**
Net profit/(loss) from discontinued operations / assets held for sale	8.9	(2,320)		(377)	
Net profit		**7,711**	**(11,239)**	**16,066**	**(9,760)**
Result minority interests		380		5,046	
Group profit for the year		7,331		11,020	

Earnings per share (Note 11)	**Year ended 31 December**	
	2018	**2017**
Earnings per share basic ordinary shares	0.03	0.05
Earnings per share diluted ordinary shares	0.03	0.05

Earnings per share from operating activities (Note 11)	**Year ended 31 December**	
	2018	**2017**
Earnings per share basic ordinary shares	0.04	0.06
Earnings per share diluted ordinary shares	0.04	0.06

Income components deriving from non-recurring transactions pursuant to CONSOB Resolution number 15519 dated 27 July 2006, which defines them as “income components (positive and/or negative) deriving from events or transactions occurring on a non-recurring basis, or from transactions or facts that are not frequently repeated in the usual course of activities, are recognised under Note 8.10 “Significant non-recurring, atypical and/or unusual transactions”.

Consolidated Statement of other items in the statement of comprehensive income at 31 December 2018 and 2017

Consolidated Statement of other items in the statement of comprehensive income (amounts in thousands of euro)	Notes	31 December 2018	31 December 2017
Net profit		**7,711**	**16,066**
of which:			
Result minority interests		*380*	*5,046*
Group result		*7,331*	*11,020*
Other comprehensive income components that will subsequently be reclassified under profit/loss for the year (net of taxes)			
Change in cash flow hedge reserve	**9.1**	**185**	**164**
- Profit (loss) for the year from impairment		*244*	*215*
- Taxes		*(59)*	*(52)*
Portion of other components of comprehensive income from investments measured using the equity method	**9.3**		**131**
- Profit (loss)			*172*
- Taxes			*(41)*
Total other comprehensive income components that will subsequently be reclassified under profit/loss for the year (net of taxes)		**185**	**295**
Other comprehensive income components that will not subsequently be reclassified under profit/loss for the year (net of taxes)			
Actuarial profit (loss)	**9.2**	**166**	**82**
- Actuarial profit (loss)		*219*	*108*
- Taxes		*(53)*	*(26)*
Total other comprehensive income components that will not subsequently be reclassified under profit/loss for the year (net of taxes):		**166**	**82**
Total other comprehensive income components net of taxes	**9**	**352**	**377**
of which:			
related to minority interests		*1*	*44*
related to the Group		*351*	*333*
Result of comprehensive income statement		**8,063**	**16,443**
of which:			
Net comprehensive result minority interests		*381*	*5,089*
Net comprehensive result Group		*7,682*	*11,354*

Statement of consolidated financial position at 31 December 2018 and 2017

Statement of consolidated financial position (amounts in thousands of euro)	Notes	Year ended 31 December 2018 Amount	2018 of which referring to Related parties (note 14)	2017 Amount	2017 of which referring to Related parties (note 14)
Tangible assets	10.1.1	84,778		82,033	
Goodwill	10.1.3	29,436		12,056	
Intangible assets	10.1.5	396,448		352,277	
Equity investments	10.1.6	22,217	22,217	29,523	29,523
Other non-current financial assets	10.1.7	12,769	5,087	9,560	4,560
Other non-current assets	10.1.8	4,713		4,585	
Deferred tax assets	10.1.9	27,295		25,353	
NON-CURRENT ASSETS		**577,657**	**27,304**	**515,387**	**34,083**
Inventories	10.2.1	8,674		22,690	
Trade receivables	10.2.2	351,022	10,587	294,030	14,303
Tax receivables	10.2.3	19,881		35,777	
Other current assets	10.2.4	20,006		19,986	
Other current financial assets	10.2.5	17,422		12,259	
Cash and cash equivalents	10.2.6	228,693		229,774	
CURRENT ASSETS		**645,698**	**10,587**	**614,516**	**14,303**
Assets held for sale	10.2.7	**930**	**930**	**2,350**	**2,350**
TOTAL ASSETS		**1,224,285**	**38,821**	**1,132,253**	**50,736**
Share capital		228,334		228,334	
Reserves		61,082		62,580	
Group profit (loss) for the year		7,331		11,020	
Total Group Shareholders' Equity		**296,747**		**301,934**	
Capital and reserves attributable to minority interests		28,125		24,940	
Profit (loss) attributable to minority interests		380		5,046	
Total Shareholders' Equity attributable to minority interests		**28,505**		**29,986**	
TOTAL SHAREHOLDERS' EQUITY	10.3	**325,253**		**331,920**	
Provisions for risks and charges	10.4.1	9,869		11,350	
Employee severance indemnity	10.4.2	7,242		7,605	
Non-current portion of medium/long-term loans	10.4.3	373,077	9,675	368,240	11,110
Deferred taxes liabilities	10.4.4	41,834		38,667	
Other non-current liabilities	10.4.5	1,721		767	
Contract-based liabilities		14,732			
NON-CURRENT LIABILITIES		**448,474**	**9,675**	**426,629**	**11,110**
Current portion of medium/long-term loans	10.4.3	104,780	1,435	67,263	1,435
Short-term borrowings	10.5.1	10,528		10,322	
Trade payables	10.5.2	250,364	6,295	209,824	5,165
Contract-based liabilities		1,165			
Tax liabilities	10.5.3	15,283		21,833	
Other current liabilities	10.5.4	47,343		51,236	
Other current financial liabilities	10.5.4	20,814		13,131	
CURRENT LIABILITIES		**450,278**	**7,730**	**373,609**	**6,600**
Liabilities directly associated with assets held for sale	10.2.7	**280**	**280**	**95**	**95**
TOTAL LIABILITIES and Shareholders' Equity		**1,224,285**	**17,685**	**1,132,253**	**17,805**

Statement of changes to consolidated shareholders' equity at 31 December 2018 and 2017

Statement of changes to consolidated shareholders' equity (Note 10.3) (thousands of Euro)	**Share capital**	**Share premium reserve**	**Legal reserve**	**Cash flow hedge reserve**	**IAS 19 reserve**	**Other reserves**	**Group net result**	**Group shareholders' equity**	**Shareholders' equity attributable to minority interests**	**Total Shareholders' Equity**
Balances at 31 December 2015	**205,500**	**6,510**	**6,141**	**(1,842)**	**380**	**7,740**	**34,069**	**258,499**	**11,800**	**270,299**
Allocation of 2015 profit										
- Consolidated profit for the previous year			738			23,347	(24,085)			
- Dividends							(9,984)	(9,984)	(831)	(10,815)
Acquisition Promoteo with partial disposal Estra Energie					(6)	14,003		13,997	32,205	46,201
Other changes					5	(34)		(29)	11	(18)
Result of income statement							11,016	11,016	4,033	15,049
Other components of comprehensive income statement				(25)	(170)			(195)	(3)	(198)
Balances at 31 December 2016	**205,500**	**6,510**	**6,879**	**(1,868)**	**209**	**45,056**	**11,016**	**273,302**	**47,218**	**320,521**
Allocation of 2016 profit										
- Consolidated profit for the previous year			771			(629)	(142)			
- Dividends							(10,874)	(10,874)	(3,709)	(14,583)
Contribution from Viva Servizi S.p.A. to Estra share capital increase	22,834	19,646			(49)	(12,734)		29,697	(9,449)	20,248
Contribution from Viva Servizi S.p.A. to Centria share capital increase						727		727	343	1,070
Acquisition of minority interests in companies already controlled					(4)	(9,550)		(9,554)	(6,977)	(16,531)
Disposal equity investments in subsidiaries without loss of control						302		302	3,468	3,770
Acquisition of control in companies with held equity investments				(1,034)				(1,034)		(1,034)
Settlement originating from cash flow hedge reserve				2,010				2,010		2,010
Other changes						1,006		1,006	(999)	7
Portion of comprehensive income statement result acquired from changes to interests held in subsidiaries					15	4,984		4,999	(4,999)	
Result of income statement							11,020	11,020	5,046	16,066
Other components of comprehensive income statement				293	40			333	44	377
Balances at 31 December 2017	**228,334**	**26,156**	**7,650**	**(599)**	**211**	**29,162**	**11,020**	**301,934**	**29,986**	**331,920**
First IFRS 9 application						(1,361)		(1,361)	(322)	(1,683)
Balances at 31 December 2017 restated	**228,334**	**26,156**	**7,650**	**(598)**	**210**	**27,803**	**11,020**	**300,575**	**29,664**	**330,238**
Allocation of 2017 profit										
- Consolidated profit for the previous year			889			(2,042)	1,153			
- Dividends							(12,173)	(12,173)	(996)	(13,170)
Other changes						664		664	(543)	121
Result of income statement							7,331	7,331	380	7,711
Other components of comprehensive income statement				184	166			351	1	352
Balances at 31/12/2018	**228,334**	**26,156**	**8,539**	**(414)**	**377**	**26,425**	**7,331**	**296,747**	**28,505**	**325,253**

Consolidated cash flow statement at 31 December 2018 and 2017

	Consolidated cash flow statement	Year ended 31 December	
	(amounts in thousands of euro)	**2018**	**2017**
	Profit (loss) for the year	7,711	16,066
	Income taxes	5,108	14,320
	Interest expense (income)	13,255	14,213
	Profit for year before taxes and interest	**26,074**	**44,599**
	Depreciation/amortisation of tangible and intangible assets	34,902	31,440
	Write-downs of tangible and intangible assets	10	1,745
	Portion of contributions to financing for investments	(621)	(66)
	Changes to fair value recorded in operating result	2,757	150
	Write-downs (revaluations) of investments	(985)	(563)
	Write-downs (revaluations) of assets held for sale/disposal	2,320	377
	Employee severance indemnity provision	182	311
	Allocations/(reversals) to provisions for risks and other allocations	(748)	(261)
	Cash flows before changes in net working capital and other assets and liabilities	**63,890**	**77,733**
	Changes to trade receivables	(48,013)	27,861
	Changes to inventories	14,016	(7,118)
	Changes to trade payables	30,956	15,140
	Changes in other current assets and liabilities	(3,628)	11,393
	Changes in tax assets and liabilities	6,458	(1,305)
	Change in employee severance indemnity (net of allocation)	(560)	(143)
	Cash flows after changes in net working capital and other changes	**63,120**	**123,561**
	Interest received	2,113	3,335
	Interest paid	(13,364)	(16,152)
	Taxes paid	(12,385)	(19,970)
	Utilisation of provisions	(765)	(677)
A	**Cash flows from operating activities**	**38,720**	**90,096**
	of which with related parties	**(6,385)**	**(20,563)**
	Investments in tangible assets	(9,136)	(5,054)
	Investments in intangible assets	(30,586)	(20,541)
	Divestment of tangible and intangible assets	355	10,191
	(Investments)/divestments of equity investments	1,338	(23,596)
	Dividends received from equity measured companies	581	-
	(Investments)/Divestments of assets held for sale/ disposal	(715)	(1,775)
	(Acquisition) or disposal of subsidiaries net of cash and cash equivalents	(30,068)	(6,386)
	Other changes from investment activities	(115)	199
B	**Cash flows from investment activities**	**(68,345)**	**(46,962)**
	of which with related parties	**581**	**-**
	Increases/(decreases) in non-current financial assets and liabilities	(898)	(402)
	Increases/(decreases) in current financial assets and liabilities	55	(3,747)
	Increases/(decreases) in other non-current assets and liabilities	2,006	(4,652)
	Increase (decrease) in short-term bank loans	69	(106,968)
	Opening of new bank loans	162,000	107,000
	Repayment of bank loans	(86,318)	(85,011)
	Buy back bond loans	(32,200)	-
	Repayment of shareholder loans	(1,435)	(1,435)
	Repayment of other lenders	(322)	(6,814)
	Opening loan expenses	(1,244)	(302)
	Effect of contributions on cash and cash equivalents	-	4,318
	Payment of dividends to Parent Company shareholders	(12,173)	(10,873)
	Payment of dividends to third parties	(996)	(3,709)
C	**Cash flows from financing activities**	**28,545**	**(112,595)**
	of which with related parties	**(1,962)**	**1,507**
	Increase (decrease) in liquidity (A+B+C)	**(1,081)**	**(69,461)**
E	**Cash and cash equivalents at 1 January**	**229,774**	**299,235**
F	**Cash and cash equivalents at 31 December**	**228,693**	**229,774**

1. Corporate information

Estra S.p.A. Energia Servizi Territorio Ambiente and "Estra S.p.A." for short (hereinafter "ESTRA" or "Estra") is a joint stock company, registered in the Companies Register of Prato, with registered and administrative offices in Via Ugo Panziera, 16 in Prato, and administrative offices in Via Toselli, 9/a in Siena and in Via Igino Cocchi, 14 in Arezzo.

The activities of the Company and its subsidiaries are detailed in the note Operating sectors, whereas information on the Group structure is found in the note Group information. Information on the Group's interaction with related parties is provided in the note Transactions with related parties.

The financial statements for the year ended at 31 December 2018 were submitted for the approval of the Company's Board of Directors on 12/04/2019.

2. Significant accounting policies

2.1 Basis of preparation

The Group Consolidated Financial Statements were prepared in accordance with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB) and approved by the European Commission, integrating the relative interpretations of the International Financial Reporting Standards Interpretations Committee (IFRS IC), previously known as the Standing Interpretations Committee (Sic), as well as the measures implemented by Art. 9 of Italian Legislative Decree no. 38/2005.

The Consolidated Financial Statements are denoted in thousands of Euro, and all figures are rounded off to thousands of Euro, unless specified otherwise.
The general principle in the preparation of these Consolidated Financial Statements is based on cost, except for assets and liabilities linked to trading and derivative instruments, measured at fair value.

The preparation of the Consolidated Financial Statements required management to use estimates; the main areas characterised by more significant estimates and assumptions, together with those impacting significantly on the situations presented, are detailed in the paragraph "Significant accounting estimates".

2.2 Financial statements

Individual income statement items are classified according to their nature. We believe that this method, which is also followed by our main competitors and is in line with international practice, provides the best representation of the company's results.
As permitted by the revised IAS 1, the comprehensive income statement is presented in a separate document to the income statement, distinguishing between components that are reclassified or not in the income statement. The other components of the comprehensive income statement are also stated separately in the statement of changes to shareholders' equity.

The statement of financial position shows the distinction between current and non-current assets and liabilities, as detailed below. The cash flow statement is prepared using the indirect method, as permitted by IAS 7.

As detailed under note 2.5 below, the schedules have undergone changes due to the application of new accounting standards. In particular, the items current and non-current "Contract-based liabilities" were added to the balance sheet due to the reclassification of contributions for gas connections from intangible assets (Assets under concession pursuant to IFRIC 12) to current and non-current "Contract-based liabilities" in applying the newly adopted IFRS 15, as detailed below. The Group has opted for the modified retrospective approach to the first time adoption of the aforementioned standard, which requires that items in the current year are presented differently to the comparative format; reference is made to the note below "Accounting standards, amendments and interpretations applied from 1 January 2018" for a more detailed description of the impact resulting from the adoption of IFRS15 on the recognition of items in the financial statements.

It is noted that as from the 2018 financial period, transport and electricity dispatching costs (€ 54,812 thousand) were reclassified from costs to acquire raw materials to costs for services. To provide a better comparison with the data from the previous period, the same reclassification was made on the comparative data as of 31 December 2017 (€ 55,385 thousand).

2.3 Consolidation criteria

The Consolidated Financial Statements includes the financial statements of Estra S.p.A and its subsidiaries as of 31 December 2018 and 2017.
Control is achieved when the Group is exposed or is entitled to variable returns, deriving from its relationship with the investment entity, and at the same time, has the ability to impact these returns by exercising its authority over said entity.
Specifically, the Group controls a subsidiary if and only if, the Group has:

- power over the investment entity (or holds valid rights that confer the effective ability to manage the significant activities of the investment entity);
- exposure or rights to variable returns deriving from the relationship with the investment entity;
- the ability to exercise its power over the investment entity so as to impact on the extent of its returns.

Generally, there is the assumption that a majority of voting rights confers control. In support of this assumption and when the Group holds less than a majority of voting rights (or similar rights), the Group considers all the relevant facts and circumstances to ascertain whether it controls the investment entity, including:

- Contract agreements with others holding voting rights;
- Rights deriving from contract agreements;
- Group voting rights and potential voting rights.

The Group reconsiders whether it has control or not when facts and circumstances indicate that changes have intervened in one or more of the three aspects significant for the purposes of defining control. The consolidation of a subsidiary begins when the Group obtains control and ceases once the Group loses this control. Assets, liabilities, revenue and costs for the subsidiary acquired or discontinued over the period are included in the consolidated financial statements from the date on which the Group obtains control, until the date when the Group no longer exercises control over the company.

Profit (loss) for the period and each of the other comprehensive income statement items are attributed to the Parent Company shareholders and minority interests, even if this implies that the minority interests have a negative balance. Where necessary, the appropriate adjustments are made to the financial statements of subsidiaries, to ensure they conform with the Group's accounting policies. All assets and liabilities, shareholders' equity, revenue, costs and intercompany financial flows relating to transactions between group entities are completely eliminated during the consolidation phase.

Changes to equity investments in a subsidiary that do not result in a loss of control are recognised under shareholders' equity.

If the Group should lose control of a subsidiary, the relevant assets (including goodwill), liabilities, minority interests and other shareholders' equity items must be eliminated, whereas any profit or loss is recorded in the income statement. The equity investment still held is then recognised at fair value. Similarly, in the event of acquiring control, any equity investment already held will be revalued at the corresponding fair value, with any profit or loss recognised in the income statement.

2.4 Summary of significant accounting policies

a) Business combinations and goodwill

Business combinations are stated using the acquisition method. The acquisition cost is determined as the sum of the transferred fee measured at fair value at the acquisition date, and the amount for the minority interest in the

acquired entity. For every business combination, the Group defines whether to measure the minority interest in the acquired entity at fair value, or in proportion to the portion of minority interest in the net assets identified in the acquired entity. Acquisition costs are recognised in the period and classified under administrative expenses.
When the Group acquires a business, it classifies or designates the financial assets acquired or the liabilities undertaken in accordance with contract conditions, economic and other pertinent conditions at the acquisition date. This includes checking to see whether an incorporated derivative should be separated from the primary contract.
If the business combination is implemented over different stages, the equity investment held previously is measured at fair value at the acquisition date and any resulting profit or loss is recorded in the income statement.
Any potential fee to be recognised, is recorded by the purchaser at fair value at the acquisition date. The change in fair value of the potential fee classified as an asset or liability, as a financial instrument falling in the scope of IAS 39 Financial Instruments: recognition and measurement, must be recognised in the income statement.
Goodwill is initially recognised at cost, represented by the surplus of the combined fees paid and the amount recorded for minority interests in respect of the net acquired assets identified and liabilities undertaken by the Group. If the fair value of the net acquired assets exceeds the combination of the fee paid, the Group checks once again whether it correctly identified all the assets acquired and all liabilities undertaken, and reviews the procedures used to determine the amounts to recognise at the acquisition date. If the new assessment once again shows a fair value for the net acquired assets that is higher than the fee, the difference (profit) is recognised in the income statement.
After the initial statement, goodwill is measured at cost, net of accumulated impairment losses. For the purposes of checking the impairment, goodwill acquired in a business combination is allocated at the date of acquisition to each cash-generating unit in the Group which expects benefits from the combination synergies, regardless of whether other assets or liabilities from the acquired entity are allocated to these units.
If the goodwill is allocated to a cash-generating unit and the entity disposes of part of this unit's assets, the goodwill associated with the discontinued assets is included in the asset's carrying value when determining the gain or loss from the disposal. Goodwill associated with discontinued assets is determined on the basis of the values relative to the discontinued assets and the portion retained by the cash-generating unit.

b) Investments in associates companies and joint ventures

An associate is a company in which the Group exercises significant influence. Significant influence is intended as the power to participate in determining the company's financial and management policies, without having control or joint control.
A joint venture is an arrangement of joint control, whereby the parties holding joint control hold rights over the net assets in the arrangement. Joint control is intended as the sharing of an arrangement's control on the basis of a contract, which exists solely when decisions on the significant assets require unanimous consent by all parties sharing control.
The considerations made to determine significant influence or joint control are similar to those needed to determine control over subsidiaries.
The Group's equity investments in associates and joint ventures are measured using the equity method.
Based on the equity method, an investment in an associate or joint venture is initially recognised at cost. The investment's carrying value increases or decreases to record the portion of the participant's share of the gains and losses realised after the acquisition date. Goodwill pertinent to the associate or joint venture is included in the equity investment's carrying value and is not subject to separate impairment testing.
The year's statement of profit and loss reflects the portion of results from associates and joint ventures attributable to the Group. Any change in other items of the comprehensive income statement relating to that associate is recognised in the Group's comprehensive income statement. In addition, should an associate or joint venture record a change that is charged directly to shareholders' equity, the Group recognises its portion, where applicable, in the statement of changes to shareholders' equity. Unrealised profits and losses deriving from transactions between the Group and associates or joint ventures are eliminated in proportion to the shareholding in the associates or joint ventures.
The portion of the result from associates and joint ventures attributable to the Group represents the result net of taxes and the portion due to the associates' or joint ventures' other shareholders and is recognised in the Income statement before or after the operating result is recognised in relation to the correlation that exists between the associate's assets and those of the entity preparing the financial statements.
The financial statements for associates and joint ventures are prepared at the same reporting date as the Group. Where necessary, the Group may adjust these to bring them in line with Group accounting policies.

Subsequently to applying the equity method, the Group assesses whether to recognise an impairment in its equity investment in the associates or joint ventures. At each reporting date, the Group assesses whether there are any objective signs that the equity investment in the associate or joint venture has undergone impairment. In this case, the Group calculates the loss as the difference between the recoverable value of the associate or joint venture and the recorded value for the latter in its own financial statements, recording this difference in the Income statement under "attributable portion of associates and joint ventures' results".

On losing the significant influence over an associate or joint control over a joint venture, the Group assesses and records the remaining equity investment at fair value. The difference between the carrying value for the equity investment at the date of losing significant influence or joint control, and the fair value of the residual equity investment and fees received, is recognised in the income statement.

c) Current/non-current classification

Assets and liabilities in the Group's financial statements are classified on a current/non-current basis.

An asset is current when:

- one can suppose that it will be realised, or is held for sale or consumption through the normal operating cycle;
- is held mainly for the purpose of trading;
- one can suppose that it will be realised within twelve months from the close of the financial period; or
- comprises cash or cash equivalents, unless it is forbidden for these to be exchanged or utilised to extinguish a liability for at least twelve months from the close of the financial period.

A liability is current when:

- it is expected to be extinguished in the normal operating cycle;
- is held mainly for the purpose of trading;
- it must be extinguished within twelve months from the close of the financial period; or
- the entity does not have an unconditional right to defer the settlement of the liability for at least twelve months from the close of the period.

Deferred and prepaid tax assets and liabilities are classified under non-current assets and liabilities.

d) Fair value measurement

The Group measures financial instruments such as derivatives and commodity trading futures contracts at fair value at each reporting date. A summary is provided below of the notes relating to the fair value of financial instruments, and the notes referring to fair value:

- Measurement techniques, discretionary measurements and significant accounting estimates: note Discretionary measurements and significant accounting estimates;
- Quantitative information on the fair value measurement hierarchy: note Financial instruments and fair value measurements;
- Financial instruments (including those measured at amortised cost): note Financial instruments and fair value measurements.

Fair value is the price that would be received to sell an asset, or would be paid to transfer a liability, in a regular transaction between market participants at the measurement date. The fair value measurement supposes that the sales transaction for the asset or transfer of the liability takes place:

- in the principal market for the asset or liability;
  or
- in the absence of a principal market, in the most advantageous market for the asset or liability.

The principal market or most advantageous market must be accessible to the Group.
The fair value of an asset or liability is valued by adopting the assumptions that market participants would use in determining the price for the asset or liability, presuming that they are acting to satisfy their own economic interests in the best way possible.
A fair value measurement of a non-financial asset considers the ability of a market participant to generate economic benefits, making maximum and best use of the asset or selling it to another market participant that would make the maximum and best use thereof.
The Group uses valuation techniques that have been adapted to its circumstances, and where there is sufficient data available to measure the fair value, by maximising the use of relevant observable inputs, and minimising the use of unobservable inputs.
All assets and liabilities measured at fair value or recognised in the financial statements are classified according to the fair value hierarchy, as follows:

- Level 1 - quoted prices (without adjustment) in active markets for identical assets or liabilities that the entity can access at the measurement date;
- Level 2 – Inputs other than quoted market prices included within Level 1 that are observable for the asset or liability, either directly or indirectly;
- Level 3 – valuation techniques where input data is unobservable for the asset or liability.

The fair value measurement is classified entirely at the same fair value hierarchy level where the input at the lowest hierarchy level used for the valuation, is classified.

For assets and liabilities recognised at fair value on a recurring basis in the financial statements, the Group determines whether transfers have occurred between the hierarchy levels, by reviewing the classification (based on the lowest level input, which is significant for the fair value measurement in its entirety) at each reporting date. The Group determines the criteria and procedures for the measurement of recurring fair value such as derivatives and commodity trading futures contracts, and for non-recurring measurements, such as assets held for sale.

For the purposes of fair value disclosures, the Group determines the asset and liability classes based on the nature, characteristics and risks of the asset or liability and the fair value hierarchy level referred to above.

e) Revenue from contracts with customers

The ESTRA Group operates primarily in the sale of gas and electricity sector and in the gas distribution sector.

The Group considers whether there are other promises contained in the contract, which represent performance obligations, and to which a portion of the transaction fee needs to be allocated (for example, guarantees, customer loyalty plans). In determining the price for a sales transaction, the Group considers the effects resulting from a variable fee, significant financing components, non-monetary fees, and fees payable to the customer (if applicable).

If the promised fee in the contract includes a variable amount, the Group estimates the amount for the fee, to which it will be entitled in exchange for the transfer of the goods to the customer.
The variable fee is estimated at the time of signing the contract, and its recognition is not possible until it becomes highly probable that when the uncertainty associated with the variable fee is subsequently resolved, there will not be a significant reduction recognised in the cumulative revenue amount already recognised.

The following specific criteria need to be followed for the purposes of recognising revenue:

i) Sale of goods

Revenue is recognised when the entity has transferred control of the goods to the buyer, which generally occurs on the goods delivery date.
Revenue from the sale of electricity and gas is recognised and stated at the time of providing the supply, recorded according to a predetermined calendar for consumption readings, and at the end of the period, include the estimate for the supply of gas and electricity provided to end customers and not yet invoiced at 31 December. Revenue for the sale of electricity and gas is recognised and stated at the time of supply and includes the allocation for supplies rendered but not yet invoiced.

ii) Rendering of services

Revenue from distribution is recognised on the basis of the tariffs approved by the Italian Regulatory Authority for Electricity, Gas and Water [ARERA], and are subject to equalisation at the end of the period to reflect the remuneration approved by the Authority against the investments made, according to the accrual principle.
Revenue referring to the provision of services is recognised on the basis of the service rendered in accordance with the relative contracts.

iii) Revenue from trading activities

Revenue from trading in natural gas is recognised as follows:

- Revenue from trading transactions that meet the so-called "own use exception" is recognised at the time of provision, and stated separately from the relative costs to purchase the gas;
- Revenue deriving from trading transactions that do not meet the so-called "own use exception", but which envisage the physical delivery of the gas sold. In these circumstances, the Group only obtains control of the gas temporarily and instrumentally on the signing of the contracts. The transactions are put in place with various counterparties, in respect of whom there is a distinct credit risk. Moreover, the fee paid to the Group in these contracts is determined in order to maximise the margin from the transaction as a whole. This revenue is recognised net of the relevant purchase cost in the income statement under "expenses and income from commodity risk management".

The sales and purchase obligations at the reporting date, in respect of which the delivery of the physical gas has not yet occurred, are measured at fair value through profit & loss in accordance with IFRS 9, and recorded in the income statement under "expenses and income from commodity risk management". See also note n) on derivative instruments in this regard.

iv) Contractual assets

Contract assets represent the entity's right to obtain the fee agreed on against the transfer of control of the goods or services to the customer.
If the Group fulfils its obligation by transferring the goods or services to the customer prior to the latter paying the fee or prior to payment being due, the entity must record an asset deriving from a contract, excluding the amounts presented as credits.

v) Trade receivables

For the Group, a receivable represents the unconditional right to receive the fee (i.e. all that is needed is for the time to lapse so that payment of the fee may be received). Reference is made to the paragraph on standards in section p) Financial instruments - initial recognition and subsequent measurement.

vi) Contract-based liabilities

Contract-based liabilities represent an obligation to transfer goods or services to the customer, where the Group has already received the fee (or where a portion of the fee is outstanding). If the customer pays the fee before the Group has transferred control of the goods or services, the liability arising from the contract is recognised when payment is made or (if earlier), when is it due. Liabilities deriving from contracts are recognised as revenue when the Group satisfies the performance obligations in the relevant contract.

vii) Costs of obtaining a contract

The Group pays commissions to acquire contracts via indirect sales channels. IFRS 15 requires that certain criteria must be met to record the incremental costs to obtain a contract and the costs incurred to execute the contract with the customer, under assets. Any capitalised costs to obtain contracts must be amortised on a straight line basis, based on the transfer of the goods or services by the entity to the customer. Incremental costs to obtain a contract and the costs to fulfil a contract are recorded as assets pursuant to IFRS 15.128, and the closing asset balance, amortisation amounts and any losses for impairment during the period are stated separately. Nonetheless, IFRS 15 does not make any stipulation regarding the classification of these assets and the relevant

amortisation. Without a standard that deals specifically with the classification and presentation of costs to obtain contracts, the Group has adopted the general IAS 8 standard to select the appropriate accounting treatment. According to this standard, incremental costs to obtain a contract and the costs incurred to fulfil a contract, must be considered separately for recognition in the financial statements.
The Group has chosen a distinctive class of intangible assets in the statements of consolidated financial position, and the relevant amortisation in the same item relating to intangible assets amortisation in the scope of applying IAS 38 - Intangible assets.

f) Interest income

In the case of all financial instruments measured at amortised cost and interest-bearing financial assets classified as held for sale, interest income is recorded by using the effective interest rate (EIR), which is the rate discounting future collections, estimated across the financial instrument's expected life or a shorter time frame, where necessary, in relation to the financial asset's net carrying value. Interest income is classified under financial income in the income statement.

g) Dividends

Dividends are recognised when the Group is entitled to receive payment, which generally corresponds with the time the Shareholders' Meeting approves the distribution.

h) Public grants

Public grants are recorded when there is reasonable certainty that the grants will effectively be received, and that all the relevant conditions have been met. Grants relating to cost components are recognised as revenue on a straight line basis over the financial periods, so that they are commensurate to the cost they intend offsetting. The grant related to an asset is recognised as revenue, and stated in equal portions across the reference asset's expected useful life.
When the Group receives a non-monetary grant, the asset and relative contribution are recorded at nominal value, and stated in the income statement in equal portions across the reference asset's useful life.

i) Income taxes

i) Current taxes

Current tax assets and liabilities are measured at the amount that is expected to be recovered or paid to the tax authorities. The rates and tax regulations used to calculate the amount are those issued, or effectively in force at the reporting date.
Current taxes referring to items recognised directly under shareholders' equity are also recognised at equity and not in the income statement. Management periodically reviews the position taken on the tax returns, and in cases where tax regulations are subject to interpretation, and where appropriate, makes the necessary provisions.

ii) Deferred taxes

Deferred taxes are calculated by applying the liability method to the temporary differences at the reporting date between the tax asset and liability figures and the corresponding carrying value.
Deferred tax liabilities are recognised for all temporary taxable differences, except for:

- deferred tax liabilities deriving from the initial recognition of goodwill or an asset or liability in a transaction not representing a business combination, which at the time of the transaction, does not affect the accounting or tax balance;
- the reversal of taxable temporary differences related to equity investments in subsidiaries, associates and joint ventures, may be controlled, and it is probable that the reversal will not occur in the foreseeable future.

A deferred tax asset is recognised for deductible temporary differences, unused tax losses and unused tax credits to the extent that it is probable that future taxable profit will be available against which the deductible temporary differences and carried tax losses and credit can be utilised, unless:

- the deferred tax liabilities related to the temporary deductible differences derives from the initial recognition of goodwill or an asset or liability in a transaction not representing a business combination, which at the time of the transaction, does not influence the balance sheet or tax balance;
- in the case of deductible temporary differences arising from investments in subsidiaries, associates, and joint ventures, deferred tax assets are only recognised to the extent that it is probable that the temporary difference will reverse in the foreseeable future and that taxable profit will be available against which the temporary difference will be utilised.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow the benefit of part or all of that deferred tax asset to be utilised. Deferred tax assets are reviewed at the end of each reporting period and are recognised to the extent that it probable that sufficient taxable profit will be available to recover these deferred tax assets.
Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates that have been enacted or substantively enacted by the end of the reporting period.
Deferred taxes referring to items recognised off the income statement are also recognised in the income statement, and therefore in shareholders' equity or the comprehensive income statement, according to the item they refer to.
Deferred tax assets and liabilities are offset where there is a legal basis, which allows for the offsetting of current tax assets and liabilities, and the deferred taxes refer to the same tax payer and same tax authorities.
Tax benefits gained as a result of a business combination, but which do not meet the criteria for separate recognition at the acquisition date, are subsequently recognised at the time when new information is obtained regarding the changes in facts and circumstances. The adjustment is recognised by reducing goodwill (up to the goodwill's value), in the event it was recorded during the measurement stage, or in the income statement, if recognised afterwards.

iii) **Indirect taxes**

Costs, revenue, assets and liabilities are recognised net of indirect taxes, such as value-added tax, except for:

- tax applied to the purchase of goods and services is not deductible; in this case this is recognised as part of the asset's purchase cost or part of the cost recorded in the income statement;
- trade receivables and payables include the applicable indirect tax.

The net amount of indirect tax that needs to be recovered or paid to the tax authorities is included among receivables or payables.

j) Conversion of foreign currency items

The functional and reporting currency used by the Parent Company in the consolidated financial statements is the Euro.

Transactions in foreign currencies are initially recognised in the functional currency, applying the spot exchange rate on the transaction date.
Monetary assets and liabilities, denoted in foreign currencies, are converted into the functional currency at the exchange rate on the reporting date.
The differences on the exchange rate that are realised or arise from the conversion of monetary entries are recognised in the income statement. These differences are recorded in the comprehensive income statement until the net investment is sold, and only then is the total amount reclassified in the income statement. Tax attributable to foreign currency translation on monetary items are also recorded in the comprehensive income statement.
Non-monetary items measured at historic cost in foreign currencies are converted at the exchange rate on the date of the transaction's initial recognition. Non-monetary items measured at fair value in foreign currencies are converted at the exchange rate on the date this value was determined. The gains or losses resulting from the

conversion of non-monetary items is treated in accordance with the recognition of profits and losses relative to the changes in fair value of the aforementioned items (i.e. the conversion differences on items where the change in fair value is recognised in the comprehensive income statement or in the income statement, are recorded in the comprehensive income statement or income statement respectively).

k) Non-current assets held for sale, disposal groups and discontinued operations

Non-current assets held for sale, disposal groups and discontinued operations, where the carrying amount will be recovered principally through a sale transaction instead of through continuing use are measured at the lower of the carrying amount and fair value less costs to sell. More specifically, a disposal group is a group of assets and directly associated liabilities, which are to be disposed of in a single transaction. Discontinued operations on the other hand, comprise a significant component of a group, such as for example, a major line of business or geographical area of operations, or a subsidiary acquired exclusively with a view to resale. In accordance with IFRS standards, data relating to non-current assets held for sale, disposal groups and discontinued operations are presented in two specific items of the financial statements: assets held for sale and liabilities directly associated to assets held for sale.
Non-current assets held for sale are not subject to amortisation and are measured at the lower of the carrying amount and relative fair value, less the sale costs; any difference between the carrying value and fair value reduced by the sales expenses is charged to the income statement as a write-down.
With sole reference to discontinued operations, the net economic results obtained pending the disposal process, the capital gains/losses deriving from the disposal itself and the corresponding comparative data for the period/previous period are presented under a specific item in the income statement: profit (loss) from discontinued assets/ held for sale.

l) Distribution of dividends and distribution of assets other than cash and cash equivalents

The Company records a liability against the distribution of cash or other assets other than cash and cash equivalents when the distribution is appropriately authorised, and is no longer at the Company's discretion. Based on Italian Company law, distribution is authorised when it is approved by shareholders. The corresponding amount is recognised in shareholders' equity.
The distribution of assets other than cash and cash equivalents, which do not refer to the distribution of a non-monetary asset controlled by the latter prior and after distribution, are measured at the fair value of the assets to distribute; the recalculation of fair value is recorded directly under shareholders' equity.
At the time of the dividend payment, any difference between the carrying value of the distributed assets and the carrying value of the payable dividend is recognised in the income statement.

m) Tangible assets

Tangible assets are entered at purchase or production cost inclusive of ancillary expenses, or at the amount based on the technical expert's estimate of the company's assets in the case of business acquisitions, and are shown net of depreciation and any losses of value. Production costs includes the direct and indirect costs for the portion reasonably attributable to the asset (for example: personnel costs, transport, customs duties, expenses to prepare installation premises, testing costs, notary and land register costs).
This cost also includes the costs to replace machinery and installations at the time they are incurred, provided they comply with recognition criteria. Where the periodic replacement of significant parts of plants and machinery is necessary, the Group depreciates these separately based on their specific useful life. Likewise, with major overhauls, the costs is included in the plant or machinery's carrying value, as in the case of replacement, where the recognition criteria are met. All costs for repairs and maintenance are recognised in the income statement when they are incurred. The effective cost of dismantling and removing an asset at the end of its use is included in the asset's cost, should the recognition criteria be met for a provision.
The carrying value of intangible assets is subject to impairment to assess whether there have been any losses in value, in particular when events or changes indicate that the carrying value cannot be recovered (for further details, reference is made to the note "Impairment of non-current assets).
Amortisation begins when the asset is available for use. Assets under construction include the costs relating to the tangible asset that is not yet available for use. Tangible assets are depreciated on a straight-line basis annually, using economic and technical rates deemed representative of the assets' residual useful lives.

The table below provides the depreciation rates that were considered when depreciating assets.

Relating to gas distribution:

Category	Depreciation period
Land	not subject to depreciation
Industrial buildings	50 years
Urban networks and connections	50 years
Connections	40 years
Stations	10 years
Tanks and storage facilities	10 years
Facilities for remote operations	10 years
Metering equipment	10 years

Relating to other specific Group business sectors:

Category	Depreciation period
Heat - District heating network	30 years
Heat - Thermoelectric Plants	25 years
Heat - Heat management facilities under concession	7-9 years (contractual term)
Telephony - Conduits	40 years
Telephony - Optical and copper cables	20 years
Telephony – SDH node, networking, access and video surveillance equipment	8 years
Telephony – Hardware and mobile phones	5 years
Renewable energy - photovoltaic plants	20 years

Regarding the remaining asset categories, the amortization rates applied are the following:

Category	Depreciation period
Lightweight constructions	10 years
Electronic machines	5 years
Furniture	8 years
Equipment	10 years
Industrial vehicles	5 years
Other vehicles	4 years

The carrying value of buildings, plants and machinery and any other significant component initially recorded, are eliminated at the time of disposal (i.e. the date when the purchaser obtains control thereof) or when no future economic benefit is expected from their use or disposal. The gain/loss emerging at the time of the asset's accounting elimination (calculated as the difference between the asset's carrying value and net fee) is recorded in the income statement.

The residual values, useful lives and depreciation methods for buildings, plants and machinery are reviewed at each reporting date, and corrected prospectively where appropriate.

Leases

The definition of a contractual agreement as a leasing operation (or containing a leasing operation) is based on the substance of the agreement and an assessment as to whether the performance of the agreement depends on the use of one or more specific assets or whether the agreement transfers the right to use the asset. The check as to whether an agreement contains a lease is done at the start of the agreement.

A leasing contract is classified either as a financial lease or operating lease at the start of the lease itself. A lease contract that essentially transfers all the risks and benefits deriving from ownership of the leased asset to the Group is classified as a financial lease.
Financial leases are capitalised at the starting date of the lease at the fair value of the leased asset, or the current rentals if this is lower. Rentals are divided into the principal and interest portions, so as to apply a consistent interest rate to the residual debt balance. Financial expenses are charged to the income statement.

Leased goods are depreciated on the basis of their useful life. Nonetheless, where there is no reasonable certainty that the Group will obtain ownership of the asset at the end of the contract, the asset is depreciated over the shorter time period between the asset's estimate useful life and the term of the lease contract.
An operating lease is one that does not qualify as a financial lease. Rentals on operating leases are recognised as costs in the income statement in equal amounts over the duration of the contract.

Financial expenses

Financial expenses directly attributable to the acquisition, construction or production of an asset that requires quite a long time before it becomes available for use, are capitalised on the cost of the asset. All financial expenses are recognised among the costs relating to the period in which they were incurred. Financial expenses comprise interest and the other costs that an entity may support to obtain the funding.

n) Intangible assets

Intangible assets acquired separately are initially recorded at cost, whereas those acquired via business combinations are recognised at fair value on the acquisition date. After initial recognition, intangible assets are recorded net of the accumulated amortisation and any impairments. Internally produced intangible assets, excluding development costs, are not capitalised and are recorded in the income statement in the period they were incurred.
The useful life of intangible assets is measured as limited or indefinite.
Intangible assets with a limited life are amortised over their useful life and are subject to impairment testing, at any time there any indications that there may be possible losses in value. The amortisation period and method for an intangible asset with a limited life are reviewed at least at the end of each period. Changes in the expected useful life or ways in which future economic benefits associated with the asset will be realised, are recognised by changes to the amortisation period or method, as the case may be, and are considered as accounting estimate changes. Amortisations of intangible assets with a limited life are recognised in the income statement under the cost category relating to the function of the intangible asset.
Intangible assets with an indefinite life are not amortised, but are subject to annual impairment testing, both at individual level and at the cash-generating unit level. The assessment of the indefinite life is reviewed annually to determine whether this allocation is sustainable, otherwise the change from the indefinite useful life to limited useful life is applied on a prospective basis.
Profit or loss deriving from the elimination of an intangible asset is measured by the difference between the net revenue from the disposal (at the date when the purchaser gains control) and the carrying value for the intangible asset, and is recorded in the income statement in the period when the elimination takes place.
Profit or loss deriving from the sale of an intangible asset is determined as the difference between the disposal value and the carrying value for the asset, and it recorded in the income statement at the time when the risks and benefits associated with ownership of the asset are transferred to the purchaser.

Patents and licences

These represented by identifiable, discernible assets under the company's control, which can generate future economic benefits; these rights are amortised across the relevant useful lives.

Service concession agreements

IFRIC 12 stipulates that when specific characteristics exist at the time of the concession, the infrastructure used to provide public services on a concession basis are recognised as intangible assets and/or as financial assets according to whether the concessionaire is entitled to a fee from the customer for the service provided and/or is entitled to receive this from the granting public entity.
The concession arrangements in place with granting entities and relating to the Group's gas distribution are recognised according to IFRIC 12, by applying the intangible asset model, because the underlying concessionary relationships do not guarantee the unconditional right in favour of the concessionaire to receive cash, or other financial assets.
Given that most of the work is tendered externally and that with the construction carried out internally, no separate distinction is made between the project margin and benefits recognised in the service remuneration

tariff, this infrastructure is recorded on the basis of costs effectively supported, net of any contributions made by entities and/or private customers.
During the construction phase, the Group records a contract asset when the right to a fee in kind is not subject to performance risks.

Amortisations are calculated on the basis of what is stipulated in the respective agreements/concessions, taking into consideration the provisions under applicable legislation on concessions for gas distribution, and in particular: i) consistently for the lesser period between the economic-technical life of the assets under concession and the term of the concession itself, when on expiry, no compensation is paid to the outgoing manager (Reimbursement Value, or "RV"); ii) based on the economic-technical life of individual assets, when on the concessions' expiry, the assets are not freely transferable.

o) Financial assets and liabilities

These include equity investments (excluding equity investments in subsidiaries, joint ventures and associates) held for trading (investments in trading securities) or held for sale, non-current receivables and loans, trade receivables and other receivables originating from business operations and other current financial assets, such as cash and cash equivalents. Finally, financial instruments also include financial payables (bank loans and bond loans), trade payables, other payables and other financial liabilities, as well as derivative instruments.
Financial assets and liabilities are recognised at the time the contractual rights and obligations related to the instrument arise.

Initial recognition and measurement of financial assets
At the time of initial recognition, financial assets are classified based on the subsequent measurement method, i.e. at amortised cost, fair value recognised in profit and loss OCI and at fair value recognised in the income statement. The classification of financial assets at the time of initial recognition depends on the characteristics of the contract cash flows for the financial assets and the business model the Group uses to manage them. Except for trade receivables that do no contain a significant financing component or where the Group has applied a practical expedient, the Group initially measures a financial asset at its fair value plus the transaction costs in the case of a financial asset not at fair value recognised in the income statement. Trade receivables that do not include a significant financing component or where the Group has applied a practical expedient are measured at the transaction price, determined as per IFRS 15.

So that a financial asset can be classified and measured at amortised cost or at fair value in OCI, it must generate financial flows that depend solely on the principal and interest on the principal amount to be repaid (i.e. solely payments of principal and interest or SPPI). This assessment referred to as a SPPI test and it conducted at instrument level.

The Group's business model for managing financial assets refers to the way in which it manages its financial assets to generate cash flows. The business model determines whether the cash flows will derive from the collection of contract-based financial flows, from the sale of financial assets or both.
The purchase or sale of a financial asset that requires delivery within a set time period generally set according to regulations or market practise (i.e. regular way trade) is recognised at the settlement date, i.e. the date on which the Group has undertaken to buy or sell the asset.

Derecognition of financial assets
A financial asset (or where applicable, part of a financial asset or parts of a group of financial assets) is derecognised when:

- the contractual rights to receive the cash flows have expired or are extinguished;
- the company retains the right to receive the cash flows from the assets, but has a contractual obligation to pay these without delay to a third party;
- the company has transferred the right to receive the flows from the asset and (i) has essentially transferred all the risks and benefits of ownership of the financial asset; or (ii) has not transferred nor substantially holds all the risks and benefits of the asset, but has transferred control thereof.

In cases where the company has transferred the rights to receive the cash flows from an asset and has not transferred nor essentially retains all the risks and benefits or has not lost control thereof, the asset is recognised to the extent of the residual involvement in the asset itself. The residual involvement takes the form of a guarantee on the transferred asset, and is measured at the lesser between the asset's initial carrying value and maximum value of the fee that the company could be obliged to pay. Trade receivables definitively considered as unrecoverable are also eliminated from the balance sheet after all the relevant recovery procedures have been completed.

Initial recognition and measurement of financial liabilities
Initially all financial assets and liabilities are recognised at fair value, and in the case of assets and liabilities other than those measured at fair value in the income statement, with the addition of ancillary costs (cost of acquisition/issuing).

Derecognition of financial liabilities
A financial liability is derecognised when the liability's underlying obligation is extinguished, cancelled or fulfilled. In cases where an existing financial liability is replaced by another from the same provider, with significantly different conditions, or the conditions of an existing financial liability are substantially amended, this exchange or amendment is treated as an accounting derecognition of the original liability and a new liability is recognised, with any differences in the carrying value recorded in the income statement.

Subsequent measurements of non-derivative financial assets and liabilities

For the purposes of subsequent measurement, financial assets are classified into four categories:

- Financial assets at amortised cost (debt instruments);
- Financial assets at fair value recorded in the comprehensive income statement with reclassification of accumulated profit and loss (debt instruments);
- Financial assets at fair value recorded in the comprehensive income statement without the reversal of profit and loss accumulated at the time of elimination (capital representative instruments);
- Financial assets at fair value recognised in the income statement.

These are the Group's main types of assets:

<u>Financial assets at amortised cost (debt instruments)</u>

This is the most relevant category for the Group. The Group measures financial assets at amortised cost if both the following requirements are take in considerations:

- the financial asset is held in the scope of a business model where the objective is to hold the financial asset for the purpose of collecting the contract-based financial flows;
- the contract terms for the financial asset provide financial flow on specific dates, which only represent payments of principal and interest on the principal amount to be repaid

Financial assets at amortised cost are subsequently measured using the effective interest criterion and are subject to impairment. Profit and loss is recorded in the income statement when the asset is eliminated, amended or revalued.

The Group's financial assets at amortised cost include trade receivables, a loan to an associate, a loan to a director included in other non-current financial assets.

<u>Financial assets at fair value recognised in the income statement</u>

This category includes assets held for trading, assets designated at initial recognition as financial assets at fair value with changes recorded in the income statement, or financial assets with mandatory measurement at fair value. Assets held for trading are all assets acquired to be sold or repurchased over the short term. Derivatives, including separated derivatives, are classified as financial instruments held for trading, unless they are designated as effective hedging instruments. Financial instruments with financial flows not represented solely by principal and interest payments are classified and measured at fair value and recognised in the income statement,

irrespective of the business model. Despite the criteria for debt instruments to be classified at amortised cost or at fair value recognised in OCI, as detailed above, debt instruments may be recognised at fair value in the income statement at the time of initial recognition if this results in the elimination or significant reduction in an accounting misalignment.
Financial instruments at fair value with changes recorded in the income statement are recognised in the statement of financial position at fair value and the net changes in fair value recorded in the profit and loss statement for the period.
Derivative instruments fall into this category.

Impairment of financial assets

The Group records a write-down for expected loss (expected credit loss or ECL) for all financial assets represented by debt instruments not held at fair value recorded in the income statement. ECLs are based on the difference between the contract financial flows payable according to the contract and all the financial flows that the Group expects to receive, discounted to an approximation of the original effective interest rate. Expected cash flows include financial flows deriving from the execution of collateral or other credit guarantees that form an integral part of the contract conditions.
Expected losses are recognised over two stages. With regard to credit exposures where there has been no significant increase in credit risk from the initial recognition, losses on credit are recorded as they derive from the estimate of default events that are possible within the next 12-month period (12-month ECL). With regard to credit exposures where there has been a significant increase in credit risk from the initial recognition, the expected losses referring to residual period of exposure are fully recorded, regardless of the time when the default event is expected to occur (“Lifetime ECL”).
For trade receivables and contract based assets, the Group applies a simplified approach to the calculation of expected losses. The Group does not therefore monitor changes in credit risk, but fully records the expected loss at each reporting date. The Group has prepared a matrix system based on historic information, which is revised in view of forecast elements with reference to specific types of debtors and their economic context, and is used as a tool to determine expected losses.

The Group considers a financial asset to be in default when it deemed improbable that the debtor will fully comply with its credit obligations without recourse to action such as the enforcement of guarantees. In some cases, the Group could also consider a financial asset to be in default when internal or external information indicates that it is improbable for the Company to fully recover the contract-based amounts, prior to having reviewed the guarantees the Group holds on said credit. A financial asset is eliminated when there is no reasonable expectation of recovering the contract-based financial flows.

p) Derivative instruments

Derivative instruments, including implicit instruments (embedded derivatives) subject to separation from the principal contract, are measured at current value (fair value) with changes recorded in the income statement, when they do not meet the criteria to qualify as hedging derivative instruments.

A non-derivative hybrid contract, such as a financial liability or a non-financial principal contract, could contains embedded derivatives. These derivatives must be separated from the principal contract and recognised as a separate derivative. If: its economic characteristics and the associated risks are strictly related to those of the principal contract; a separate instrument with the same conditions of the embedded derivative would satisfy the definition of a derivative; and the hybrid contract is not measured at fair value in the income statement. Embedded derivatives are measured at fair value, with changes in fair value recorded in the income statement. A redetermination occurs only when a change in the contract conditions significantly changes the cash flows otherwise expected or when a financial asset is reclassified to a different category from fair value in the income statement.
An implicit derivative included in a hybrid contract containing a financial asset is not unbundled from the host contract. The financial asset together with the implicit derivative is fully classified as a financial asset at fair value recognised in the income statement.

Derivatives are classified as hedging instruments, continuing to follow the rules under IAS 39 when the relationship between the derivative and hedging subject is formally documented and the hedging effect that is

periodically verified, is high. When the hedging derivatives cover the risk of changes to the fair value of the hedged elements (fair value hedge), derivatives are recognised at fair value with the effects recorded in the income statement; similarly, instruments subject to hedging are adequate to reflect changes in the fair value associated with the hedged risk. When derivatives cover the risk of changes in cash flows from hedged elements (cash flow hedge), the effective portion of changes in the fair value of derivatives is directly recognised in shareholders' equity under a specific equity provision called the "Cash flow hedge reserve", whereas the ineffective portion is recorded in the income statement. Amounts that are directly recognised in shareholders' equity are reflected in the comprehensive income statement.
Changes to the fair value of derivatives that do not meet the conditions to qualify as hedging are recognised in the income statement. In particular, changes to the fair value of non-hedging derivatives on interest rates and on currencies are recognised in the income statement in "Financial income/expenses"; whereas the changes in fair value of non-hedging derivative instruments on commodities are recorded in the income statement under "Expenses/(income) from commodity risk management".

At each reporting date, hedging financial instruments are subjected to an efficiency test to check if the cover has the requirements to qualify as effective hedging and to be recognised according to hedge accounting standards.

The derivative financial instruments used are measured at fair value in relation to the market forward curve at the reporting date, when the underlying of the derivative is traded on markets that present official and liquid forward price listings. In the case that the market does not present forward listings, provisional price curves are used, based on evaluation techniques.

The Group holds financial derivative instruments in the following categories:

- Non-current financial derivative hedging instruments, referring mainly to Interest Rate Swap (IRS) contracts to hedge the risk of unfavourable interest rates on loans or long-term leasing plans. The effective portion of changes in the fair value of derivatives is directly recognised in shareholders' equity under a specific equity provision called the "Cash flow hedge reserve", whereas the ineffective portion is recorded in the income statement. Amounts that are directly recognised in shareholders' equity are reflected in the comprehensive income statement.
- Commodity Swaps stipulated to hedge price indices for volumes sold, in order to limit price risk deriving from specific gas purchase transactions at a fixed price and resale at a variable price (or vice versa) at different times. Derivatives do not meet the conditions, including formal requirements, required by IAS 39 to qualify as hedging. The relevant fair value changes are recognised in the income statement.
- Forward commodity contracts to buy or sell that provide for the physical delivery of gas in subsequent periods. Their measurement depends on the classification of the instrument in one of the following categories:
    - Forward contracts used in gas trading, falling within the scope of application of IAS 39 as "contracts entered into for trading, speculative and hedging purposes". These financial instruments are measured at fair value at the reporting date with recording of the effects in the income statement under "Expenses/(income) from commodity risk management";
    - Forward contracts used in the marketing of gas, not falling within the scope of application of IAS 39, because they have been entered into to optimise the Group's own procurement and sales portfolio ("own use"). These financial instruments are recognised at the time of the physical delivery of the underlying commodity. In this regard, reference is also made to the note "Revenue from trading".

q) Inventories

Inventories were recorded at the lower of the acquisition cost or production cost, including any ancillary costs, and the estimated realizable value based on market prices. The cost configuration adopted is that of the weighted average cost. Any obsolete or slow-moving inventories were written down on the basis of their possible use or implementation.
Gas storage inventories held for trading were measured at fair value, in relation to the official listings on the reference market at the valuation date.

r) Environmental securities: White certificates

The Group only holds Energy Efficiency Certificates (TEE - Titoli Efficienza Energetica) for own-use, i.e. in relation to its own requirements (Industrial Portfolio), whereas it holds no units/certificates for trading purposes (Trading Portfolio).
The TEE held for own-use ("Industrial Portfolio") acquired to meet requirements, (determined in relation to the obligations accrued at year end), are recognised under current assets at fair value based on their expected realisable value.
Furthermore, a "Risk Provision" is allocated, for the TEE that have not yet been acquired (to meet the year obligation) for the difference between the contribution value and TEE market value. The provision is recorded under "Other operating costs".

Accounting treatment according to the IFRS is the "Net liabilities approach", based on which the TEE purchase costs are recognised under "Other operating costs" at the time of purchase, whereas the contribution (ARERA/GSE) relating to cancelled TEEs is recorded under "Other revenue and income" at the time of effective collection. The TEEs in the portfolio at the reporting date are valued based on the contribution value recognised by ARERA/GSE for the current year, and are recognised under "Other revenue and income" and "Receivables from CCSE" [Electricity Equalisation Fund].

s) Losses in value for non-current assets

At each reporting date, the Group assesses whether losses in value indicators exist in relation to non-current assets. In this case, or in the cases where an annual impairment test is required, the Group estimates the recoverable value. The recoverable value is the higher between the asset or cash-generating unit's fair value, net of sales costs, and its value in use. The recoverable value is determined per individual asset, except when this asset generates cash that is not largely independent from what is generated from other assets or groups of assets. If the carrying value an asset is higher than its recoverable value, the asset has lost value and is consequently written down to its recoverable value.
In determining the value of use, the Group discounts estimated future financial flows to current value using a discount rate that reflects the market valuation for the current value of money and specific asset risks. Recent transactions on the market are considered when determining the fair value net of sales costs. If it is not possible to identify these transactions, an appropriate valuation model is used.
The Group bases its impairment test on detailed budgets and provisional calculations, prepared separately for each of the Group's cash-generating units allocated individual assets. A long-term growth rate is calculated in these budgets and provisional calculations to project future cash flows beyond the last year included in the plan.
Value impairments of assets in use are posted to the income statement in the cost categories consistent with the function of the asset which has shown the value impairment.

For assets other than goodwill, at each reporting date, the Group assesses any indications of a loss (or reduction) in value previously recorded, and where these indicators exist, estimates the asset's or CGU's recoverable value. The value of an asset that was previously written down can only be restored if there were changes in the assumptions on which the recoverable value calculation was based, subsequent to the recording of the last impairment. The recovery in value cannot exceed the carrying value that would have been determined, net of amortisations, had no impairment been recognised in previous periods.

Goodwill is subject to impairment testing at least once a year (at 31 December), and with greater frequency, when circumstances indicate that the entry value could be subject to a loss in value.
The impairment is determined by valuing the recoverable value for the cash-generating unit (or group of cash-generating units) that the goodwill refers to. An impairment loss is recognised when the recoverable value for a cash-generating unit is lower than the cash-generating unit's carrying value that the goodwill was allocated to. The loss in value for goodwill cannot be recovered in future periods.

t) Cash and cash equivalents and short-term deposits

Cash and cash equivalents include cash in hand and short-term deposits falling due within three months, which are not subject to significant risks of changes in value.

For the purposes of representation in the consolidated cash flow statement, cash and cash equivalents are represented by cash as defined above, net of bank overdrafts, as these are considered an integral part of the Group's liquidity management.

u) Provisions for risks and charges

Provisions for risks and charges are carried out when the Group must meet a current obligation (legal or implicit) resulting from a past event, when it is probable that resources must be disbursed to meet this obligation, and it is possible to reliably estimate the amount. When the Group considers that a risks and charges provision will be partly or entirely recovered (as in the case of risks covered by insurance policies), the indemnity is recorded separately and distinctly under assets, if and only if, it is reasonably certain. In this case, the cost of any provision is presented in the income statement, net of the amount recognised for the indemnity.
If the effect of the value of money over time is significant, provisions are discounted using a before tax discount rate, which, where appropriate, reflects the liabilities' specific risks. When the liability is discounted, the increase in the provision due to the passage of time is recorded as a financial expense.

v) Post-employment benefits

The employee severance indemnity (TFR) and pension funds are determined applying an actuarial method; the amount for the rights accrued in the period by employees is charged to the income statement under labour costs, whereas the figurative financial expense that the company would incur if it requested funding from the market for an amount equalling the severance pay indemnity is recorded under net financial income (expenses). The actuarial gains and losses that reflect the effects of the changes in the actuarial assumptions are recorded in the comprehensive income statement, taking into account employee's remaining average working life.
Based on Finance Law no. 296 of 27 December 2006, for the purposes of IAS 19, only liabilities relating to the severance indemnities accrued that have remained with the company were valued, because the accruing portions are paid to a separate entity (Complementary pension or National Pension Fund INPS). Consequent to these payments, the company will have no further obligations related to work provided in future by the employee.
Benefits guaranteed to employees and awarded concurrently or subsequent to their termination of employment, based on definite benefit plans (discounts on electricity, healthcare, other benefits) or long-term benefits (loyalty bonus) are recognised in the period when the right accrues.
Liabilities related to definite benefit programmes, net of any assets servicing the plan, are determined by independent actuaries based on actuarial assumptions, and are recorded in relation to the work needed to obtain the benefits.

2.5 Changes to accounting standards and disclosure

2.5.1 Accounting standards, amendments and interpretations applied as from 1 January 2018

IFRS 9 Financial instruments

IFRS 9 Financial Instruments replaces IAS 39 Financial Instruments: Recognition and measurement for periods starting 1 January 2018 or thereafter, combining all three aspects relating to the accounting of financial instruments: classification and measurement, impairment and hedge accounting.

With the exception of hedge accounting, the standard requires retrospective application, but without the need to provide comparative information. With regard to hedge accounting, the standard applies prospectively, with certain limited exceptions.

The Group adopted the new standard as of January, 1st 2018, without restating the comparative information, and recording the cumulative effect of the initial application as an adjustment to the opening balance of the profits carried forward as of January, 1st 2018.

With regard to the first application of this standard, we note that:

a) Classification and measurement

The Group did not record any significant impact on its shareholders' equity following the application of the classification and measurement requirements as per IFRS 9. The Group continued the fair value measurement of all financial assets currently treated at fair value in accordance with IAS 39.

b) Impairment

The adoption of IFRS 9 partially changed the Group's accounting of impairments relating to financial assets, replacing the approach of sustained losses envisaged by IAS 39 with the prospective approach (or forward looking approach) to expected credit losses (ECL).

IFRS 9 requires the Group to record expected losses on credits on all portfolio obligations, loans and trade receivables, using as a reference either a 12-month period or the full lifetime of the instrument's contract (i.e. lifetime expected loss). The Group applied a simplified approach, and therefore recorded expected losses on all trade receivables based on their remaining contract lifetime.

The application of the expected losses on credit model resulted in a revision of the provision matrix applied by the Group, which adequately reflects counterparty credit risk and the change and optimisation of the operating processes that ensure information is available to implement the measurement models and to prepare financial reporting. The Group has developed a new credit analysis model, so as to provide a more detailed analysis of the different risks associated with customer credit payments, starting from when these arise and progressively in relation to their increasing ageing.

The adoption of IFRS 9 requirements referring to ECLs resulted in an increased provision being made losses in value of the Group's financial assets, with particular reference to overdue trade receivables or those overdue by less than 12 months for € 2,213 thousand, gross of prepaid taxes for € 531 thousand, and a consequent adjustment to shareholders' equity at 01 January 2018 of € 1,682 thousand, of which € 1,361 thousand referred to the Group and € 326 thousand to third parties.

c) Hedge accounting

Regarding the hedge accounting, the Group has opted to continue measuring and recognising hedging instruments at 31 December 2018 in terms of IAS 39.

IFRS 15 Revenue from contracts with customers

IFRS 15, issued in May 2014 and amended in April 2016, introduces a new five-step model for recognising revenue deriving from contracts with customers, effective as from 1 January 2018.
IFRS 15 replaces IAS 11 *Construction Contract*s, IAS 18 *Revenues* and the relative interpretations and is applicable to all revenue derived from contracts with customers, with the exception of contracts not falling within the scope of other standards.

IFRS 15 provides for the recognition of revenue for amount reflecting the consideration to which the entity expects to be entitled in exchange for those goods or services to the customer.

The standard sets a new model for recognising revenue, applies to all contracts with customers, except for contracts falling within the scope of application of IAS 17 and IFRS 16, insurance contracts and financial instruments. The new standard introduces a new five-step model for recognising revenue deriving from contracts with customers:

1. identifying the contract with the customer;
2. identifying the performance obligations within the contract;
3. determining the price;

4. allocating the price to the performance obligations in the contract;
5. recognising revenue when the entity fulfils each performance obligation.

The standard requires an assessment by the entity, which takes into consideration all the facts and circumstances that are relevant in applying each step of the model to contracts with its customers. The standard also specifies that the incremental costs to obtain a contract and the directly related costs to fulfilling the contract should also be recognised.

The Group has chosen the modified retrospective approach as a transition method, as envisaged under paragraph C3, letter b), recording the cumulative effect of the initial application as an adjustment to the opening balance of the profits carried forward at 1 January 2018.
Under these circumstances, based on a choice by management, IFRS 15 is applied retrospectively only to contracts not signed at the date of initial application (1 January 2018).

The ESTRA Group operates primarily in the sale of gas and electricity sector and in the gas distribution sector. The analysis of the effects on the Group's consolidated financial statements related to the application of IFRS 15 referred to the following transaction categories:

- contracts for the supply of electricity and gas, which concurrently require that the Group provides ancillary services, with reference to the procedures for recognising revenue for the different performance obligations undertaken by the Group;
- futures contracts (to buy or sell) gas on national and foreign markets with physical delivery of the gas in subsequent periods, used in gas trading, with reference to the procedures for recognising revenue based on the role undertaken by the Group (principal or agent);
- contracts for natural gas distribution services referring to the procedures for recognising revenue for system charges based on the role undertaken by the Group (principal or agent);
- contracts for the supply of electricity and gas and contracts for distribution services that envisage the Group obtaining a fee for the connection/activation service, with reference to the procedures for recognising revenue for the different performance obligations undertaken by the Group.

With the analysis completed, there was no significant deferment impact for revenue, but only effects in terms of reclassification and/or recognition of the latter net of the relevant costs, which then, did not produce effects on the income statement results for the period, nor on shareholders' equity at 01 December 2018 due to the retrospective application of the standard.

More specifically, the application of IFRS 15 resulted in the following effects:

(a) Considerations as agent and principal

(1) Trading activity

The Group signs futures contracts to buy and sell gas on national and international markets, where the Group obtains control of the gas only temporarily and instrumentally on signing the contracts. The transactions are put in place with various counterparties, in respect of whom there is a distinct credit risk. Moreover, the fee paid to the Group in these contracts is determined in order to maximise the margin from the transaction as a whole.

Prior to the adoption of IFRS 15, based primarily on assessments relating to credit risk, the Group had concluded that it was exposed to significant risks and benefits associated with the abovementioned forward buying and selling transactions, and had recognised these contracts in its capacity as principal. The IFRS 15 establish that the credit risk indicator is no longer relevant for these analyses. The Group concluded that its role in these contracts is that of agent, given that the contracts are entered into to ultimately take advantage of additional profit opportunities, within predefined risk limits, without control of the underlying assets being transferred or is transferred albeit on a temporary basis. This change resulted in only the margin being recognised.

(2) Tariff components - system charges

Through some of its subsidiaries, the Group operates in the regulated gas distribution sector: the Network Code is the document on which relations between gas distribution network users (companies selling gas) and Distributors

is based. This document describes the services that Users can request from the Distribution Companies and governs all contract aspects related to service provision (times, execution and invoicing procedures, penalties, bonuses, etc.).
With the adoption of IFRS 15, the Group has stated the revenue and costs associated with certain ancillary tariff components relating to the gas distribution service that need to be paid to the CSEA (RE, RS, UG1 and GS)[1] and where the Group operated in the capacity of agent.

(b) Construction activity and improvements from in-house production

Excluding services provided in terms of gas concession contracts in terms of IFRIC 12, the implementation of IFRS 15 has made it necessary to recognise internal costs relating to activities and increases for internal works, which had previously been recorded under Revenue items.

(c) Contributions on gas distribution connections

Regarding the gas distribution, the Group has further reclassified the contributions for connections from intangible assets (Assets under concession recognised in accordance with IFRIC 12) to current and non-current "Contract-based liabilities" (€ 14,073 thousand at 01 January 2018) with the consequent reclassification of revenue related to their portion pertinent to 2018 (€ 454 thousand) from "Depreciation, amortisation, provisions and write-downs" to "Revenue from contracts with customers" to better represent their nature of an initial fee in terms of the contracts with customers and record these consistently with fulfilling the contract obligations and regulations generating performance obligations for the distributor.

The effect of adopting the new IFRS 9 and IFRS 15 standards on the opening shareholders' equity at 1 January 2018 is summarised in the table below:

Effect on Statement of consolidated financial position at 31 December 2017 **(amounts in thousands of euro)**	**Year ended 31 December 2017 published**	**Reclassification of contributions for connections applying IFRS 15**	**Impairment of trade receivables applying IFRS 9**	**Year ended 31 December 2017 restated**
Non-current assets	515,387	14,073	531	529,992
Current assets	614,516		(2,213)	612,303
Assets held for sale	2,350			2,350
TOTAL ASSETS	**1,132,253**	**14,073**	**(1,682)**	**1,144,644**
Total Group Shareholders' Equity	301,934		(1,361)	300,573
Total Shareholders' Equity attributable to minority interests	29,986		(322)	29,664
TOTAL SHAREHOLDERS' EQUITY	**331,920**		**(1,682)**	**330,238**
Non-current liabilities	426,629	13,666		440,295
Current liabilities	373,609	408		374,017
Liabilities directly associated with assets held for sale	95			95
TOTAL LIABILITIES and SHAREHOLDERS' EQUITY	**1,132,253**	**14,073**	**(1,682)**	**1,144,644**

[1] These components refer to: (i) RE – Variable portion to cover charges for energy savings measures and interventions and the development of renewable sources in the natural gas sector; (ii) RS – Variable portion to cover charges related to the quality of gas services; (iii) UG1 – Variable portion to cover any imbalances in the equalisation systems and to cover any adjustments; (iv) GS – Variable portion to cover the tariff offsetting system for economically disadvantaged customers.

On a voluntary basis, the Group has also provided the disclosure regarding the comparison between economic values at 31 December 2018 without the application of the new IFRS 15 and IFRS 9 and at 31 December 2018 with the effects of the new IFRS 15.

The summary of the effects are shown in the table below:

Effect on the Consolidated Income Statement for the year ended 31 December 2018 (amounts in thousands of euro)	**Year ended 31 December 2018 without application of IFRS 15 and 9**	Net recognition of trading costs and revenue	Net recognition of tariff components	Recognition changes for increases from internal works	Other net recognised components	**Year ended 31 December 2018 with application of IFRS 15 and 9**
Revenue from contracts with customers	1,040,888	(228,618)	(4,483)	(1,243)	(1,124)	805,421
Other operating revenue	43,154				(5,601)	37,552
Raw materials, ancillary materials and goods	(711,125)	229,561		297		(481,267)
Costs for services	(210,590)			826	5,640	(204,124)
Costs for Rentals and Leases	(14,125)					(14,125)
Personnel costs	(37,842)			120	1,118	(36,604)
Depreciation, amortisation, provisions and write-downs	(42,811)				(454)	(43,265)
Other operating costs	(36,663)		4,483		421	(31,760)
Income/(expenses) from commodity risk management	(3,475)	(943)				(4,419)
Portion of income/(expenses) from measurement of non-financial investments using the equity method	558					558
Operating result	**27,969**	**-**	**-**	**-**	**-**	**27,969**

The Group has broken down the revenue deriving from contracts with customers into categories representing how the nature, amount, time frames and uncertainties of revenue and cash flows are conditioned by economic factors. The Group has also provided disclosure on the relationship between the disclosure broken down in terms of revenue and the disclosure of revenue per sector. For the disclosure on revenue, reference is made to note 8.1 Revenue from contracts with customers.

The other components recognised mainly refer to the recognition of revenue for staff seconded to third parties under personnel costs and the reclassification of contributions for connections as referred above.

There was no material impact on the cash flow statement and comprehensive income statement.

Amendments to IFRS 2 Classification and measurement of share-based payments

The IASB issued amendments to IFRS 2 Share-based payments, involving three main areas: the effects a vesting condition on the measurement of a transaction with payment based on shares paid in cash; the classification of a transaction with payment based on shares settled net of the obligations for withholdings; the accounting treatment when a change in the terms and conditions of a transaction with payment based on shares changes its classification from settled in cash to settled with capital representative instruments.

At the time of adoption, entities must apply the changes without restating previous periods, but retrospective application is permitted if chosen for all three amendments and other criteria are met. These amendments are in force for financial years starting 1 January 2018 or subsequently, and early application is allowed.
These amendments will have no impact on the Group's financial statements.

Amendments to IFRS 10 and to IAS 28: sale or contribution of assets between an investor and its associate or joint venture

The amendments deal with the conflict between IFRS 10 and IAS 28 regarding the loss of control of a subsidiary that is sold or contributed to an associate or joint venture. The amendments clarify that the gain or loss from the sale or contribution of the asset that constitutes a business, as defined under IFRS 3, between an investor and its associate or joint venture, must be fully recognised.
Any gain or loss resulting from the sale or contribution of the asset not constituting a business, is only recognised to the extent of the portion held by third party investors in the associate or joint venture. The IASB has indefinitely postponed the application date for these amendments, but if an entity were to decide to apply them early, it should do so prospectively.

2.5.2 Accounting standards, amendments and interpretations endorsed by the European Union, but not yet applicable and not adopted early by the Group

The standards and interpretations that had already been issued but are not yet in force at the reporting date of the Group's consolidated financial statements are set out below. The Group intends adopting these standards and interpretations when they enter into force, if applicable.

IFRS16 – Leases

IFRS 16 was issued in January 2016, and replaces IAS 17 Leases, IFRIC 4 Determining Whether an Arrangement Contains a Lease, SIC-15 Operating Leases —Incentives and SIC-27 Evaluating the Substance of Transactions in the Legal Form of a Lease.

IFRS 16 defines the principles for recognising, measuring, presenting and disclosing leases and requires that lessees recognise all lease contracts in the financial statements based on a single model similar to the one used to recognise financial leases pursuant to IAS 17.

The standard provides for two exemptions for lessees from applying the model: lease contracts relating to "low value" assets (e.g. personal computer) and short-term lease contracts (i.e. lease contracts with a rental period o 12 months or less). At the commencement date of the lease, the lessee recognises a liability for the rentals (i.e. the lease liability) and an asset representing the right-of-use for the asset under a lease, for the duration of the contract (i.e. right-of-use). Lessees must recognise the interest payable on the lease liability and amortisation of the right of use asset separately.

Lessees must also remeasure the amount for the lease liability should specific events occur (for example: a change in the lease's term, a change in the future lease payments following a change in an index or rate used to determine said payments). The lessee will generally recognise the remeasurement amount for the lease liability as an adjustment to the right-of-use.

The accounting method for the lessor with regard to IFRS 16 remains largely unchanged compared to the current accounting policy based on IAS 17. Lessors will continue to classify all leases, using the same IAS 17 classification standard, distinguishing between two types of leases: operating leases and finance leases.

IFRS 16 is effective for financial periods as from 1 January 2019 and requires that lessees and lessors provide more extensive disclosure compared to IAS 17.

Transition to IFRS 16

The Group expects to adopt IFRS 16 retrospectively for every prior reference period. The Group will decide to apply the standard to contracts previously identified as leases that apply IAS 17 and IFRIC 4. The Group will therefore not apply the standard to contracts that were not previously identified as leases as per IAS 17 and IFRIC 4.

The Group will elect to apply the exemptions proposed by the standard on lease contracts, where the lease term ends within 12 months of the date of initial application and the lease contract for the underlying asset has a low value. The Group has signed lease contracts for some office equipment (e.g. personal computers, printers and photocopiers), which are deemed to be of negligible value.

As a result of applying IFRS 16, the Group's operating result will improve, whereas financial charges and liabilities will increase. This derives from the change to the accounting treatment of lease expenses classified as operating leases in terms of IAS 17.

The Group has conducted a preliminary analysis on the effects of IFRS 16, estimating the impact from the first application on Lease liabilities and Asset right of use at 01 January 2019 to be around € 14.7 million, and in terms of the 2019 income statement, lower external costs for around € 3.9 million, higher amortisations for around € 3.7 million and higher financial expenses for around € 0.3 million, before the related tax effects.

In implementing the new standard with effect from 2019, we will also take into account the interpretations that will be issued in this regard by the IFRS Interpretations Committee (IFRIC), in particular regarding the surface rights and the concession fees in a service concession arrangement and the accounting practices that will be followed.

IFRIC Interpretation 23 Uncertainty over Income Tax Treatment

The Interpretation defines the accounting treatment for income tax when the tax treatment creates uncertainty effecting the application of IAS 12, and is not applied to taxes that do fall within the scope of IAS 12, nor does it specifically include requirements relating to interest or sanctions attributable to uncertain tax treatments.

The interpretation deals specifically with the following points:

- Whether an entity should consider uncertain tax treatments separately;
- The entity's assumptions for taxation authorities' examinations of tax treatments;
- How an entity should determine taxable profit (or tax loss), the tax base, unused tax losses, unused tax credits and tax rates;
- How an entity should treat changes in facts and circumstances.

An entity needs to decide whether to consider each uncertain tax treatment separately or collectively with other (one or more) uncertain tax treatments. An approach providing better predictions for the resolution of the uncertainty should be followed. The Interpretation is effective for financial years starting 1 January 2019 or subsequently, but certain concessions are available for first time applications. The Group will apply the Interpretation from the date it enters into force, actually it is going to value the possible impacts. Furthermore, the Group may need to define processes and procedures to obtain the information needed to apply the Interpretation in a timely manner.

Amendments to IFRS 9: Prepayment Features with Negative Compensation

In terms of IFRS 9, a debt instrument can be measured at amortised cost or at fair value in the comprehensive income statement, on condition that the cash flows that are "solely payments of principal and interest on the reference amount" (SPPI principle) and the instrument is classified in the appropriate business model. The amendments to IFRS 9 clarify that a financial asset exceeds the SPPI principle independently of the event or circumstances that cause the contract's early termination, and independently of which party pays or receives reasonable compensation for the early termination of the contract.

The amendments are to be applied retrospectively and are effective as from 1 January 2019, with early application permitted. These amendments will not impact on the Group's consolidated financial statements.

Amendments to IFRS 10 and to IAS 28: Sale or Contribution of Assets between an Investor and its Associate or Joint Venture

The amendments deal with the conflict between IFRS 10 and IAS 28 regarding the loss of control of a subsidiary that is sold or contributed to an associate or joint venture. The amendments clarify that the gain or loss from the sale or contribution of the asset that constitutes a business, as defined under IFRS 3, between an investor and its associate or joint venture, must be fully recognised. Any gain or loss resulting from the sale or contribution of the asset not constituting a business, is only recognised to the extent of the portion held by third party investors in the associate or joint venture. The IASB has indefinitely postponed the application date for these amendments, but if an entity were to decide to apply them early, it should do so prospectively. The Group will apply these amendments when they come into force.

Amendments to IAS 19: Plan Amendment, Curtailment or Settlement

The amendments to IAS 19 set out the accounting rules in the case of a plan amendment, curtailment or settlement occurring during the reference period. The amendments stipulate that when a plan amendment, curtailment or settlement occurs during the period, it is mandatory for the entity to:

- Determine the cost of the service for the remaining period subsequent to the plan amendment, curtailment or settlement, using the actuarial reference assumptions for remeasuring the net liability (asset) for defined benefits so that it reflects the benefits offered by the plan and the plan's assets after this event;

- Determine the net interest for the remainder of the period after the plan amendment, curtailment or settlement using: the net defined benefit liability (asset) reflecting the benefits offered under the plan and the plan assets after that event; and the discount rate used to remeasure that net defined benefit liability (asset).

The amendments clarify that an entity firstly must determine any past service costs, rather than the gain or loss realised on settlement, without considering the effect of the asset ceiling. This amount is recognised in profit (loss) for the period.

Subsequently after the plan amendment, curtailment or settlement, the entity then determines the effect of the asset ceiling. Any change in that effect, excluding amounts included in net interest, is recognised in other comprehensive income.

The amendments are applicable to plan amendments, curtailments or settlements occurring as from the first reporting period that begins on or after 1 January 2019, and early application is permitted.

These amendments will only apply to future changes to the plan, curtailments or Group transactions.

Amendments to IAS 28: Long-term interests in associates and joint ventures

The amendments specify that an entity applies IFRS 9 to long-term interests in associates or joint ventures, to which the equity method is not applied but that, in substance, form part of the net investment in the associate or joint venture (long-term interests).

This clarification is relevant because it implies that the expected credit loss model in IFRS 9 applies to such long-term interests.

The amendments also clarified that, in applying IFRS 9, an entity does not take account of any losses of the associate or joint venture, or any impairment losses on the net investment, recognised as adjustments to the net investment in the associate or joint venture that arise from applying IAS 28 Investments in Associates and Joint Ventures.

The amendments are to be applied retrospectively and are effective as from 1 January 2019, with early application permitted. Since the Group does not hold long-term interests in its associates and joint ventures, the amendments will not impact the consolidated financial statements.

Annual improvements 2015-2017 Cycle (issued in December 2017)

These improvements refer to:

IFRS 3 Business Combinations

The amendments clarify that when an entity obtains control of a business that is a joint operation, it applies the requirements for a business combination, which is realised over several stages, including the remeasurement of the fair value in the previously held interests in the joint operation's assets and liabilities. in doing so, the purchaser remeasures the entire interest previously held in the joint operation.

An entity should apply the amendments to business combinations with acquisition dates on or after 1 January 2019. Earlier application is permitted. These amendments apply to the Group's subsequent business combinations.

IFRS 11 Joint Arrangements

A party that participates in a joint operation without having joint control, may obtain joint control over that joint operation if that asset constitutes a business according to the definition in IFRS 3.
The amendments clarify that the interests previously held in that joint operation are not remeasured. An entity must apply the amendments to transactions in which it obtains joint control as from the financial period starting 1 January 2019 or after. Earlier application is permitted. These amendments are not currently applicable to the Group, but could become applicable in the future.

IAS 12 Income Taxes

The amendments clarify that the tax effects on dividends are largely associated with past transactions or events that generated the distributable profits, rather than the distribution to shareholders. The entity must therefore recognise the income tax consequences of dividends in profit or loss, other comprehensive income or equity, consistently with where the entity previously recognised this transaction or past event.

The entity applies these amendments for the financial years starting 1 January 2019 or subsequently, and early application is allowed. When applying these amendments for the first time, the entity applies them to the effects that the taxes had on the dividends recorded as from the start of the first financial period. Given that the Group's current practices are consistent with these amendments, the Group does not foresee any impact on its consolidated financial statements.

IAS 23 Borrowing Costs

The amendments clarify that an entity treats as a non-specific borrowing, any borrowing made and that from the outset was intended to develop an asset, in the case where all the necessary actions to prepare said asset for use or sale have been completed.

An entity applies these amendments to the financial expenses incurred as from the start of the period in which the entity applies these amendments for the first time. An entity applies these amendments for the financial years starting 1 January 2019 or subsequently, and early application is allowed. Given that the Group's current practices are consistent with these amendments, the Group does not anticipate any impact on its consolidated financial statements.

"Amendments to IAS 1 and IAS 8 – Definition of Material", issued in October 2018

The amendments clarify the definition of "material" as follows: "information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity." By including the concept of "obscuring information" in the new definition, the amendments specify that information is obscured when it is communicated in such a way that it could have the same effect as its omission or misstatement. To avoid situations where there is an obligation to include information in the financial statements that cannot influence the decisions of primary users, the amendments introduce a new threshold in the definition of material, replacing "could influence" with "could reasonably be expected to influence". Finally, the amendments clarify that the entity has an obligation to consider the financial statements' primary users (e.g. existing and potential investors, lenders and other creditors) when deciding on which information to make public. Prior to endorsement, the amendments will be applicable as from the financial periods starting 1 January 2020 or subsequently. Earlier application is permitted. The Group is currently assessing the potential effects arising from the future application of these new provisions.

"Amendments to IFRS 3 – Definition of a Business", issued in October 2018.

The amendments clarify that to be considered a business, the acquisition must include, as a minimum, an input and a substantive process that together significantly contribute to the ability to create outputs. The new guidelines offer a reference framework to assess whether an input and substantive process exist. The definition of business and output now concentrates on goods and services provided to customers and removes the reference to an ability to reduce costs and other economic benefits. In addition, it is no longer necessary to assess whether market participants are capable of replacing any missing inputs or processes and continuing to produce an output. The amendments also introduce an optional test, which if positive, eliminates the need for additional assessments (concentration test). In terms of this test, a set of acquired activities and assets is not a business if substantially all the fair value of the gross assets acquired is concentrated in a single identifiable asset (or group of similar identifiable assets).

Prior to endorsement, the amendments will be applicable as from the financial periods starting 1 January 2020. Earlier application is permitted. The Group is currently assessing the potential effects arising from the future application of these new provisions.

"Revised Conceptual Framework for Financial Reporting"

"Revised Conceptual Framework for Financial Reporting", issued in March 2018. The revised version includes wide ranging amendments in relation to the previous 2010 version. The revised Conceptual Framework introduces some new concepts, provides better definitions and measurement criteria and clarifies some important concepts. In particular, it defines:

- the general objective of financial reporting;
- the qualitative characteristics making financial information useful;
- a description of the reporting entity and its boundary;
- definitions of an asset, liability, equity, income and expenses, and guidance on supporting these definitions;
- criteria for the recognition and derecognition of assets and liabilities in financial statements;
- measurement bases and guidance on how to use them;
- concepts and guidance on presentation and disclosure; and
- concepts relating to capital and capital maintenance.

The revised Conceptual Framework is accompanied by a Basis for Conclusions. The IASB also issued a separate accompanying document, "Amendments to References to the Conceptual Framework in IFRS Standards", which outlines the amendments to the relevant standards so as to update the references to the revised Conceptual Framework.

The revised Conceptual Framework will be applicable as from the financial periods starting 1 January 2020. Earlier application is permitted. The Group is currently assessing the potential effects arising from the future application of these new provisions.

3. Significant accounting judgements, estimates and assumptions

In terms of IFRS-EU, the preparation of the Group's financial statements requires directors to make discretionary assessments, estimates and assumptions that influence the figures for income, costs, assets and liabilities and the relevant disclosures, including potential liabilities. Management's estimates and opinions are based on prior experience and on all other aspects deemed reasonable in that case; they are adopted when the carrying value for assets and liabilities is not easy to discern from other sources. The final results may therefore differ from those estimates. Estimates and assumptions are revised periodically, and the effects of any changes are reflected in the income statement, where the revision refers only to that financial period. Where these changes involve both current and future financial periods, the change is recognised in the period when the revision was made and in the relevant future periods.
To provide a better understanding of the financial statements, note 3.2 "Significant accounting estimates" hereunder shows the main items affected by the use of accounting estimates and that include a significant component of opinions by management, highlighting the main assumptions used in the assessment process, in accordance with the aforementioned international accounting standards. The critical nature of these assessment lies in fact with the recourse made to assumptions and/or professional opinions relating to issues that are by nature uncertain.
Changes to the conditions underlying the assumptions and opinions adopted could impact significantly on subsequent results.
Additional information relating to the Group's exposure to risks and uncertainties is provided in the following paragraphs:

- Capital management;
- Objectives and criteria for financial risk management;
- Disclosure on sensitivity analysis.

3.1 Judgements

In applying the Group's accounting standards, directors have taken decisions based on the following discretionary assessments (excluding those that involve estimates), with a significant effect on the figures recorded in the financial statements.

(i) Assets held for sale or disposal

The Group has designated as non-current assets held for sale/discontinued, the Polish company Useneko, operating in the distribution of gas in Poland, held for 100% by Estra S.p.A.

The Board of Directors considers that the subsidiary has the characteristics to be classified as an asset held for sale or discontinued asset, based on the following reasons:

- The subsidiary Useneko represents a separate geographic area, specifically, the only one outside of Italy;
- the investment's carrying value will primarily be recovered in a sales transaction, instead of its continued use;
- the asset is available for immediate sale in its current condition, subject to conditions that are usual for the sale of these assets. The sale is deemed highly probable;
- Management is involved in planning the asset's disposal and negotiations with the potential buyer are at an advanced stage;
- the finalisation of the sale has gone on for over a year due to events and circumstances beyond the entity's control, associated with certain critical aspects that emerged with interventions to restore the network and procedures to regularise contracts for rights of access, representing preparatory work for the sale of the business;

- The Group has undertaken actions to resolve these critical aspects in order to dispose of the company.

Based on this designation, the subsidiary as presented in accordance with IFRS 5: Useneko assets and liabilities were presented on a straight line basis under "asses/liabilities held for sale", and the effect of the asset at its presumed realisable value is recorded as Profit (loss) deriving from assets held for sale. The Board of Directors valued the further delay in the disposal of the asset not dependent by internal reason. The Board of Director is still committed to the plan to sell. In this financial statement the Board adjusted the net value of the assets held for sales at the fair value, equal to € 0,65 million. They also accounted a € 2,3 million write-down, in "Gain/(losses) from assets held for sales" according to the IFRS 5.

(ii) Joint control in an entity where the Group holds less than the majority of shares

The Group with the shareholder Viva Servizi S.p.A. jointly controls the company EDMA Reti Gas S.r.l. at 31 December 2018, even though individually it holds 45% of the share capital. This is because on the basis of the Articles of Association and shareholder agreements that require the unanimous consent of both parties in decisions relating to significant assets, the Group jointly decides on the financial, management and strategic policies of the subsidiary together with Viva Servizi S.p.A.

Given the non-financial nature of the investment and the management and operational role played by the Group, the portion of the subsidiary's result attributable to the Group is measured using the equity method, and recorded in the income statement before the operating result.

(iii) Identification of Cash Generating Units (CGU)

In applying IAS 36 "Impairment of assets", goodwill recognised in the financial statements based on business combination operations is allocated to individual CGUs or groups of CGUs, in that they are expected to benefit from the combination. A CGU represents the smallest group of assets that generates cash flows that are largely independent.
In the process to identify the CGUs, management has taken into account the specific nature of the asset and business it belongs to (territorial area, business area, reference regulations, etc.), checking that the cash flows deriving from a group of assets is strictly independent and autonomous from those deriving from other assets (or groups of assets).

The assets included in each CGU are also identified on the basis of the procedures management uses to manage and monitor them in the scope of the business model adopted. More specifically, the following CGUs were identified:

* Sale of Gas and Electricity CGU
* Centria gas distribution CGU
* Gergas gas distribution CGU
* Natural gas trading CGU

in addition, other CGUs were identified that overlap with individual companies falling in the scope of IFRS 8 as "Other Operating Segments", as specified in note 4 "Operating Sectors".

3.2 Significant accounting estimates

The application of generally accepted accounting standards for the preparation of the financial statements, requires that Management makes accounting estimates based on complex and/or subjective judgement, past experience and assumptions deemed reasonable and realistic on the basis of information known at the time of the estimate. The use of these estimates influence the value of assets and liabilities and the information related to potential assets and liabilities at the financial statements date, as well as the income and expense amounts in the reference period. Final results could differ from the estimates made, due to the uncertainties characterising the assumptions and conditions generating the estimates. The main accounting estimates which are considered critical included in the process to prepare the financial statements are shown below, in that they are highly dependent on subjective opinions, assumptions and estimates on issues that by their nature are uncertain. Any changes to the conditions on which the opinions, assumptions and estimates adopted are based, could impact significantly on subsequent results.

(i) Impairment of non-financial assets

An impairment is recorded in the value of a non-financial asset when events or changes in circumstances lead to the assumption that the carrying amount is not recoverable. The events that could determine a loss in an asset's value are changes to business plans, regulatory changes, a high turnover of customers, changes in market prices, reduced usage of plants. The decision whether to proceed with an impairment and quantification thereof depends on Management's assessments made on complex and highly uncertain aspects, which include future pricing trends, the impact of inflation, the customer drop-out or defection rate (churn rate).
The impairment occurs when the asset or cash generating unit's carrying value exceeds its recoverable value, which is the higher between its fair value less sales costs and its use value. Fair value less sales costs is the amount obtained from the sale of an asset or cash generating unit in a free transaction between cognisant and available parties, less the disposal costs. In determining this fair value, Management may also use technical reports prepared by third parties, especially with regard to the industrial value of assets under concession (RIV).
The calculation for the use value is based on the discounted cash flow model. The cash flows deriving from the approved provisional plans that are based on accurate estimates and do not include restructuring plans that the Group has not yet undertaken or significant future investments that would increase the value of the assets making up the cash generating unit subject to the assessment. The recoverable value depends significantly on the discount rate used in the discounted cash flow model, as well as the expected cash flows in the future and growth rate used for the extrapolation. The key assumptions used to determine the recoverable value for the different cash generating units, including a sensitivity analysis test, are detailed in the following notes Impairment test pursuant to IAS 36 on the goodwill value (10.1.4 Impairment test pursuant to IAS 36 on the goodwill value) and Impairment test pursuant to IAS 36 on the value of tangible assets (10.1.2 Impairment test pursuant to IAS 36 on the value of tangible assets).

(ii) Business combinations

The recognition of business combination operations implies allocating the difference between the purchase cost and net carrying value to the assets and liabilities of the acquired business. For most assets and liabilities, the allocation of the difference is done by recording assets and liabilities at their fair value. If it is positive, the non-attributable portion is recognised in goodwill, and if negative, in the income statement. The allocation of the price paid on a provisional basis is subject to review/updating within the 12 months after the acquisition, with due regard for any new information on the facts and circumstances that existed at the acquisition date. In the allocation process, the Group bases itself on available information, and on external assessments for the more significant business combinations; the allocation process also requires an overall assessment to be made by Management, which is also made in relation to available information.

(iii) Assets estimated useful life

Amortisations/depreciations are calculated on the basis of the asset's estimated useful life, the residual concession term, the drop-out or defection rate (churn rate). Useful life is determined by Directors, with the help of technical experts at the time of recording the asset in the financial statements; the assessment regarding the useful life term is based on historic experience, market conditions, forecasts on future events that could impact on the useful life, including changes in technology. The Group periodically reviews changes in technology and the sector, the customer churn rate, the expenses for dismantling/closing, and the recovery value to update the residual useful life. This periodic update could involve a change to the amortisation/depreciation period, and therefore also the depreciation rate for future periods.
With regard to the term for concessions relating to the distribution of natural gas, Italian Legislative Decree no. 164/00 (Letta Decree) stipulated that all concessions must be put out to tender within the expiry of the so-called “transitory period”, and that the new concession term could not exceed twelve years. On the outgoing operator's expiry of the concessions, a set indemnity is paid based on industrial estimate criteria, against the transfer of the distribution networks. In so far as the estimates conducted by directors are concerned when determining the depreciation/amortisation criteria, the assets' net carrying value on expiry of the concession should not be higher than the residual industrial value (RIV).

(iv) Defined benefit plans

The cost of defined benefit pension plans after employment and the current value of the defined benefit obligation are determined by using actuarial assessments. The actuarial assessment involves calculations using various assumptions that can differ from effective future developments. These assumptions include determining the discount rate, future salary increases, the mortality rates, and future pension increases. Due to the complexity of this assessment and its long-term nature, these estimates are especially sensitive to changes in the assumptions. All assumptions are reviewed on an annual basis.
The discount rate represents the parameter subject to the greatest variations. In determining the appropriate discount rate, directors use the corporate bond interest rate as a reference, in currencies consistent with the currencies for the defined benefit obligations, that are assigned a minimum AA rating by internationally recognised rating agencies and with average expiries corresponding to the expected term of the defined benefit obligation. Obligations are subject to an additional qualitative analysis and those that present a credit spread that is deemed excessive are eliminated from the obligations population on which the discount rate was calculated, because they do not represent a high-quality category of obligations.
The mortality rate is based on tables available for the specific mortality of each country. These mortality tables tend to vary only at intervals in relation to demographic changes. Future salary increases and pension increases are based on the expected inflation rate for each country. Additional information is provided in Note Employee severance indemnity.

(v) Fair value measurement of financial instruments

When the fair value of an asset or liability in the statements of financial position cannot be measured on the basis of listing on an active market, the fair value is determined by using different valuation techniques, including the discounted cash flow model. The inputs used in this model are taken from observable markets, where possible, but should this not be possible, a certain level of estimation is required to define fair values. Estimates include considerations on variables such as liquidity risk and credit risk, if deemed relevant. Changes in the assumptions in these aspects could have an impact on the fair value of the financial instruments recorded.

(vi) Provisions for risks and allowance for bad debt

Provisions for risks are done on the basis of expectations of actual events, which according to available information and the support of lawyers and consultants assisting the Group, are deemed to be reasonably certain.
The recoverability of receivables recorded for the sale of electricity and gas, together with the need to record any write-downs in these, are the result of an assessment process by Company Management, involving complex and/or subjective opinions The calculation is based on a client cluster analysis, these are integrated by specifics analytics valuations. These analyses are performed by a matrix for the measurement of the expected losses (provision matrix). The percentage of write-down are determined by an historical data analysis, these regarding the losses on trade receivables, the creditworthiness, collection of receivables by the time bucket, credit status and finally regarding the historical trend of the specific cluster. These analysis take in consideration the actual information that could influencing the expected credit losses.

(vii) Revenue recognition

Revenue from the sale of electricity and gas to business, retail and domestic customers is recognised and stated at the time of providing the supply, recorded according to a predetermined calendar for consumption readings, and include the estimate for the supply of gas and electricity provided to end customers and not yet invoiced at 31 December. This estimate is obtained as the difference between consumption (effective or estimated based on the customers' historic consumption and other factors that could influence consumption, such as weather conditions) already invoiced by the end of the financial period and the total quantity released into the distribution network, net of the estimate of network losses.; the estimate is recorded in specific provisions for invoices to be issued. The volumes distributed and allocated are communicated by distributors and transporters, both nationally and locally, and are subject to potential adjustments in subsequent years as required by reference regulations. The extent of gas and electricity volumes released into the network and not yet invoiced, obtained in this way, is valued according to the type of customer, based on the incidence of the respective volumes already invoiced during the period and based on the relative average tariff in force during the period.

The provision for revenue from invoices to be issued for the sale of gas and electricity to end customers is therefore the outcome of a complex estimate based on distributed and allocated volumes, subject to adjustments, and is influenced by the professional judgement of Company Management. Please refer to 10.2.2. Trade receivables for further information.

4. Segment information

For management purposes, the Group is organised into *strategic business units* ("SBU"), based on the products and services provided, and qualifying as operating sectors in terms of IFRS 8, as detailed below:

(i) Distribution of natural gas

The SBU's activity includes the technical and operational management of the natural gas distribution network.

(ii) Natural gas and electricity sales

The SBU's activity is represented by the sale of methane gas and electricity on the wholesale and retail markets. Sales area support is provided by the gas and electricity procurement activities, dispatching, storage and logistics and portfolio optimisation.

(iii) Corporate and other sectors

The "Corporate and other sectors" SBU includes:

- the technical and operational management of telecommunications networks and their marketing (this also includes activities related to video surveillance services, data transmission, telephony and internet access);
- the provision and exploitation of plants producing energy from renewable sources with particular reference to solar, wind and biomass sources;
- the management of heating systems owned by third parties (heat management services) and facility management;
- the marketing of liquid propane gas;
- the holding company's activities in terms of management and logistics support provided to other companies in the Group.

In the consolidated financial statements at 31 December 2017, the Group had also identified the IFRS 8 "**Natural gas trading"** operating sector, representing the natural gas trading business, which focuses on taking advantage of added profit opportunities in the trading sphere within predefined risk limits, aimed at improving purchasing and procurement conditions by optimising the Group's assets (storage and transportation capacity for natural gas and flexibility in long-term supply contracts) ("Industrial portfolio").

Due to the effects of the net accounting of costs and income from trading activity as required by IFRS 15 that is effective as from 01 January 2018, the sector does not exceed the quantitative thresholds set by IFRS 8, which would require separate disclosure.

During 2018, following the completion of the operations initiated at the end of the previous financial period to acquire total control of the share capital and subsequent merger by incorporation into Estra Energie S.r.l.of Exo Energy Trading S.r.l., a company operating in natural gas trading previously with mixed holdings and governance, the Group undertook the internal reorganisation of the natural gas sales and electricity sales SBU, placing the gas trading activity and the supply of gas to end customers under the same decision-making level in terms of assigning objectives, allocating resources and monitoring results. Based on this reorganisation, and the similar characteristics in terms of the Industrial Portfolio (such as market, underlying asset and counterparties), as from these consolidated financial statements, trading results will be included in the operating sector "Sale of gas and electricity", as per IFRS 8, par. 29.

The other sectors have different economic characteristics, organisational criteria and performances, but do not exceed the quantitative thresholds to the extent of making it necessary to provide separate disclosure.

The Group operates in Italy, with the exception of the discontinued operation relative to the subsidiary Useneko located in Poland. For the effects of the discontinued operation, reference is made to the specific paragraph in this document.

Directors separately assess the results achieved by operating sectors so as to make decisions regarding the allocation of resources and monitor performance. Sector performance is measured on the basis of results, which are assessed consistently with the consolidated financial statements' result.
The Group's financial management (including costs and expenses on funding) and income taxes are managed at Group level, and are not allocated to operating sectors.
The transfer price between operating sectors is negotiated internally on the same basis as transactions with third parties.
Directors separately monitor only the activities of the operating sector, whereas liabilities are monitored at Group level.

A comparative analysis of the economic data per operating sector is provided below for the 2018 and 2017 financial periods. To ensure a better comparison with 2018 figures, prepared as per IFRS 15, the results for operating sectors at 31/12/2017 were restated so as to represent:

- the net margin for gas trading activity in the Gas and electricity sales operating segment with consequent reclassification of costs and revenue in the item "Income/(expenses) from commodity management";
- revenue from pass-through tariffs net of the related costs in the natural gas distribution operating segment;
- revenue from pass-through ancillary services net of the related costs in the gas and electricity sales operating segment;
- revenue from personnel seconded to third parties to reduce the personnel costs of operating sectors.

Operating results by segment

Operating sectors	Distribution of natural gas		Gas and electricity sales		Corporate and Others		Adjustments and eliminations		Total	
	Year ended 31 December		Year ended 31 December		Year ended 31 December		Year ended 31 December		Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**
Total Revenues	110,179	87,954	750,633	653,524	56,002	45,909	(73,841)	(71,528)	842,973	715,859
External costs	(67,738)	(50,592)	(699,837)	(585,535)	(37,541)	(32,539)	73,841	71,533	(731,276)	(597,132)
Personnel costs	(12,790)	(10,698)	(10,870)	(10,241)	(12,945)	(11,706)		(5)	(36,604)	(32,651)
Income/(expenses) from commodity risk management			(4,419)	1,359					(4,419)	1359
Portion of profit/(loss) from non-financial associates and joint ventures					558	225			558	225
Gross operating margin (EBITDA)	**29,651**	**26,664**	**35,508**	**59,107**	**6,074**	**1,889**	**-**	**-**	**71,233**	**87,660**
Depreciation, amortisation and write-downs	(13,066)	(9,696)	(12,492)	(14,118)	(9,354)	(9,371)			(34,912)	(33,185)
Provisions	(62)	(129)	(8,225)	(9,463)	(65)	(186)			(8,353)	(9,779)
Operating result (EBIT)	**16,523**	**16,839**	**14,790**	**35,526**	**(3,345)**	**(7,668)**	**-**	**-**	**27,969**	**44,696**

Asset values by segment

Operating sectors	Distribution of natural gas		Gas and electricity sales		Corporate and Others		Adjustments and eliminations		Total	
Sector activities	**Year ended 31 December**		**Year ended 31 December**		**Year ended 31 December**		**Year ended 31 December**		**Year ended 31 December**	
(amounts in thousands of euro)	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**
Non-current assets	298,800	255,022	176,990	167,167	101,870	104,909	(4)	(11,712)	577,657	515,386
Current assets	81,698	40,906	384,774	309,031	224,236	96,284	(45,010)	(73,737)	645,698	372,484
Assets held for sale					930	2,350			930	2,350
Total assets	**380,498**	**295,928**	**561,764**	**476,198**	**327,036**	**203,543**	**(45,014)**	**(85,449)**	**1,224,285**	**890,220**

The figures above represent the breakdown of the asset composition per SBU, excluding the financial components, as Group financial management is managed at Group level.

Investments and business combinations by segment

Investments per operating sector	Distribution of natural gas		Gas and electricity sales		Corporate and Others		Total	
(amounts in thousands of euro)	**Year ended 31 December**		**Year ended 31 December**		**Year ended 31 December**		**Year ended 31 December**	
	2018	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**
Investments in intangible assets	20,888	12,515	7,050	5,801	2,647	2,225	30,586	20,541
Investments in intangible assets deriving from business combinations	12,690		15,116	19,943	3		27,809	19,943
Total investments (including business combinations) in intangible assets	**33,578**	**12,515**	**22,167**	**25,744**	**2,650**	**2,225**	**58,395**	**40,484**
Investments in tangible assets	510	178	215	750	8,411	4,125	9,136	5,053
Investments in tangible assets deriving from business combinations	84		75	225	420	35,418	580	35,643
Total investments (including business combinations) in tangible assets	**594**	**178**	**291**	**975**	**8,831**	**39,543**	**9,716**	**40,696**
Total	**34,172**	**12,693**	**22,457**	**26,719**	**11,481**	**41,768**	**68,111**	**81,180**

Net Income reconciliation

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Result for sectors (net of adjustments and eliminations)	**27,969**	**44,697**
Financial income	2,113	3,335
Financial expenses	(15,368)	(17,548)
Gains or losses on currency conversions	(2)	
Portion of income/(expenses) from valuation of financial investments using the equity method	427	280
FINANCIAL MANAGEMENT	**(12,830)**	**(13,933)**
PROFIT BEFORE TAXES	**15,139**	**30,764**
Income taxes for the year	(5,108)	(14,321)
NET RESULT FROM OPERATING ACTIVITIES	**10,031**	**16,443**
Net profit/(loss) from discontinued operations / assets held for sale	(2,320)	(377)
NET RESULT FOR THE YEAR	**7,711**	**16,066**

5. Capital management

For the purposes of Group capital management, this includes share capital issued, the share premium reserve, all other capital reserves attributable to the Parent Company's shareholders and the third party shareholders' equity. The main objective in capital management is to maximise value for shareholders. The Group manages the asset structure based on economic conditions and the requirements of financial covenants.

The Group controls the asset structure using a gearing ratio, referring to the ratio between net financial debt and consolidated shareholders' equity. The Group's policy requires that this ratio remains below 1. The Group includes under net financial debt, cash and cash equivalents, receivables and payables to credit institutions, payables to bondholders, leasing companies and shareholder loans, excluding discontinued operations. Also excluded are financial assets and liabilities deriving from the fair value measurement of derivative contracts and trading on commodities.

	(amounts in thousands of euro)	**Year ended 31 December**	
		2018	**2017**
	Cash and cash equivalents(1)	228,678	229,774
	Current financial receivables (2)	17,422	12,259
	Current financial debt (3)	136,122	90,717
	Net current financial debt	**(109,993)**	**(151,316)**
	Non-current financial debt (4)	373,077	368,240
D	**Net financial debt**	**263,084**	**216,924**
E	**Shareholders' equity**	**325,253**	**331,920**
D/E	***Leverage***	**0.81**	**0.65**

(1)Equal to the item Cash and cash equivalents; (2) Equal to the item Other current financial assets; (3) Equal to the sum of the items Current portion of medium/long-term loans, Short-term borrowings and Other current financial liabilities; (4) Equal to the item Non-current portion of medium/long-term loans

In order to achieve this objective, the Group's capital management aims, *inter alia*, to ensure that covenants associated with interest-bearing loans and bond loans are respected, as these define the asset structure requirements. Violations of covenants would entitle banks/lenders to ask for the immediate repayment of loans and funding.
Based on the information in the financial statements at 31 December 2018, there were no violations of covenants associated with funding and loans during the current period.

Please see paragraph Liquidity Risk for additional information.

6. Group Information

Scope of Consolidation

The table below shows the scope of consolidation at 31 December 2018 compared with the scope of consolidation at 31 December 2017:

			31/12/2018				31/12/2017			
Company name	**Registered office**	**Primary activity**	**Portion attributable to the Group**	**Share of direct control**	**Share of indirect control**	**Notes**	**Portion attributable to the Group**	**Share of direct control**	**Share of indirect control**	**Notes**
Parent company										
E.S.TR.A. S.p.A.		Holding								
Fully consolidated subsidiaries										
ESTRACOM S.p.A.	Prato (PO)	Telecommunications	**79.32%**	79.32%			**79.32%**	79.32%		
Estra Clima S.r.l.	Prato (PO)	Heat management	**100.00%**	100.00%			**100.00%**	100.00%		
E.S.TR.A. Energie S.r.l.	Siena (SI)	Gas sales	**100.00%**	100.00%			**100.00%**	100.00%		
ETA3 S.p.A.	Arezzo (AR)	Holding					**100.00%**	100.00%		
ESTRA Elettricità S.p.A.	Prato (PO)	Electricity sales					**100.00%**		100.00%	(1)
Gergas S.p.A.	Grosseto (GR)	Gas distribution	**79.93%**	79.93%			**79.93%**	79.93%		
Centria S.r.l.	Arezzo (AR)	Gas distribution	**99.65%**	99.65%			**99.65%**	99.65%		
SOLGENERA S.r.l.	Prato (PO)	Renewable energies					**100.00%**	100.00%		
Gas Tronto S.r.l.	Spinetoli (AP)	Gas sales	**100.00%**		100.00%	(1)	**92.67%**		92.67%	(1)
Prometeo S.p.A.	Osimo (AN)	Gas and electricity sales	**53.09%**		53.09%	(1)	**53.09%**		53.09%	(1)
Piceno Gas S.r.l.	Ascoli Piceno (AP)	Gas sales	**100.00%**		100.00%	(1)	**100.00%**		100.00%	(1)
Cavriglia SPV S.P.A.	Prato (PO)	Renewable energies	**100.00%**	100.00%			**100.00%**	100.00%		
Tegolaia SPV S.p.A.	Fano (PU)	Renewable energies	**100.00%**	100.00%			**100.00%**	100.00%		
EDMA S.r.l.	Ancona (AN)	Holding					**100.00%**	100.00%		
TuAreti S.r.l.	Arezzo (AR)	Gas distribution	**100.00%**	100.00%			**100.00%**		100.00%	(2)
Gas Marca S.r.l.	Civitanova Marche (MC)	Gas sales	**100.00%**		100.00%	(1)	**49.00%**		49.00%	(1)
Melfi Reti Gas S.r.l.	Pettoranello (IS)	Gas distribution	**99.65%**		100.00%	(4)				
Idrogenera S.r.l.	Prato (PO)	Renewable energies	**51.00%**	51.00%			**50.00%**	50.00%		
Equity consolidated joint ventures										
EDMA S.r.l.	Ancona (AN)	Holding					**45.00%**	45.00%		
EDMA Reti Gas S.r.l.	Ancona (AN)	Gas distribution	**45.00%**	45.00%			**45.00%**	45.00%		
Idrogenera S.r.l.	Prato (PO)	Renewable energies					**50.00%**	50.00%		
Nuova Sirio S.r.l.	Siena (SI)	Renewable energies	**50.00%**	50.00%			**50.00%**	50.00%		
Companies held for sale/disposal										
USENEKO	(POLAND)	Gas distribution	**100.00%**	100.00%			**100.00%**	100.00%		
Sin.It. S.r.l.	Milan (MI)	Gas sales	**11.05%**	11.05%			**11.05%**	11.05%		
Equity consolidated associates										
Blugas Infrastrutture S.r.l.	Cremona	Gas storage	**31.17%**	31.17%			**31.17%**	31.17%		
SIG S.r.l.	Ancona (AN)	Gas distribution	**38.70%**		38.70%		**38.70%**		38.70%	(2)
A.E.S. Fano Distribuzione Gas S.r.l.	Fano (PU)	Gas distribution	**49.00%**		49.00%		**49.00%**		49.00%	(2)
Monte Urano S.r.l.	Rome (RM)	Gas sales	**26.01%**		49.00%	(3)	**26.01%**		49.00%	(3)
Gas Marca S.r.l.	Civitanova Marche (MC)	Gas sales					**49.00%**		49.00%	(1)
Sangro Servizi S.r.l.	Atessa (CH)	Gas sales					**49.00%**		49.00%	(1)

Notes

(1) through Estra Energie Srl

(2) through EDMA S.r.l. (company merged with Estra S.p.A.)

(3) through Prometeo S.r.l.

(4) through Centria

The changes that took place in the **scope of consolidation at 31 December 2018** compared to 31 December 2017 are the following:

- **Subsidiaries**

  - Increased percentage in Group control of Gastronto S.r.l. from 92.67% at 31 December 2017 to 100% at 31 December 2018, following the acquisition of an additional 7.33% shareholding during 2018 by Estra Energie;
  - Addition of Gas Marca S.r.l. into the scope of full consolidation following the acquisition by Estra Energie S.r.l. of the remaining 51% of the share capital. The company held for 49% at 31 December 2017 was consolidated using the equity method;
  - Entry into the scope of fully consolidated companies of Melfi Reti Gas S.r.l. following the acquisition by Estra S.p.A. of the 100% shareholders' Meeting, sold during the year to Centria S.r.l.;
  - Entry into the scope of fully consolidated companies at 51% of Idrogenera S.r.l., already held for 50% by the Group at 31 December 2017, following Estra Energie acquiring a 1% shareholding, consequently acquiring control of the company.
  - Increased percentage in Group control of ETA3 S.p.A. from 66.99% at 31 December 2016 to 100.00% at 31 December 2017, following the acquisition by the Parent Company of the remaining 33.01% shareholding held by third parties;
  - Exit from the scope of fully consolidated companies by EDMA S.r.l., Solgenera S.r.l. and ETA 3 S.r.l. following the merger by incorporation into Estra S.p.A.;
  - Exit from the scope of fully consolidated companies by Estra Elettricità following the merger by incorporation into Estra Energie S.r.l.

A further change in respect of the scope of fully consolidated companies is the acquisition of Metania S.r.l., which merged by incorporation into Estra Energie S.r.l. before the end of the financial period.

- **Associates**

  - Exit from associates and measured using the equity method of Sangro Servizi S.r.l., following the cancellation by mutual consent of the deed of sale for the company shareholding of 7 March 2017 between Coopgas (now merged by incorporation into Estra Energie) and the Municipalities of Atessa, Paglieta and San Vito Chietino, and concurrent sale of the same shareholding to Hera Comm, which was awarded the tender.

7. Business combinations and disposals of assets, and acquisition and disposal of non-controlling interests

7.1 Financial year 2018

- **Acquisition of Metania S.r.l.**

On 6 April 2018, Estra S.p.A. finalised the acquisition from the Alexa di Isernia Group of the 100% shareholding in Metania s.r.l., a company operating in the sale of electricity and gas, with a portfolio of about 22,000 customers in Molise, Campania, Lazio and Abruzzo, as well as 4 branches in the region.

For the purposes of consolidation, the available accounts at the closest time to the acquisition date of 31 March 2018 and only the subsidiary's income statement referring to the last nine months of the financial period were included in these consolidated financial statements.

The fair value of identifiable assets and liabilities at the acquisition date was as follows:

Balance Sheet	Fair value
NON-CURRENT ASSETS	
Tangible assets	48
Customer list	6,690
Intangible assets	12
Equity investments	15
Other non-current financial assets	1,280
Deferred tax assets	196
	8,242
CURRENT ASSETS	
Trade receivables	5,196
Other current assets	593
Cash and cash equivalents	569
	6,357
TOTAL ASSETS	**14,599**
NON-CURRENT LIABILITIES	
Employee severance indemnity	67
Deferred taxes liabilities	1,903
	1,971
CURRENT LIABILITIES	
Short-term borrowings	4
Trade payables	6,829
Tax liabilities	1,027
Other current liabilities	354
	8,214
TOTAL LIABILITIES	**10,185**
TOTAL NET IDENTIFIABLE ASSETS	**4,414**
Goodwill deriving from acquisition	10,836
Consideration for acquisition	**15,250**

From the purchase price allocation the Group relieved an intangible asset referring to a customer list for € 6,7 million gross of deferred tax liabilities for € 1,9 million.
Goodwill for € 10,836 thousand, represented by the surplus on the consideration paid in relation to the net identifiable assets acquired and the liabilities undertaken by the Group, refers to the higher business value given by the subsidiary's territorial positioning, its ability to acquire new customers and develop new business and the possibility of creating synergies, which not being separate, do not meet the requirements to be recorded as intangible assets in terms of IAS 38.

Goodwill was allocated entirely to the gas and electricity sales sector, and it is not expected that this will be deductible for tax purposes.

The fair value measurement of the goodwill and customer lists is based on the forward discount cash flows, this calculation take in consideration the historical churn rate.
From the acquisition date, Metania has contributed, net of infragroup eliminations, to the Group's 2018 revenue for € 6,263 thousand, to the operating result for € 558 thousand and to the Group's net income for € 373 thousand. The company was merged by incorporation into Estra Energie prior to the end of the 2018 financial period.

If the combination had been effective from the beginning of the year, the income statement in the consolidated financial statements at 31 December 2018 would have presented higher revenue for € 1,615 thousand, a higher operating result for € 195 thousand, and a lower net income of € 35 thousand.

- **Acquisition of Melfi Reti Gas S.r.l.**

On 6 April 2018, Estra S.p.A. finalised the acquisition from the Alexa di Isernia Group of the 100% shareholding in Melfi Reti Gas S.r.l., a company operating in the gas distribution sector with approximately 16,000 PODs and 580 km network in the Optimal Territorial Areas for the distribution of natural gas [ATEM] for Campobasso, Isernia and L'Aquila, where it distributed around 19 million cubic metres of gas in 2017.

For the purposes of consolidation, the available accounts at the closest time to the acquisition date of 31 March 2018 and only the subsidiary's income statement referring to the last nine months of the financial period were included in these consolidated financial statements.

The fair value of identifiable assets and liabilities at the acquisition date was as follows:

Balance Sheet	Fair value
NON-CURRENT ASSETS	
Tangible assets	84
Assets under concession	12,690
Other non-current financial assets	1,032
Deferred tax assets	11
	13,817
CURRENT ASSETS	
Inventories	35
Trade receivables	1,904
Tax receivables	82
Other current assets	1,356
Cash and cash equivalents	62
	3,437
TOTAL ASSETS	**17,254**
NON-CURRENT LIABILITIES	
Employee severance indemnity	72
Deferred taxes liabilities	3,220
	3,291
CURRENT LIABILITIES	
Trade payables	853
Tax liabilities	2,399
Other current liabilities	1,711
	4,963
TOTAL LIABILITIES	**8,254**
TOTAL NET IDENTIFIABLE ASSETS	**9,000**
Consideration for acquisition	**9,000**

From the acquisition date, Melfi Reti Gas S.r.l. has contributed, net of infragroup eliminations, to the Group's 2018 revenue for € 1,536 thousand, to the operating result for € 366 thousand and to the Group's net income for € 238 thousand.

If the combination had been effective from the beginning of the year, the income statement in the consolidated financial statements at 31 December 2018 would have presented higher revenue for € 453 thousand, a higher operating result for € 106 thousand, and a lower net income of € 75 thousand.

- **Acquisition of Gas Marca S.r.l.**

With deed dated 18 June 2018, Estra Energie S.r.l., who already held a 49% shareholding, acquired the remaining 51% of the share capital in Gas Marca S.r.l. with registered office in Civitanova Marche (MC) from ATA Civitanova S.p.A. at a price of € 6,679 thousand.

The company has about 16,000 customers in the provinces of Macerata and Fermo.

For the purposes of consolidation, the available accounts at the closest time to the acquisition date of 30 June 2018 and the subsidiary's income statement for the first six months was not included in these consolidated financial statements.

The accounting of the business combination operations generated an upward adjustment for € 605 thousand, referring to the restatement of the 49% shareholding at fair value, which was already held prior to the acquisition.

The fair value of identifiable assets and liabilities at the acquisition date was as follows:

Balance Sheet	Fair value
NON-CURRENT ASSETS	
Tangible assets	27
Customer list	8,238
Intangible assets	125
Other non-current assets	114
Deferred tax assets	74
	8,578
CURRENT ASSETS	
Trade receivables	4,343
Tax receivables	34
Current financial assets	48
Cash and cash equivalents	68
	4,493
TOTAL ASSETS	**13,071**
NON-CURRENT LIABILITIES	
Provisions for risks and charges	31
Employee severance indemnity	95
Deferred taxes liabilities	2,374
	2,500
CURRENT LIABILITIES	
Current portion of medium/long-term loans	
Short-term borrowings	1
Trade payables	1,858
Tax liabilities	1,437
Other current liabilities	722
	4,018
TOTAL LIABILITIES	**6,518**
TOTAL NET IDENTIFIABLE ASSETS	**6,553**
Goodwill deriving from acquisition	**6,544**
Consideration for acquisition	**13,097**

From the purchase price allocation the Group relieved an intangible asset referring to a customer lists for € 8,2 million gross of deferred tax payables for € 2,4 million.Goodwill for € 6,544 thousand, represented by the surplus on the consideration paid in relation to the net identifiable assets acquired and the liabilities undertaken by the

Group, refers to the higher business value given by the subsidiary's territorial positioning, its ability to acquire new customers and develop new business and the possibility of creating synergies, which not being separate, do not meet the requirements to be recorded as intangible assets in terms of IAS 38.

Goodwill was allocated entirely to the gas and electricity sales sector, and it is not expected that this will be deductible for tax purposes.

The fair value measurement of the goodwill and customer lists is based on the forward discount cash flows, this calculation take in consideration the historical churn rate.
From the acquisition date, Gas Marca S.r.l. has contributed, net of infragroup eliminations, to the Group's 2018 revenue for € 908 thousand, negatively to the operating result for € 1,679 thousand and to the Group's income net of taxes negatively for € 1,213 thousand.

The 2018 operating result for the newly-acquired company was significantly impacted by the adjustment calculation to entries, resulting from the outcome of the settlements for the 2013-2017 period ordered by the Authority under resolution 670/2017/R/gas of 5 October 2017. The incorporation of these entries had a significant impact on the subsidiary and the Group's operating costs for € 1,387 thousand.

If the combination had been effective from the beginning of the year, the income statement in the consolidated financial statements at 31 December 2018 would have presented higher revenue for € 3,682 thousand, a higher operating result for € 75 thousand, and a lower net income of € 8 thousand.

- **Agreements related to the sale of Andali Energia S.r.l.**

You are reminded that on 15 December 2017, through the subsidiary Solgenera S.r.l., the Group sold the company Sunshine S.r.l. a 100% stake in the share capital of Andali Energia S.r.l., which held the Single Authorisation to build a 36 MW wind plant in Andali (CZ), and which had brought arbitration proceedings against Terna Rete Elettrica Nazionale S.p.a. to obtain, inter alia, the termination of the connection contract and compensation for the damage suffered and to be suffered.

The sales agreement made provision, inter alia, for: *i)* a consideration of € 1 for the sale of the entire shareholding in Andali for € 1, with incremental price revision clauses dependant on the occurrence of specific conditions, some of which were related to the development of the arbitration proceedings initiated against Terna *ii)* Estra to retain the obligation of compensating Andali in the case of the surety issued to the GSE being enforced, which was to guarantee the implementation of the investment for a maximum amount of € 2,205 thousand (50% of the total).

During 2018, in view of the arbitration proceedings and various legal positions undertaken, Solgenera S.r.l., Andali Energia S.r.l. and Terna Rete Elettrica Nazionale S.p.a., reached a settlement regarding the dispute, entering into agreement with the aim of closing off the current proceedings and precluding any further disputes. As a result of the agreements signed, Solgenera S.r.l., now merged into Estra S.p.A. was released from the obligation of compensation referred to under point *ii)* for a maximum amount of € 2,205 thousand, as well as the payment of € 489 thousand from Terna as a reimbursement for the costs incurred on the interconnection works to the national grid and € 579 thousand from Sunshine S.r.l. to supplement the sales price for the shares.

Based on the above, taking into account the reversal of the provision made at 31 December 2017, the Group's 2018 income statement recorded other revenue for € 3,273 thousand.

- **Acquisitions of additional minority interests in companies already controlled**

During 2018, Estra Energie S.r.l. acquired 7.33% of Gastronto S.r.l. for € 275 thousand, to obtain 100% control of the company.

A summary is provided below of the considerations paid, the carrying value of the net assets acquired and the effects for shareholders' equity in terms of the IFRS 3 accounting standard:

Company	% Acquired	Carrying value of interest acquired	Consideration paid	Retained earnings/losses	IAS 19 discounted reserve
Gastronto	7.33%	534	275	259	-

7.2 Financial year 2017

- **Share capital increase reserved to Viva Servizi S.p.A.**

As from the 2014 financial period, the Estra Group embarked on a significant aggregation project with its partner Viva Servizi S.p.A. in Ancona, which resulted in the establishment of the company Edma S.r.l. (hereinafter EDMA), a new corporate entity, with the objective of consolidating and developing the sale of gas and electricity and gas distribution in the Adriatic region.
Following the corporate operations undertaken in 2016, the company was held for 45% by Estra and for 55% by Viva Servizi S.p.A. and held:

- 24.47% of Estra Energie, primary company in the Estra Group operating in the gas sales sector;
- 100% of EDMA Reti Gas S.r.l, 38.70% of SIG S.r.l. and 49% of Aes Fano S.r.l., a company operating in the gas distribution sector.

The business combination project continued during 2017, with further developments over two stages, namely:

Stage 1:

a) the demerger of EDMA Reti Gas S.r.l., held for 100% by EDMA, through the establishment of a new company called TuAreti Gas S.r.l., to which the natural gas distribution business unit was transferred, for the Municipalities of Mosciano, Citerna, Reti and Magione, including ownership of the networks and plants, staff and all accounts relating to the existing concession contracts. The demerger took place on 7 August, and became effective on the same date;

b) the reduction of EDMA share capital with the assignment, with direct beneficiaries being the shareholders Viva Servizi S.p.A. at 55% and Estra at 45% of the 100% shareholding of EDMA Reti Gas S.r.l., once the above business unit was unbundled. The assignment was resolved at the extraordinary shareholders' meeting on 7 August 2017.

Stage 2:

(c) The conferral to Estra by Viva Servizi S.p.A. of its 55% stake in the share capital of EDMA, which at the end of aforementioned operations, holds 24.47% in Estra Energie, 100% in TuAreti Gas S.r.l., 38.70% in SIG S.r.l. and 49% in Aes Fano S.r.l.

The conferral was finalised on 28 December 2017 with the Estra extraordinary shareholders' meeting that resolved a share capital increase, with the exclusion of pre-emptive rights in terms of Art. 2441, paragraph 6 of the Italian Civil Code, up to a maximum of € 228,334,000, based on the

offering of 22,834,000 newly issued shares with a nominal value of € 1.00 each, for an overall premium of € 19,646 thousand, for a total of € 42,480 thousand reserved to Viva Servizi S.p.A.
The 22,834,000 newly issued shares were subscribed by Viva Servizi S.p.A. through the contribution of the following assets in kind:

i) full ownership of the representative portion of 55% in the share capital of EDMA;
ii) full ownership of a property located at Via Trieste 2 in Ancona;
iii) full ownership of the receivables vested in Viva Servizi S.p.A. for the rendering of services to EDMA for a nominal amount of € 1,871 thousand and receivables vested with Viva Servizi S.p.A. in respect of users for the provision of integrated water management service for a nominal amount of € 930 thousand, in both cases, with payment terms within twelve months;
iv) full ownership of the application software licences, specific to the administrative and accounting management of multi-utilities needed for EDMA service operations.

The operations referred to under Phase 1 a) and b) qualify as "*business combinations under common control*" with the objective of "*Group reorganization*" in the scope of the EDMA sub-Group; consequently, they produced no effects on the Consolidated Financial Statements at 31 December 2017 in terms of IFRS 3.

In particular:

a) the demerger of EDMA Reti Gas S.r.l., held for 100% by EDMA, through the establishment of a new company called TuAreti Gas S.r.l does not qualify as a *business combination* according to the IFRS 3 definition, and was therefore recognised at the demerged shareholders' equity carrying value of € 15,500 thousand at the demerger date as shown below:

Description	**Amount**
Assets under concession	10,624
Non-current financial assets	5,000
Trade receivables	143
Total assets	**15,767**
Liabilities	
Employee severance indemnity and other staff expenses	267
Total liabilities	**267**
Net assets	**15,500**

b) the reduction of EDMA share capital, with direct beneficiaries being the shareholders Viva Servizi S.p.A. at 55% and Estra at 45% of the 100% stake of EDMA Reti Gas S.r.l. qualifies as a distribution of dividends by EDMA in favour of shareholders (joint control), not offering cash and cash equivalents, but rather an asset, more specifically the shareholding in ERG.

Given the characteristics of the operation, this was recorded at carrying value (€ 9,951 thousand).

The operation referred to in Stage 2, namely the conferral by Viva Servizi S.p.A. to Estra of its representative portion of 55% of EDMA's share capital, qualifies as a business combination, where the buyer obtained control of Edma through the issuing of shares.

As a consequence of the operation, Edma that had previously been a joint venture consolidated using the equity method, became a 100% subsidiary of the Group towards the end of the financial period; for this reason, the assets and liabilities of the company were included in the consolidated financial statements, which were consolidated together with those of the subsidiary TuAreti Gas S.r.l., at 31 December 2017 without inclusion in the income statement.

The fair value of the identifiable EDMA and TuAreti assets and liabilities at the acquisition date stood at € 38,830 thousand, as they appeared from the Directors' Report prepared at the time of the share capital increase through the conferral of the 55% EDMA shareholding held by Viva Servizi S.p.A., and confirmed in the report prepared in terms and to all effects of Art. 2343-*ter*, paragraph 2, letter b) of the Italian Civil Code by the appointed technical expert.

The table below shows the fair value of the assets and liabilities acquired:

Balance Sheet	Fair value
NON-CURRENT ASSETS	
Tangible assets	59
Intangible assets - Assets under concession IFRIC 12	9,509
Other intangible assets	192
Equity investments	45,739
Estra Energie	*41,980*
SIG	*3,171*
AES Fano	*588*
Other non-current financial assets	5,000
Deferred tax assets	65
	60,564
CURRENT ASSETS	
Trade receivables	9,402
Other current assets	7,578
Cash and cash equivalents	4,318
	21,297
TOTAL ASSETS	**81,862**
NON-CURRENT LIABILITIES	
Non-current portion of medium/long-term loans	1,070
Employee severance indemnity	118
Deferred taxes liabilities	14
	1,202
CURRENT LIABILITIES	
Current portion of medium/long-term loans	598
Trade payables	5,442
Tax liabilities	61
Other current liabilities	3,958
	10,059
TOTAL LIABILITIES	**11,262**
TOTAL NET IDENTIFIABLE ASSETS	**70,600**
Contribution share capital increase (55%)	**38,830**

The operation resulted in the acquisition of the minority interests of Estra Energie held by Viva Servizi S.p.A. through EDMA (24.47%) and consequently, at consolidation level, the Shareholders' equity attributable to minority interests was eliminated for the difference, between the consolidated shareholders' equity attributable to minority interests (€ 12,734 thousand) and the consideration paid (conferral value), recognised as required by IFRS 3 for the treatment of the acquisition operations of interests in already controlled companies.

The accounting of the business combination operation did not generate any effect for the income statement from the restatement of the 45% EDMA shareholding at fair value, which was already held prior to the acquisition.

Given that the combination took place at the end of the financial period, the full consolidation of EDMA and TuArete did not impact on the 2017 income statement.

With regard to EDMA, if the business combination had been effective from the start of the year, the effects on the income statement would not have been significant.
With regard to TuArete, if the business combination had been effective from the time of its establishment (7 August 2017), the income statement in the consolidated financial statements at 31 December 2017 would have presented higher revenue for € 850 thousand, a higher operating result for € 196 thousand, and a higher net income of € 139 thousand.

➢ Acquiring control of Piceno Gas Vendita S.r.l.

On 30 March 2017, the Group acquired control of the company Piceno Gas Vendita S.r.l. following the acquisition of a 45% shareholding for € 6,323 thousand by Estra Energie S.r.l., which had already held 45% of the share capital in the previous financial period. The additional 10% to gain total control of the company was acquired on 4 December 2017 for € 1,405 thousand.

The date of 31 March 2017 was taken as the consolidation date in the consolidated financial statements at 31 December 2017, which included the subsidiary's income statement for the nine months ended 31 December 2017.
The accounting of the business combination operation did not generate any effect for the income statement from the restatement of the 45% Piceno Gas Vendita shareholding at fair value, which was already held prior to the acquisition, because the carrying value already corresponded with the fair value at the acquisition date.

The fair value of identifiable assets and liabilities at the acquisition date was as follows:

Balance Sheet	Fair value
NON-CURRENT ASSETS	
Tangible assets	19
Customer list	18,196
Intangible assets	17
Other non-current assets	2
Deferred tax assets	218
	18,452
CURRENT ASSETS	
Trade receivables	7,028
Tax receivables	47
Other current assets	41
Cash and cash equivalents	492
	7,608
TOTAL ASSETS	**26,060**
NON-CURRENT LIABILITIES	
Employee severance indemnity	164
Deferred taxes liabilities	5,244
	5,408
CURRENT LIABILITIES	
Short-term borrowings	970
Trade payables	5,015
Tax liabilities	291
Other current liabilities	375
	6,650
TOTAL LIABILITIES	**12,058**
TOTAL NET IDENTIFIABLE ASSETS	**14,002**
Consideration for acquisition, including portion already held at the end of the previous financial period	**14,002**

From the acquisition date, Piceno Gas S.r.l. has contributed, net of infragroup eliminations, to the Group's revenue for € 3,665 thousand, to the operating result with a loss of € 717 thousand and to the Group's net income with a loss of € 473 thousand.

If the combination had been effective from the beginning of the year, the income statement in the consolidated financial statements at 31 December 2017 would have presented higher revenue for € 1,436 thousand, a higher operating result for € 171 thousand, and a higher net income of € 57 thousand.

➢ Acquiring control of Cavriglia SPV S.p.A and Tegolaia SPV S.p.A.

During August and September 2017, Estra S.p.A., which already held 44.44% of Cavriglia SPV and 49% of Tegolaia SPV, acquired the remaining portion of their share capital to reach a 100% shareholding in both.

More specifically, Estra signed:

- together with CCC Soc. Coop. and Cellini GTC Soc. Coop, a contract to acquire 55.56% of the share capital of Cavriglia SPV S.p.A. (for 1,309,722, of which 1,047,778 shares from CCC Soc. Coop. and 261,944 from Cellini GTC Soc. Coop.) for a total consideration of € 1,192 thousand, of which € 954 thousand was paid to CCC Soc. Coop. and € 238 thousand to Cellini GTC Soc. Coop respectively;
- together with CCC Soc. Coop, a contract to acquire 49% of the share capital of Tegolaia SPV S.p.A. (equal to 534,313 shares) for a total consideration of € 351 thousand.
- with Consorzio Toscano Cooperative CTC, a contract to acquire 2% of the share capital of Tegolaia SPV S.p.A. (equal to 21,808 shares) for a total consideration of € 14 thousand.

For the purposes of consolidation, the available accounts at the closest time to the acquisition date of 30 September 2017 and the subsidiaries' income statement referring to the last quarter were included in the Estra consolidated financial statements at 31 December 2017.

The accounting of the business combination operations generated a downward adjustment for € 24 thousand for Cavriglia and upward adjustment of € 55 thousand for Tegolaia, referring to the restatement of the 44.44% and 49% shareholdings respectively at fair value, which were already held prior to the acquisition.

The fair value of identifiable assets and liabilities at the acquisition date was as follows:

Balance Sheet	Fair value recognised at the time of Cavriglia acquisition	Fair value recognised at the time of Tegolaia acquisition
NON-CURRENT ASSETS		
Tangible assets	23,554	11,865
Deferred tax assets	103	78
	23,657	**11,942**
CURRENT ASSETS		
Trade receivables	863	424
Tax receivables	1,642	1,231
Current financial assets	21	
Other current assets	3	
Cash and cash equivalents	4,087	1,452
	6,616	**3,108**
TOTAL ASSETS	**30,273**	**15,051**
NON-CURRENT LIABILITIES		
Provisions for risks and charges	308	226
Non-current portion of medium/long-term loans	24,984	12,089
Deferred taxes liabilities	20	35
	25,313	**12,350**
CURRENT LIABILITIES		
Current portion of medium/long-term loans	1,375	664
Short-term borrowings	281	143
Trade payables	942	733
Tax liabilities	154	74
Other current liabilities	63	15
	2,815	**1,630**
TOTAL LIABILITIES	**28,128**	**13,979**
TOTAL NET IDENTIFIABLE ASSETS	**2,146**	**1,071**
Consideration for acquisition, including portion already held at the end of the previous financial period	**2,146**	**1,071**

The items Current and non-current portion of medium/long-term loans refer for € 26,211 thousand to project financing obtained by the companies to fund the construction of photovoltaic plants, and for € 7,075 thousand to shareholder loans, where Estra took over the portions paid by selling shareholders, eliminated in the consolidated financial statements and the current value of future concession fees.

The acquisition also resulted in the recognition of Interest Rate Swap (IRS) derivative instruments to hedge the risk of unfavourable interest rates on the project financing project at the time of acquisition. The effective hedging instruments were recognised at fair value, net of the relative tax effects, in shareholders' equity under the specific "cash flow hedge reserve" (negative for € 1,497 thousand for Cavriglia and negative for € 397 thousand for Tegolaia).

It should be noted that on 20 December 2017, to better rationalise financial costs, the aforementioned project financing and relative Interest Rate Swap (IRS) derivative instruments were extinguished early.

The companies hold a concession for the design, construction and management of photovoltaic plants in Cavriglia (AR) and the related associated works. The concession includes:

a) The design of the works, project management, coordination of safety during the design and execution stages;
b) The performance of all works, services and supplies needed to realise the works and make the plant operational;
c) The ordinary and extraordinary maintenance, upgrading and repair of machines, equipment and devices to ensure optimal functioning of the plants and related works at every level;
d) The operational management and economic exploitation of the works realised for the term of the concession (20 years from when plant becomes operational).

The concessionary relationship between the companies and the granting Municipality was recognised in terms of IAS 17.50 as a sale and leaseback transaction (IAS 17.59), where after construction of the plant and the transfer of ownership, the Group does not lose control thereof; it is therefore recorded as a tangible asset, at the construction cost plus the dismantling and depreciation costs across the term of the concession. The value of the tangible asset also includes the current value for the future concession expenses recorded as indirect construction costs, with a corresponding counter financial liability entry made (€ 3,575 thousand for Cavriglia and € 1,809 for Tegolaia).

From the acquisition date, Cavriglia SPV S.p.A. has contributed, net of infragroup eliminations, to the Group's revenue for € 472 thousand, to the operating result with a loss of € 38 thousand and to the Group's net income with a loss of € 2,174 thousand.

If the combination had been effective from the beginning of the year, the income statement in the consolidated financial statements at 31 December 2017 would have presented higher revenue for € 2,633 thousand, a higher operating result for € 1,259 thousand, and a higher net income of € 213 thousand.

From the acquisition date, Tegolaia SPV S.r.l. has contributed, net of infragroup eliminations, to the Group's revenue for € 267 thousand, to the operating result with a loss of € 48 thousand and to the Group's net income with a loss of € 683 thousand.

If the combination had been effective from the beginning of the year, the income statement in the consolidated financial statements at 31 December 2017 would have presented higher revenue for € 1,330 thousand, a higher operating result for € 664 thousand, and a higher net income of € 110 thousand.

- **Acquisitions of additional minority interests in companies already controlled**

The following acquisitions and disposals of minority interests in companies already controlled were recorded during 2017:

- Acquisition of 9.08% of Estracom S.p.A. held by Planetaria S.r.l., for € 637 thousand, to reach a controlling shareholding of 79.32%;

- Acquisition of 35% of Biogenera S.r.l held by the Municipality of Calenzano and by Alia Servizi Ambientali S.p.A., resulting in full control of the subsidiary's shareholding. The acquisition was done following the share capital being brought to zero to cover the losses in the 2016 financial statements and total subscription of the new share capital by Estra Clima S.r.l., controlled for 100% by the Parent Company. The subsidiary was merged by incorporation into Estra Clima before the end of the financial period;

- Acquisition of 40% of Exo Energy Trading S.r.l. held by Openlogs S.r.l., for € 303 thousand, to reach total control of the company by Estra Energie S.r.l. The subsidiary was merged by incorporation into Estra Energie S.r.l. before the end of the financial period;

- Estra Energie S.r.l. acquired 12.72% of Gastronto S.r.l. for € 483 thousand, to obtain 92.67% control of the company;

- Acquisition of 40% of Estra Elettricità S.r.l. held by Canarbino S.r.l., for € 9,012 thousand, to reach total control of the company by Estra Energie S.r.l. based on the agreement signed between the parties on 25 October 2017;

- Acquisition of 33.013% of the share capital of ETA 3 S.r.l. held by Edison, for € 9,270 thousand, to reach total control of the company by Estra S.p.A. At the acquisition date, the company held 0.22% of the shares in Estra and 21.20% of the shares in Estra Energie S.r.l.

A summary is provided below of the considerations paid, the carrying value of the net assets acquired and the effects for shareholders' equity in terms of the IFRS 3 accounting standard:

Company	% Acquired	Carrying value of interest acquired	Consideration paid	Retained earnings/losses	IAS 19 discounted reserve
Estracom	9.08%	793	637	156	1
Biogenera	35.00%	(68)		(68)	
Exo	40.00%	69	303	(234)	
Gastronto	12.72%	1,036	483	553	
ETA 3	33.01%	4,651	9,270	(4,616)	(3)
Estra Elettricità	40.00%	496	9012	(8,516)	(2)
Total		**6,977**	**19,705**	**(12,725)**	**(4)**

With regard to the 40% acquisition of Estra Elettricità S.r.l. by Estra Energie, it is noted that based on the same agreement, the parties also implemented Canarbino's intention to acquire (and the Estra Group's to dispose of) the natural gas and electricity provision contracts in areas outside the Tuscany region. The portfolio restructuring led to Estra Energie and Estra Elettricità transferring around 11,000 gas contracts and around 25,000 electricity contracts to Canarbino. From the difference between the transfer price for the contracts and the net carrying value for the cost to acquire customers for € 1,959 thousand relating to the gas contracts and € 3,880 thousand for the electricity contracts, capital gains resulted for € 1,687 thousand); and € 1,487 thousand respectively, recognised in the consolidated financial statements' shareholders' equity, i.e. accounting for the sales as transactions forming part of the agreement relating to the acquisition of the minority interests (IFRS 10.B97).

7.3 Subsidiaries with significant minority interests

Details are provided below of the subsidiaries with significant minority interests.

The economic-financial data is based on balances prior to intercompany eliminations.

Financial year 2018

Portion of shareholding interest held by minority shareholders:

Company name (Fully consolidated subsidiaries)	Registered office	Currency	Primary activity	Third party %
Prometeo S.p.A.	Osimo (AN)	Euro	Gas and electricity sales	40.41%

Income statement (thousands of Euro)	Prometeo
Operating revenue	
Revenue from contracts with customers	122,628
Other operating revenue	1,108
	123,736
Operating costs	
Raw materials, ancillary materials and goods	78,857
Costs for services	33,816
Costs for rentals and leases	271
Personnel costs	1,915
Depreciation, amortisation, provisions and write-downs	5,161
Other operating costs	221
	120,241
OPERATING RESULT	**3,495**
Financial income	166
Financial expenses	510
FINANCIAL MANAGEMENT	**(344)**
PROFIT BEFORE TAXES	**3,151**
Income taxes for the year	1,100
NET RESULT FOR THE YEAR	**2,051**

Balance Sheet (thousands of Euro)	Prometeo
NON-CURRENT ASSETS	
Tangible assets	155
Goodwill	7,311
Intangible assets	2,928
Equity investments	1,071
Other non-current assets	29
Deferred tax assets	3,412
	14,906
CURRENT ASSETS	
Trade receivables	59,185
Tax receivables	531
Other current assets	603
Cash and cash equivalents	9,496
	69,815
TOTAL ASSETS	**84,721**
TOTAL SHAREHOLDERS' EQUITY	**16,623**
NON-CURRENT LIABILITIES	
Provisions for risks and charges	156
Employee severance indemnity	357
	513
CURRENT LIABILITIES	
Short-term borrowings	3
Trade payables	59,956
Tax liabilities	2,552
Other current liabilities	5,074
	67,585
TOTAL LIABILITIES and SE	**84,721**

Financial year 2017

Portion of shareholding interest held by minority shareholders:

Company name (Fully consolidated subsidiaries)	Registered office	Currency	Primary activity	Third party %
Prometeo S.p.A.	Osimo (AN)	Euro	Gas and electricity sales	40.41%

Income statement (thousands of Euro)	Prometeo
Revenue	
Revenue from sales and services	119,119
Other operating revenue	1,535
	120,655
Operating costs	
Raw materials, ancillary materials and goods	74,336
Costs for services	36,006
Costs for Rentals and Leases	235
Personnel costs	1,459
Depreciation, amortisation, provisions and write-downs	6,238
Other operating costs	82
	118,356
OPERATING RESULT	**2,298**
Financial income	372
Financial expenses	254
FINANCIAL MANAGEMENT	**118**
PROFIT BEFORE TAXES	**2,416**
Income taxes for the year	1,170
NET RESULT FOR THE YEAR	**1,246**

Balance Sheet (thousands of Euro)	Prometeo
NON-CURRENT ASSETS	
Tangible assets	68
Goodwill	8,065
Intangible assets	2,750
Equity investments	1,071
Other non-current financial assets	
Other non-current assets	29
Deferred tax assets	2,943
	14,927
CURRENT ASSETS	
Trade receivables	52,377
tax receivables	1,551
Other current assets	574
Cash and cash equivalents	7,962
	62,464
TOTAL ASSETS	**77,391**
TOTAL SHAREHOLDERS' EQUITY	**16,316**
NON-CURRENT LIABILITIES	
Provisions for risks and charges	139
Employee severance indemnity	367
	506
CURRENT LIABILITIES	
Portion of medium/long-term loans within 12 months	
Short-term borrowings	1,564
Trade payables	52,748
Tax liabilities	1,521
Other current liabilities	4,735
Other current financial liabilities	
	60,568
TOTAL LIABILITIES and SE	**77,391**

7.4 Equity investments in joint ventures

As of December, 31 2018 2018, the Group held a 45% interest in EDMA Reti Gas S.r.l., in which it exercises joint control with Viva Servizi S.p.A., a 55% shareholder, on the basis of the Articles of Association and shareholder agreements. These agreements required the consent of each two parts for the decisions regarding the financial, management and strategic policies of the subsidiary company.

The company operates in the natural gas distribution sector, managing plants and intake networks, and the distribution of gas in the province of Ancona.

The interest was recorded as of 31 December 2018 for € 9,688 thousand and measured using the equity method.

The table below shows the main economic and asset figures:

Balance Sheet	31/12/2018
Assets under concession	26,373
Cash and cash equivalents	3,954
Equity	22,348
Bank loans	6,136

Income statement	31/12/2018
Operating revenue	29,806
Operating costs	26,051
Depreciation, amortisations and provisions	2,440
Operating result	1,315
Net income for the year	925

8. Notes on the main income statement items

8.1 Revenue

In the financial periods ended 31 December 2018 and 31 December 2017, revenue amounted to € 842,973 thousand and € 1,016,504 thousand respectively. The table below shows the breakdown between revenue from contracts with customers and other operating revenue:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Revenue from disposal of goods and services	805,421	979,127
Other operating revenue	37,552	37,378
Total revenues	**842,973**	**1,016,504**

The drop in the item was strongly impacted by the effects of applying IFRS 15 as from 01 January 2018, and more specifically from the recognition of revenue and costs from gas trading activity under "margin from commodities management", as detailed below. Though the Group adopted a "modified approach" for the first adoption of IFRS 15 decided to report the values in the account Revenue from disposals of goods and services.

8.1.1 Revenue from the disposal of goods and services

The table below shows the breakdown of revenue from contracts with the Group's customers at 31 December 2018, compared with the year ended 31 December 2017:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Revenue from methane gas distribution	28,557	20,215
Revenue for applicable tariff components for the methane gas distribution	-	3,479
Equalisation methane gas distribution	(10,585)	(6,902)
Revenue from sales and distribution of LPG	3,416	3,363
Revenue from sales of methane gas	629,212	537,852
Revenue from methane gas trading		287,863
Revenue from sales of electricity	110,058	106,355
Revenue from telecommunication services	4,643	4,514
Revenue from other Group operations	15,654	8,259
Increases in non-current assets from in-house production	19,750	14,129
Current portion of contributions received	1,943	-
Revenue from post meter services and ancillary services	2,773	-
Revenue from disposal of goods and services	**805,421**	**979,127**

The main changes refer to:

- "Revenue from methane gas distribution": the item increased by € 8,342 thousand mainly due to the change in the scope of consolidation, and more specifically from the onset of management in the Municipalities of Rieti, Magione and Mosciano S. Angelo as from 1 January 2018 (following the contribution to the Estra share capital increase in December 2017 by Viva Servizi S.p.A.) and the acquisition of Melfi Reti Gas S.r.l.;

- "Revenue for applicable tariff components for the methane gas distribution": due to the application of IFRS 15, revenue for applicable tariff components (€ 4,483 thousand) were recognised net of the relative 2018 costs;

- "Equalisation methane gas distribution": the item was up by € 3,683 thousand on the previous year, and refers to the mechanism managed by the Authority via the Cassa Conguaglio to ensure equivalence between the revenue obtained by each business with the application of mandatory tariffs, which obviously do not reflect the specific costs for each business and the costs awarded to each business, through the reference tariff;

- "Revenue from sale of methane gas": the item records an increase of € 91,360 thousand primarily due to the higher gas volumes sold and the entry of Gas Marca S.r.l. and Metania S.r.l. into the scope of consolidation;

- "Revenue from methane gas trading": due to the application of IFRS 15, revenue for natural gas trading (€ 228,618 thousand) were recognised net of the relative 2018 costs;

- "Revenue from sale of electricity": the item records an increase of € 3,703 thousand primarily due to the higher electricity volumes sold and the entry of Metania S.r.l. into the scope of consolidation;

- "Revenue from other Group operations": refers primarily to the Parent Company revenue from service contracts with Shareholders, associates and joint control companies, revenue from heat management and the typical maintenance of the subsidiary Estra Clima S.r.l. and revenue from the production of energy from renewable sources. The change refers mainly to the increase in Parent Company assets and the consolidation over the entire period of Cavriglia S.p.V S.p.A. and Tegolaia SPS. S.p.A., operating in the production of energy from photovoltaic plants, consolidated for a single quarter in the previous period;

- "increases from in-house production": refers primarily to the in-house costs for the work on the networks under concession, which were up by € 5,621 thousand;

- the "Portion of contributions received" and "Revenue from post meter services and ancillary services": recognises revenue from the disposal of goods and services in terms of IFRS 15, whereas these appear under other operating revenue in the comparative figures for 2017.

Revenue from the sale of methane gas and electricity at 31 December 2018 and 2017 include the provision for the estimate on the electricity and gas supplies provided to end customers and not yet invoiced at 31 December. The estimate was based on the volumes distributed and assigned, as obtained from transporters, and subject to potential adjustments.

A list is provided below of the Group's revenue from contracts with customers at 31 December 2018, according to operating sector:

Year ended 31 December 2018		**Operating sectors**		
(amounts in thousands of euro)	**Total**	**Distribution of natural gas**	**Gas and electricity sales**	**Corporate and Others**
Revenue from methane gas distribution	28,557	28,557		
Equalisation methane gas distribution	(10,585)	(10,585)		
Revenue from sales and distribution of LPG	3,416	3,416		
Revenue from sales of methane gas	629,212		629,212	
Revenue from sales of electricity	110,058		110,058	
Revenue from telecommunication services	4,643			4,643
Revenue from other Group operations	15,654	82		15,572
Increases in non-current assets from in-house production	19,750	19,750		
Current portion of contributions received	1,943	454		1,489
Revenue from post meter services and ancillary services	2,773		2,773	
Revenue from disposal of goods and services	**805,421**	**41,674**	**742,043**	**21,704**
Adjustments and eliminations	63,968	39,051	1,783	23,134
Total revenues gross of adjustments and eliminations between operating sectors	**869,389**	**80,725**	**743,826**	**44,838**

The Group operates in Italy, with the exception of the discontinued operation relative to Useneko located in Poland.

As stated in the main accounting standards applied, the Group mainly records revenue over a time frame consistent with the transfer of control of the goods and services provided.

The main performance obligations are those specific to the business sector and refer to the transfer of control of commodities to end customers, and the transportation and distribution costs for these, when the distribution network is managed based on applicable concessions and legislation.

The market conditions applied are in line with sector practices and applicable legislation.

The Group has the option of invoicing customers for the amounts corresponding to the performance provided.

With regard to the time frame for recognising revenue from connection contributions, these are consistent with the useful life of the corresponding assets recognised by the Group where this is a consistent legal obligation to provide the service.

8.1.2 Other operating revenue

The table below shows the breakdown of the Group's operating revenue at 31 December 2018, compared with the year ended 31 December 2017:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Reimbursement of seconded personnel costs	-	1,568
Charge back of costs for post meter services and POD services	-	5,097
Energy Efficiency Certificates	25,080	17,615
Release of risk provisions	2,443	-
Other revenues	10,013	11,601
Gains extra-feature management	16	22
Current portion of contributions received		1,475
Other operating revenue	**37,553**	**37,378**

The "Reimbursement of seconded personnel costs" is recorded in 2018 as a direct reduction in personnel costs for € 1,118 thousand.

Revenue from the charge back of the costs for post meter services and POD services are recognised net of the relevant 2018 costs for € 5,601 thousand in accordance with IFRS 15, as the nature of the performance qualifies as an agent.

The item "Energy Efficiency Certificates" (TEE - Titoli Efficienza energetica) contains the value of said certificates relative to the year 2018 as the tariff contribution pursuant to the AEEG resolutions, which has increased significantly on the previous year due to the prices recorded on the market.

The release of risk provisions refers primarily to the release of the indemnity obligation in favour of Andali the case of the enforcement of the surety issued by GSE for € 2,205 thousand as detailed in the paragraph "Agreements related to the sale of Andali Energia S.r.l.".

"Other revenues" for the financial period refer mainly to the charge back of costs incurred by the Parent Company on behalf of associates and joint ventures.

8.2 Operating costs

In the financial periods ended 31 December 2018 and 31 December 2017, operating costs amounted to € 811,144 thousand and € 972,183 thousand respectively:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Raw materials, consumables and goods for resale	481,267	661,404
Costs for services	204,124	189,298
Costs for Rentals and Leases	14,125	12,855
Personnel costs	36,604	34,218
Depreciation, amortisation, provisions, write-downs	43,265	42,964
Other operating costs	31,760	31,444
Operating costs	**811,144**	**972,183**

8.2.1 Purchase of raw and ancillary materials, consumables and goods for resale

The costs to purchase raw and ancillary materials, consumables and goods amount to € 481,267 thousand at 31 December 2018 and to € 661,404 thousand at 31 December 2017.

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Purchase of raw and ancillary materials and goods	471,761	668,522
Changes to inventories	9,803	(7,118)
	481,564	**661,404**
minus:		
- increases from in-house production	(297)	
Raw materials, consumables and goods for resale	**481,267**	**661,404**

The purchase costs of raw and ancillary materials, consumables and goods in 2018 came down to the recognition in the item “commodities trading margin” for the revenue and costs from the gas trading activity in accordance with IFRS 15. In particular, in the year ended 31 December 2017, “Purchase of raw and ancillary materials and goods” includes the costs for the trading activity for € 287,041 thousand. The corresponding amount at 31 December 2018 for € 229,561 thousand is classified under “Income/(expenses) from commodity risk management”.

The most significant component in this item refers to the gas purchase, transport and storage costs for € 415,085 thousand and the costs to purchase electricity for € 40,881 thousand.

The item also includes the extraordinary “settlement” component, referring to the subsidiary Gas Marca S.r.l. for € 1,387 thousand, detailed in the paragraph “Acquisition of Gas Marca S.r.l.”.

The costs to purchase gas include the purchase costs deriving from the long-term delivery contract to Tarvisio between Sinergie Italiane S.r.l. and Gazprom Export LLC, with the resale to the Group’s resale companies.

The costs to purchase of raw and ancillary materials, consumables and goods for the provision of natural gas and electricity to end customers in 2018 increased compared to 2017, in relation to revenue trends.

8.2.2 Costs for services

The table below shows the breakdown of the Group's costs for services at 31 December 2018, compared with the year ended 31 December 2017:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Professional fees	10,214	8,927
Other costs for services	14,928	14,660
Cost for the renovation of third party plants and for tenders and maintenance	10,283	7,420
Insurance	1,700	1,668
Technical, fiscal, administrative and notary fees and consulting services	8,048	5,554
Costs relative to customer management and for the printing and delivery of bills	4,943	5,662
Telecommunications services	1,849	1,691
Costs for gas distribution to users	94,839	85,554
Costs for electricity transport and dispatching	54,812	55,385
Costs for advertising and sponsoring the Group's products	3,324	2,778
minus:		
- increases from in-house production	(817)	
Costs for services	**204,124**	**189,298**

The item "Costs of gas distribution to users" shows a significant increase in 2018 over the previous year, mainly due to the growth of volumes of gas distributed.

In addition, the increase in the costs for services refers to the higher costs for professional fees, consulting and advertising and sponsorship expenses for advertising campaigns related to the new listing process.

8.2.3 Costs for Rentals and Leases

The table below shows the breakdown of the Group's costs for rentals and leases at 31 December 2018, compared with the year ended 31 December 2017:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Expenses for gas concessions	8,356	6,958
Rental office premises	2,719	2,681
Various rentals and leases	3,050	3,216
Costs for Rentals and Leases	**14,125**	**12,855**

Expenses for gas concessions refer to the fees paid to Municipalities providing the natural gas distribution and measuring service, and primarily:

- € 2,516 thousand to Municipalities providing services to Centria S.r.l. and shareholders of Coingas S.p.A., Consiag S.p.A. and Intesa S.p.A. (€ 2,516 thousand in 2017);
- € 571 thousand to Municipalities providing the service to Gergas S.p.A. (Grosseto) (€ 661 thousand in 2017);
- € 4,931 thousand to the Municipalities awarded the concession for natural gas distribution and measuring, subsequent to public tender procedures (€ 3,710 thousand in 2017). The increase in this item is due to the inclusion of Tua Rete S.r.l. within the scope of consolidation at the end of 2017; the latter manages the gas distribution service under concession in the Municipalities of Mosciano, Citerna, Rieti and Magione.

Rental office premises relates primarily to the costs incurred by the Group to rent office premises from shareholders Consiag S.p.A., Coingas S.p.A. and Intesa S.p.A.

Various rentals and leases primarily refers to the Unbundling Local Loop (ULL) fees paid by the subsidiary Estracom S.p.A., needed to conduct its telecommunication activities, hardware and software leases and vehicle leases.

8.2.4 Personnel costs

The table below shows the breakdown of the Group's personnel costs at 31 December 2018, compared with the year ended 31 December 2017.

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Wages and salaries	26,336	24,772
Social security contributions	8,572	7,608
Employee severance indemnity	1,559	1,460
Other costs	114	91
Seconded personnel from third parties	143	286
minus:		
- increases from in-house production	(120)	
Personnel costs	**36,604**	**34,218**

The increase in this item is attributable mainly to the growth in the staff component, following the company acquisitions during 2018 and at the end of 2017.

8.2.5 Depreciation, amortisation, provisions and write-downs

The table below shows the breakdown of the Group's amortisation, provisions and write-downs at 31 December 2018, compared with the year ended 31 December 2017:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Amortisation of intangible assets	27,847	26,477
Depreciation of tangible assets	7,055	4,964
Write-down of intangible assets	-	21
Write-down of tangible assets	10	1,723
Write-down of trade receivables	8,320	9,539
Provisions for risks	-	143
Other provisions	32	97
Depreciation, amortisation, provisions and write-downs	**43,264**	**42,964**

For details of items relating to depreciation, amortization and write-downs of trade receivables, reference is made to the tables describing tangible assets, intangible assets and provisions for write-downs shown in the notes to the financial statements. An increase was recorded specifically under "Depreciation of tangible assets" for € 2,091 thousand due to investments and the extended scope of consolidation during the period.

With regard to the "Write-down of tangible assets" in 2017, reference is made to the "Impairment test" note pursuant to IAS 36 on the value of tangible assets.

8.2.6 Other operating costs

The table below shows the breakdown of the Group's other operating costs at 31 December 2018, compared with the year ended 31 December 2017:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Other operating expenses	4,093	2,464
Various indirect taxes	1,331	1,060
Purchase of Energy Efficiency Certificates	25,357	17,861
Membership fees	683	715
Tariff component resolution 159/08	-	8,574
Losses on disposals	296	770
Other operating costs	**31,760**	**31,444**

The item "Purchase of Energy Efficiency Certificates" refers to the costs sustained to obtain energy saving certificates to fulfil the 2018 obligation. Similarly to the relevant revenue item, the costs to purchase energy efficiency certificates recorded a significant increase associated with higher market prices.

"Tariff component resolution 159/08" relates to the amount payable to the Cassa Conguaglio for the Electricity Sector in terms of Resolution no. 159/08 ARERA and subsequent amendments and integrations. Based on IFRS 15, given that the tariff component resolution 159/08 is applicable, this component is stated net of the relevant revenue.

8.3 Income and expenses from commodity risk management

In the financial periods ended 31 December 2018 and 2017, the results from commodity risk management amounted to € 394 thousand for expenses and € 536 thousand for income respectively.

As from 01 January 2018, due to the application of IFRS 15, the item refers to the change in fair value on forward contracts (to buy and sell) used in the gas trading activity and swap derivatives not designated as hedging instruments as in previous years, as well as to revenue and costs for natural gas trading transactions, with physical delivery during the period.

The table shows the item's breakdown:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Margin of gas trading activity	(984)	150
change in fair value of commodity swaps used in the marketing of electricity	(63)	-
change in fair value of commodity swaps used in the marketing of gas	(3,372)	-
Total expenses from commodity risk management	**(4,419)**	**150**

Additional information is available in the note Financial Instrument and measurements at fair value.

8.4 Portion of income/expenses from valuation of non-financial investments using the equity method

In the years ended 31 December 2018 and 31 December 2017, income from the valuation of non-financial investments using the equity method amounted to € 558 thousand and € 225 thousand respectively.

The item refers to the portion attributable to the Group of the joint venture EDMA Reti Gas S.r.l. result, measured using the equity method. Given the non-financial nature of the investment and the management and operational role played by the Group, the portion of the subsidiary's result attributable to the Group is recorded in the income statement before the operating result.

8.5 Financial income

In the financial periods ended 31 December 2018 and 31 December 2017, financial income amounted to € 2,113 thousand and € 3,335 thousand respectively. This is detailed as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Income from associates	185	207
Various income from others	1,759	2,846
Revaluation IRS derivatives	169	282
Financial income	**2,113**	**3,335**

Income from associates and joint ventures accrued on receivables recorded under financial assets for the loans granted to the latter.

"Other income" refers mainly to interest income accrued on bank and postal current accounts for Euro 516 thousand (Euro 910 thousand at 31 December 2017) and interest income from delayed payments charged to customers for Euro 1,241 thousand (Euro 1,917 thousand at 31 December 2017).

8.6 Financial expenses

In the financial periods ended 31 December 2018 and 31 December 2017, financial expenses amounted to € 15,368 thousand and € 17,548 thousand respectively. This is detailed as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Interest payable to holding companies	366	409
Interest and other financial charges	15,002	17,139
Financial expenses	**15,368**	**17,548**

Interest payable to holding companies includes the interest payable on loans contracted by the Parent Company with Shareholders.

Interest and other financial charges are shown in the table below:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Interest payable on current bank accounts	39	383
Interest payable on loans and financial transactions	3,965	7,727
Interest payable on bonds	10,057	8,511
Other interest payable	366	303
Interest on arrears	467	114
Interest on employee severance costs	108	102
Interest and other financial charges	**15,002**	**17,139**

The figure for “Interest payable on bonds” for 2018 was impacted by the extraordinary components (interest advanced and partial reversal of opening loan expenses) for € 2,119 thousand related to the early repayment of bond loans for a nominal value of € 30 million.

The figure for “Interest payable on loans and financial transactions” for 2017 was affected by the extraordinary components related to the early repayment of leases and extinguishing of hedging derivative instruments for a total of € 3,274 thousand.

8.7 Portion of income/expenses from valuation of financial investments using the equity method

In the years ended as of 31 December 2018 and as of 31 December 2017, the valuation of financial investments using the equity method resulted in income for € 427 thousand in 2018 and income of € 280 thousand in 2017.

The item refers to the portion attributable to the Group of the associate and joint venture financial results, measured using the equity method.

8.8 Income taxes for the year

In the financial periods ended 31 December 2018 and 31 December 2017, income taxes for the year amounted to € 5,204 thousand and € 14,321 thousand respectively:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Current taxes	11,034	18,537
Taxation of previous years	(407)	125
Current taxes	**10,627**	**18,661**
Prepaid taxes	(1,154)	(985)
Deferred taxes	(4,365)	(3,356)
Taxes for the year	**5,108**	**14,320**

The Group has chosen to adopt the national tax consolidation regime, the rules of which are contained in articles 117 to 129 of Italian Presidential Decree no. 917/1986. This optional regime envisages that the holding company is responsible for calculating a single taxable income for the entire Group, corresponding to the algebraic sum of net incomes of the companies covered, and consequently a single income tax payable for the Group companies.

In each fiscal year companies recording a loss have the right to receive as loss compensation an amount equal to the IRES tax rate applicable in that fiscal year, multiplied by the loss in question. Companies recording a surplus of interest expense or excess ROL have the right, if the surplus is used, to receive compensation equal to an agreed percentage of the lower taxes calculated on the surplus used.

The scope of consolidation includes the following companies held for above 50%: Estra Clima S.r.l., Centria S.r.l., Estra Energie S.r.l, Gergas S.p.A. and Estracom S.p.A.

8.9 Net result for discontinued/held for sale assets

In the financial periods ended 31 December 2018 and 31 December 2017, the result for discontinued/held for sale assets amounted to € (2,320) thousand and € (377) thousand respectively.

The Group has designated as non-current assets held for sale/discontinued, the Polish company Useneko, operating in the distribution of gas in Poland, which up until 2016 also included its direct subsidiary Serenia S.r.l. in liquidation, which merged with the Parent Compliance during 2017, once the process got underway to discontinue/sell the two subsidiaries.

The process to discontinue the business extended beyond the time frame initially envisaged due to critical aspects emerging with certain network recovery issues and the regularising of contracts for certain rights of access, which were needed for the sale. The business is classified under the assets held for sale based on what is set out in the paragraph of note 3.1 i).

At the reporting date of this document, following the conditional sales contract signed at the beginning of 2017, the contract to dispose of the Polish subsidiary shareholding at a price of € 650 thousand is currently being finalised, except for the clauses revising the incremental pricing in relation to the completion of certain activities by the seller and Useneko. Given the confirmed intention to implement the disposal and the uncertainty regarding the possible improved conditions, in these consolidated financial statements, Directors adjusted the net value for the assets held for sale to the most probable realisable value for the sale of € 650 thousand, recording a write-down of € 2,320 thousand under "Profit (loss) deriving from assets held for sale" in terms of IFRS 5.

8.10 Non-recurring items and/or unusual significant transactions

The income statement for 2018 and 2017 were not influenced by any non-recurring aspects, pursuant to CONSOB Resolution number 15519 of 27 July 2006.

9. Notes on the main comprehensive income statement items

9.1 Change in cash flow hedge reserve

In the financial periods ended 31 December 2018 and 31 December 2017, the change in the cash flow hedge reserve was positive for € 185 thousand and € 164 thousand respectively.
The item represents the component of the comprehensive result incorporating the change to the "Cash flow hedge reserve" recorded for the effective position of hedging IRS derivatives.

9.2 Actuarial profit (loss)

In the financial period ended 31 December 2018 and 2017, actuarial gains amounted to € 166 thousand and € 82 thousand respectively.
The item represents the component of the comprehensive result incorporating the change to the "IAS 19 discounted reserve", recorded for the actuarial gains and losses arising from changes to the actuarial assumptions used in the employee severance indemnity valuation as per IAS 19.

9.3 Portions of other components of comprehensive income from investments valued using the equity method

In the year ended 31 December 2017, the portions of other components of comprehensive income from investments valued using the equity method amounted to gains for € 131 thousand. This item that was not included at 31 December 2018, represents the component of the comprehensive result incorporating the change to the "Cash flow hedge reserve" in the financial statements of the subsidiaries Cavriglia SPV S.p.A. and Tegolaia SPV S.p.A. or parties subject to joint control measured using the equity method at 31 December 2017 and fully consolidated in 2018.

10. Notes on the main balance sheet items

10.1 NON-CURRENT ASSETS

10.1.1 Tangible assets

In the financial periods ended 31 December 2018 and 31 December 2017, tangible assets amounted to € 84,778 thousand and € 82,033 thousand respectively.

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Land and buildings	7,169	4,954
Plants and machinery	66,230	67,757
Industrial and commercial equipment	758	435
Other assets	5,820	5,940
payments on accounts and assets under construction	4,801	2,947
Tangible assets	**84,778**	**82,033**

Tangible assets are primarily represented by the following investments:

- a wood biomass co-generation plant and the relative district heating network in the Municipality of Calenzano;
- plants and machinery relating to the implementation of telematic and telecommunications structures arising from activities undertaken by Estracom S.p.A.;
- a trigeneration plant located in Sesto Fiorentino owned by the subsidiary Estra Clima S.r.l.;
- photovoltaic plants, owned or leased, and recorded using the IAS 17 financial method;
- a property complex in Pettoranello del Molise, acquired in 2018 at the same time as the acquisition of the shareholding in Melfi Reti Gas S.r.l. and Metania S.r.l.

The following changes were recorded in this item for the year ended 31 December 2018:

thousands of Euro	**Land and buildings**	**Plants and machinery**	**Industrial and commercial equipment**	**Other assets**	**payments on accounts and assets under construction**	**Total**
Cost or valuation						
At 1 January 2018	**7,368**	**98,335**	**2,647**	**23,017**	**2,947**	**134,314**
Increases	2,243	2,521	359	1,245	2,769	9,136
Sales/eliminations		(2)	(10)	(396)		(408)
Reclassifications	270	419	63	315	(916)	151
Corporate acquisitions		607	78	138		823
Write-downs		(10)				(10)
At 31 December 2018	**9,880**	**101,869**	**3,138**	**24,319**	**4,801**	**144,007**
Amortisation/ depreciation						
At 1 January 2018	**(2,415)**	**(30,577)**	**(2,212)**	**(17,077)**		**(52,281)**
Amortisation/depreciation for the year	(275)	(4,960)	(120)	(1,699)		(7,055)
Sales/eliminations		1	9	393		404
Reclassifications	(21)		(31)			(52)
Corporate acquisitions		(103)	(25)	(116)		(244)
At 31 December 2018	**(2,712)**	**(35,639)**	**(2,380)**	**(18,499)**		**(59,229)**
Carrying value						
At 31 December 2017	**4,953**	**67,758**	**435**	**5,940**	**2,947**	**82,033**
At 31 December 2018	**7,169**	**66,231**	**758**	**5,820**	**4,801**	**84,778**

We specifically note the following for 2018:

- investments in the year for € 9,136 thousand attributed primarily to (i) "Land and buildings" for a total of € 2,243 thousand including the acquisition of full ownership of the property in Pettoranello del Molise, which houses the office of Melfi Reti Gas S.r.l. (Euro 2,048 thousand); (ii) "Plants and machinery", for a total of € 2,521 thousand referring mainly to the plants and machinery related to implementing telematic and telecommunication structures and the purchase of 3 photovoltaic plants related to the property in Pettoranello del Molise (iii) "Payments on accounts and assets under construction", for a total of € 2,769 thousand referring mainly to the laying of the infrastructure cabling in the FTTH industrial areas;

- net increases for corporate acquisitions for € 580 due mainly to the full consolidation of Idrogenera S.r.l., with the acquisition of full control. The compliance has a hydroelectric plant located in Castel San Niccolò (AR);

- amortisations for the period for € 7,055 thousand.

The following changes were recorded in this item for the year ended 31 December 2017:

thousands of Euro	Land and buildings	Plants and machinery	Industrial and commercial equipment	Other assets	payments on accounts and assets under construction	Total
Cost or valuation						
At 01 January 2017	**6,832**	**47,593**	**2,557**	**21,087**	**4,134**	**82,203**
Increases	25	2,429	98	1,590	911	5,054
Sales/eliminations		(970)	(8)	(577)		(1,555)
Reclassifications		1,459		639	(2,098)	
Corporate acquisitions		49,539		163		49,701
Contributions	750	8		115		873
Corporate sales	(239)					(239)
Write-downs		(1,723)				(1,723)
At 31 December 2017	**7,368**	**98,335**	**2,647**	**23,017**	**2,947**	**134,314**
Amortisation/ depreciation						
At 01 January 2017	**(2,225)**	**(14,028)**	**(2,116)**	**(15,953)**		**(34,322)**
Amortisation/depreciation for the year	(190)	(3,159)	(103)	(1,511)		(4,964)
Sales/eliminations		546	7	573		1,126
Corporate acquisitions		(13,931)		(128)		(14,058)
Contributions		(5)		(59)		(64)
Corporate sales						
At 31 December 2017	**(2,415)**	**(30,577)**	**(2,212)**	**(17,077)**		**(52,281)**
Carrying value						
At 31 December 2016	4,607	33,566	441	5,134	4,134	47,882
At 31 December 2017	4,954	67,757	435	5,940	2,947	82,033

We specifically note the following for 2017:

- net increases for corporate acquisitions for € 35,643 thousand, referring primarily to the acquisition and full consolidation of Cavriglia SPV S.p.A. for € 23,554 thousand and Tegolaia SPV S.p.A. for € 11,864 thousand, which operate photovoltaic plants;

- investments in the year for € 5,054 thousand attributed primarily to (i) "Plants and machinery", for a total of € 2,429 thousand referring mainly to the plants and machinery related to implementing telematic and telecommunication structures; (ii) "Other assets", for a total of € 1,590 thousand referring to office machinery and furniture and (iii) “Accounts and assets under construction”, for a total of € 911 thousand relating primarily to the projects underway for the telephony sector, and in particular the realisation of video surveillance systems, the back-bone of the telephony network and fibre optic connections;

- elimination for € 429 thousand, relating mainly to telecommunication systems;

- contributions of assets for € 809 thousand, relating to the Estra share capital increase subscribed by Viva Servizi S.p.A.;

- amortisations for the period for € 4,964 thousand;

- impairments for € 1,723 relating to the district heating plant in Sesto Fiorentino, as detailed in the note below.

10.1.2 Impairment testing pursuant to IAS 36 on the value of tangible assets

Financial year 2018

The Directors based on internal and external conditions, found no impairment indicators referring to tangible assets.

Financial year 2017

The Directors noted impairment indicators referring to the district heating plant in Sesto Fiorentino, recorded for a carrying value of **€ 3,545** thousand at 31 December 2017 prior to the write-down undertaken, due to lower operating results from the plan forecasts, largely as a result of less urban development, and consequently, less connected residential units compared to expectations. This plant refers to the “Heat management” included under “Other operating sectors”.

The impairment test compared the carrying value recorded and the estimated recoverable value for the asset, calculated on the basis of its value in use.
For the value in use, the current value of estimate future cash flows was considered, which supposes that they will derive from the asset’s continued use and disposal of the asset at the end of its useful life. The value in use was determined using the Discounted Cash Flow method, which estimates future cash flows and their discounting based on an appropriate discount rate.
The cash flow provisions represent the best estimates that Estra’s management could conduct based on the main assumptions underlying the plant’s operations over the period 2018-2032 (residential units, production and sale of thermal and cooling energy, maintenance costs and investments in the plant, sales tariffs). The cash flow deriving from the disposal at the end of the useful life (terminal value) was estimated at € 460 thousand, based on the forecast value for tangible assets at the end of the plan.
The discount rate used to reflect the current market valuations with reference to the current value of money and specific risks associated with the asset, was estimated consistently with the considered cash flow, using the weighted average cost of capital (WACC) after tax of 5%. To complete this analysis, Directors recorded an impairment in the current year for € 1,723 thousand against a carrying value after depreciations, net of contributions of € 3,545 thousand at 31 December 2017, which was stated in the Income statement under write-downs of tangible assets. The net value for the asset amounts to € 1,822 thousand at 31 December 2017, after the write-down undertaken.
The calculation of the value in use is especially sensitive to the following assumptions:

- gross margin;
- discount rate.

The increase in the after-tax discount rate, or a reduction in the expected gross margin would result in a further reduction in the plant's value.

10.1.3 Goodwill

Goodwill recorded in the consolidated financial statements at 31 December 2018 (and 31 December 2017) refers to:

i) the following business combination operations prior to the FTA date, where the Group opted not to retrospectively apply IFRS 3:
   - goodwill recorded following the acquisition of Gergas S.p.A. relating to the "Gergas gas distribution" CGU (€ 1,369 thousand);
   - goodwill recorded from the contributions of the gas customer management business units by Consiag S.p.A., Intesacom S.p.A. and Coingas S.p.A.; the acquisition against payment for the gas sales business units of Amag S.r.l., Valdarnotiberinagas S.r.l., Baiengas Commerciale S.r.l. and Offidagas S.r.l. and Esegas; the deficit from the merger by incorporation of Energeia S.r.l, into the complex relating to the "Sale of Gas and Electricity" CGU (€ 10,687 thousand).

ii) the following business combination operations after the FTA date amount at € 17,380 thousands and are detailed as follow: goodwill resulting from the Purchase Price Allocation from the acquisition of Metania S.r.l. in 2018 (€ 10,836 thousand);
   - goodwill resulting from the Purchase Price Allocation from the acquisition of Gas Marca S.r.l. in 2018 (€ 6,544 thousand).

The Group conducted impairment testing at 31 December 2018 and 31 December 2017, which as stated above, did not show any losses in value.

10.1.4 Impairment testing pursuant to IAS 36 on the value of goodwill

The goodwill acquired with the business combinations, for the purposes of the impairment was allocated to the "Gas and electricity sales" and "Gergas gas distribution" cash generating units:

Carrying value of goodwill allocated to each cash generating unit:

	Gas and electricity sales		Gas distribution		Total	
	2018	**2017**	**2018**	**2017**	**2018**	**2017**
Goodwill	28,067	10,687	1,369	1,369	29,436	12,056

The Group conducted its own impairment test at 31 December 2018 and 2017.

The Group monitor the recoverability of the assets based of approved Business Plan that take in considerations the synergies and the strategies at the CGU level.

Gas and electricity sales

The recoverable value for the Gas and electricity sales cash-generating unit was determined on the basis of the value in use calculation, where cash flow projections were used for the CGU, based on the most recent business plans available at the measurement date and approved by Company Management (the business plan referred to 2019-2021 for the impairment testing at 31 December 2018). The discount rate applied to the cash flow projections, net of tax is 6.8% in 2018 (5.3% in 2017). Cash flows were extrapolated using a growth rate of 1.5% in 2018 (1.5% in 2017), taken as the average growth rate for the business of gas and electricity sales over the long-term. To complete the analysis, Directors did not record an impairment for net assets in the Gas and electricity sales unit, including goodwill for € 28,067 thousand (€ 10,687 thousand in 2017).

Key assumptions used in calculating the value in use and sensitivity to changes in assumptions

The value in use for the Gas and electricity sales CGU was especially sensitive to the following factors:
- gross margin;
- market share during the forecast period;
- discount rates.

Gross margin – The gross margin was based on the figures over the three years prior to the start of the Plan's time frame, prudently assuming marginal increases related to increased efficiency. The increase in the costs of raw materials beforehand or not achieving the efficiency targets could result in a decreased margin compared to what is envisaged in the plan.

Market share assumptions - Management expects the market share in Gas and electricity sales to grow over the Plan's time frame, thanks also to the commercial investments envisaged for maintenance and the acquisition of new customers. Management recognises that it is possible that new players will enter the market and/or increased competition in the sector could impact significantly on the growth rate.

Discount rates – Discount rates reflect the specific market risk assessment for each cash flow generating unit, taking into consideration the value of money over time and the specific risks of the underlying activities, which were not already included in the cash flow estimates themselves. The calculation of the discount rate is based on the Group's specific circumstances and its operating sectors, resulted from weighted average capital cost (WACC). The WACC takes into account both debt and equity. The cost of equity derives from the expected yield rate on investments. The cost of debt is based on the onerous funding that the Group has undertaken. The specific sector risk is incorporated, by applying specific beta factors. The beta factors are checked annually, based on available market information. The discount rates are adjusted to take into account quantities and specific time frames of future tax flows, so as to reflect an after-tax discount rate.

The sensitivity analysis was developed by focusing on CGU margins, assuming a 5% decrease, with a consequent reduction in cash flows over the course of the plan and in following years, and on a WACC increase of 5%.

The amounts obtained on this basis were also higher to those for the CGU, and therefore the analysis further confirmed the Gas and electricity sales CGU recorded value.

Gergas gas distribution

Goodwill results from the acquisition of Gergas, a company operating in gas distribution in Grosseto and Campagnatico.

Goodwill is negligible when compared with the comprehensive carrying value for the assets allocated to the Gergas gas distribution unit. Nonetheless, given the uncertainties that still exist regarding the timing to announce and conduct tenders to renew gas distribution concessions/assignments, Directors decided to subject the goodwill to impairment testing, by comparing the carrying value for the gas distribution assets with the fair value net of sales costs (RIV).

To this end, an independent expert was appointed to estimate the Residual Industrial Value (RIV), which is the reference value for determining the right to compensation/reimbursements relating to networks, where the Group could lose the entirety of its concessions, following the tenders that will be announced to assign the concessions.

The recoverable value determined is higher than the asset's carrying value, by also applying reasonable sensitivity factors bringing down the Industrial Value. To complete the analysis, Directors did not record an impairment for carrying value recorded for the net assets in the Gergas gas distribution unit, including goodwill for € 1,369 thousand.

10.1.5 Intangible assets

In the financial periods ended 31 December 2018 and 31 December 2017, intangible assets amounted to € 396,448 thousand and € 352,277 thousand respectively.

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Industrial patent rights, licences and trademarks	4,360	4,462
Assets under concession	265,170	231,221
Customer lists	117,743	109,761
Other intangible assets	8,925	6,470
Intangible assets under construction	250	363
Intangible assets	**396,448**	**352,277**

Industrial patent rights, licences and trademarks refer mainly to third-party software user licences, amortized over 3 years.

Assets under concession relate to networks, plants, connections and other assets pertinent to the distribution of natural gas, recognised according to the "intangible assets method", envisaged by IFRIC 12 for existing concession relationships with the granting entities.

The natural gas distribution service is assigned on the basis of open public tenders, which do not refer to individual Municipalities, but rather to Minimum Geographic Areas (Ambiti Territoriali Minimi - ATEM). Municipalities, cannot therefore independently assign the service on the basis of individual tenders.

However, prior to the adoption of Italian Legislative Decree 164/2000 (so-called Letta Decree), the gas distribution service was assigned directly by individual Municipalities. Furthermore, after the adoption of Legislative Decree 164/2000 and up until the issuing of the relevant implementation decrees, the natural gas distribution activity was assigned on the basis of open public tenders by individual Municipalities. Therefore, as of today's date, the Group still has some concessions assigned directly or by public tender by individual Municipalities.

In the event of the concessions' expiring, the term of the concession is deemed extended up until a new tender is announced. During this extension period, the relationship between the granting party and concession holder continues, and consequently, the latter is still obliged to manage the service, limited to the ordinary administration, up until the new assignment takes effect. Furthermore, the outgoing operators fulfils all the obligations arising from the concession, including the payment of the concession fee payable to the granting entity.

In the event that the Group does not succeed in being awarded new tenders to supply services that are continuing on an extension basis, at the time of taking over, the new operator shall pay the Group as the outgoing operator, for the transfer of the distribution networks from the outgoing operator to the new concession holder. This amount is determined according to the provisions in the concession contract. Without any specific provision (or without certain elements), the contract provisions are supplemented by the guidelines under Ministerial Decree 226/11.

With regard to the above, the technical assessment showed a Residual Industrial Value (RIV) for the networks, plants, connections and other assets pertinent to gas distribution and recorded under "Assets under concession" that was considerably higher than the carrying value in the consolidated financial statements.

Customer lists mainly refers to determining the purchase price allocation (PPA) of the client portfolio of the companies acquired in the business combinations conducted by the Group as from 2015. The item is amortised over the amortisation period corresponding to the expected useful life for the customer lists, which is reassessed at the end of each financial period in relation to the historic and forecast losses for customers (so-called "Churn Rate"). In the financial periods ended 31 December 2018 and 31 December 2017, the customer lists were amortised over a 20-year time frame. The Group deemed this amortisation policy to also be consistent for the customer lists recorded when allocating the fee for the companies acquired during 2018, based on the estimate of their useful life.

Other intangible assets refers mainly to the costs to acquire customers (contract costs) incurred by the Group's commercial companies, amortised over 5-years at a decreasing rate.

The Group annually checks whether there are any impairment indicators; specifically, for the customer lists and contract costs, this refers to checking the annual churn rate recorded for each gas and electricity sales company. The churn rate, also referred to as the drop-out or defection rate, is an indicator used to measure the loss of customers over a specific time period, and represents the percentage of customers that left the service (switch out) compared to the total number of customers using the service.

Based on the above, there were no impairments found at the end of 2018 with regard to intangible assets with a defined useful life.

The following changes were recorded in this item for the year ended 31 December 2018:

thousands of Euro	**Industrial patent rights, licences and trademarks**	**Assets under concession**	**Customer lists**	**Other intangible assets**	**Intangible assets under construction**	**Total**
Cost or valuation						
At 1 January 2018	**35,988**	**373,560**	**122,589**	**15,643**	**363**	**548,143**
Effect 1 January 2018 IFRS 15		15,076				15,076
Increases	3,635	20,028		6,797	125	30,586
Sales/eliminations		(1,685)				(1,685)
Reclassifications		(59)		146	(238)	(151)
Corporate acquisitions	358	21,920	15,374	188		37,841
At 31 December 2018	**39,982**	**428,839**	**137,963**	**22,775**	**250**	**629,809**
Depreciation, amortisation and write-downs						
At 1 January 2018	**(31,526)**	**(142,239)**	**(12,827)**	**(9,174)**		**(195,866)**
Effect 1 January 2018 IFRS 15		(1,002)				(1,002)
Amortisation/depreciation for the year	(3,759)	(12,462)	(6,990)	(4,636)		(27,847)
Sales/eliminations		1,334				1,334
Reclassifications		31		21		52
Corporate acquisitions	(336)	(9,231)	(403)	(62)		(10,032)
At 31 December 2018	**(35,621)**	**(163,669)**	**(20,220)**	**(13,851)**		**(233,361)**
Carrying value						
At 31 December 2017	**4,462**	**231,221**	**109,762**	**6,469**	**363**	**352,277**
At 31 December 2018	**4,361**	**265,170**	**117,743**	**8,924**	**250**	**396,448**

We specifically note the following for 2018:

- Net effect of the first application of IFRS 15 is € 14,073 thousand, as detailed in the relevant paragraph of the notes;
- investments for the period € 30,596 thousand, referring primarily to:
  - "Assets under concession" for a total of € 20,028 thousand for investments made regarding the gas distribution networks;
  - "Industrial patent rights, licences and trademarks" for a total of € 3,635 thousand relating mainly to software costs;
  - "Other intangible assets" for a total of € 6,797 thousand, relating mainly to the costs to acquire customers incurred by the Group's gas and electricity sales companies;
- net increases resulting from the 100% acquisition of Melfi Reti Gas S.r.l., where the relevant consolidation contributed intangible assets for a total of € 12,690 thousand referring to the gas distribution networks falling in the scope of application of IFRIC 12; from the 100% acquisition of Metania S.r.l, where the relevant consolidation contributed intangible assets for a total of € 6,702 thousand referring to the customer lists acquired; from the completion of the 100% acquisition of Gas Marca S.r.l, where the relevant consolidation contributed intangible assets for a total of € 8,362 thousand (referring mainly to customer list for € 8,238 thousand) as outlined in the notes to the changes in the scope of consolidation;
- sales/eliminations for € 351 thousand mainly relating gas meters;
- amortisations for the period for € 10,032 thousand.

The following changes were recorded in this item for the year ended 31 December 2017:

thousands of Euro	**Industrial patent rights, licences and trademarks**	**Assets under concession**	**Customer lists**	**Other intangible assets**	**Intangible assets under construction**	**Total**
Cost or valuation						
At 01 January 2017	**32,447**	**343,862**	**102,595**	**25,677**	**2,017**	**506,598**
Increases	3,280	11,887	67	4,819	488	20,541
Sales/eliminations	(27)	(2,102)		(14,188)		(16,318)
Reclassifications	9				(9)	
Corporate acquisitions			19,926	61		19,987
Contributions	301	19,913		71		20,285
Corporate sales				(796)	(2,133)	(2,929)
Impairment	(21)					(21)
At 31 December 2017	**35,988**	**373,560**	**122,589**	**15,643**	**363**	**548,143**
Depreciation, amortisation and write-downs						
At 01 January 2017	**(27,533)**	**(125,264)**	**(6,556)**	**(10,522)**		**(169,875)**
Amortisation/depreciation for the year	(3,914)	(9,262)	(6,271)	(7,029)		(26,477)
Sales/eliminations		1,380		8,350		9,730
Corporate acquisitions				(44)		(44)
Contributions	(79)	(9,192)		(2)		(9,273)
Corporate sales				73		73
At 31 December 2017	**(31,526)**	**(142,338)**	**(12,827)**	**(9,174)**		**(195,866)**
Carrying value						
At 31 December 2016	4,913	218,598	96,039	15,155	2,017	336,722
At 31 December 2017	4,462	231,222	109,761	6,470	363	352,277

We specifically note the following for 2017:

- investments for the period € 20,541 thousand, referring primarily to:
  - "Assets under concession" for a total of € 11,887 thousand for investments made regarding the gas distribution networks;
  - "Industrial patent rights, licences and trademarks" for a total of € 3,280 thousand relating mainly to software costs;
  - "Other intangible assets" for a total of € 4,819 thousand, relating mainly to the costs to acquire customers incurred by the Group's gas and electricity sales companies.

- increases resulting from the business acquisitions of Piceno Gas Vendita S.r.l. and Verducci S.r.l. for € 19,943 thousand, as outlined in note Business Combinations and acquisitions of minority interests. In particular, during 2017, the Group completed the 100% acquisition of Piceno Gas Vendita,where the consolidation contributed intangible assets for a total of € 18,212 thousand (referring mainly to customer lists for € 18,196 thousand) and the 100% of Verducci S.r.l.,where the consolidation contributed intangible assets for a total of € 1,731 thousand, represented by the customer lists acquired;

- sales/eliminations for € 6,588 thousand, mainly relating to the sale of around 11,000 gas contracts and 25,000 electricity contracts to Canarbino S.r.l. in the scope of the 40% acquisition of Estra Elettricità S.p.A by Estra Energie S.r.l., as referred to under "Acquisitions of additional minority interests in companies already controlled";

- amortisations for the period for € 26,477 thousand;

- corporate sales for € 2,856 thousand, referring to the deconsolidation of Andali Energie S.r.l.;

- contributions for € 11,012 thousand, referring to the contribution to Centria S.r.l. by Energia Offida S.r.l. of assets under concession for € 1,212 thousand, the consolidation of EDMA S.r.l. and TuArete S.r.l. for € 9,801 thousand, (of which assets under concession for € 9,509 thousand) and the contribution for the share capital increase of Estra by Viva Servizi S.p.A. of software licences for € 99 thousand. Reference is made to the paragraph "Business combination and corporate sales".

10.1.6 Equity investments

In the financial periods ended 31 December 2018 and 31 December 2017, equity investments amounted to € 22,217 thousand and € 29,523 thousand respectively.

Equity investments **(amounts in thousands of euro)**	**Balance at 31 December 2017**	**Business combinations**	**Increases/(decreases)**	**Other changes**	**Revaluation/(write-down)**	**Balance at 31 December 2018**
Idrogenera S.r.l.	8		8		(16)	-
Edma Reti Gas S.r.l.	9,603				85	9,688
Nuova Sirio S.r.l.	19				18	37
Equity investments in companies subject to joint control	**9,630**		**8**	**-**	**87**	**9,725**
Blugas Infrastrutture S.r.l.	7,521				(125)	7,396
AES Fano	188			399	56	643
Monte Urano S.r.l.	1,071				(166)	905
Sangro Servizi S.r.l.	1,823		(1,823)			-
Gas Marca S.r.l.	5,906				(5,906)	-
SIG S.r.l	3,184				(28)	3,156
Equity investments in associates	**19,694**		**(1,823)**	**399**	**(6,169)**	**12,100**
Ecolat S.r.l.			125			125
AISA S.p.A.			77			77
Other companies	8	15				23
Casole Energia S.r.l.	191				(24)	167
Equity investments in other companies	**199**	**15**	**202**	**-**	**(24)**	**392**
Total equity investments	**29,523**	**15**	**(1,613)**	**399**	**(6,106)**	**22,217**

The increases/(decreases) in the year refer to:

- The sale to Hera Comm of the 49% stake in Sangro Servizi S.r.l., concurrently with the cancellation by mutual consent of the deed of sale for the shareholding by the Municipalities of Atessa, Paglieta and San Vito Chietino of 7 March 2017;
- The acquisition by ETH S.r.l. of 12% of Ecolat S.r.l., with the subscription to the capital increase for € 125 thousand. The acquisition transaction was completed in February 2019, with ETH S.r.l. selling the remaining 88% shareholding for € 6,380 thousand. In addition to being a shareholder in SEI Toscana S.r.l., the company owns a selection and sorting plant for waste originating from separate collection in the provinces of Grosseto, Arezzo, Prato and Florence, also operating the waste collection centre in Grosseto and a municipal waste recovery storage platform.
- The acquisition from the Municipality of San Savino of 1.16% of AISA S.p.A., which holds a 6% shareholding in SEI Toscana S.r.l. for € 77 thousand.

The other changes refer to the full consolidation of Idrogenera S.r.l. and Gas Marca S.r.l., as mentioned in the notes on the changes to the scope of consolidation.

The revaluations/write-downs result from applying the equity method.

No impairments were identified for any equity investments, and consequently no specific impairments tests were conducted.

With regard to Blugas Infrastrutture S.r.l., the investment is recognised at a carrying value higher than the corresponding portion of the subsidiary's shareholders' equity at 31 December 2018 for € 2,473, following the assignment of a higher purchase to acquire the company's assets represented by:

- a 10% co-interest to the project for the construction and operation of the storage plant located in San Potito and Cotignola, Ravenna province, with the partner Edison Stoccaggio at 90%, as a result of a special concession ("San Potito and Cotignola Storage") awarded by the Italian Ministry for Economic Development with the Ministerial Decree of 24/04/2009;
- an ownership interest of 70 million cubic metres of natural gas to be extracted from the Abbadesse field.

With regard to the San Potito and Cotignola Stoccaggio project Storage, it should be noted that, following the discovery of a more complex geological situation than expected, Edison Stoccaggio had to significantly revise the originally approved project with a consequent reduction in storage capacity estimates. Bythis changed scenario, AEEGSI (now ARERA) with resolution 66/2016 dated 25 February 2016 redetermined the tariffs using a penalising mechanism that was questionably lawful, to reduce the revenue from the site capex (calculated according to the investment realised/ space performance achieved ratio), which will be applied each year up until the site regulation is completed (expected in 2019), at the same time, requiring a partial adjustment for the lower revenue received, in relation to the space performance that the fully operation concession will guarantee. In addition only with regard to 2015, and once again based on resolution 531/2014/R/gas, the Authority made the recognition of certain revenue components (amortisation and incentive rates) conditional on the site becoming "commercially" operational, i.e. the date when the site began to commercially offer its capacity for storage services (2015), effectively moving the recognition of these components by a year (as from 2016).

The co-holder Edison Stoccaggio strongly objected to the Authority's argument, undertaking the relevant legal action to request the cancellation of said Resolution, so that the business revenue could be restored as per the original project. Therefore following the rejection of Edison Sotccaggio's application by the Regional Administrative Court of Lombardy with judgment dated 8 October 2018, the former then presented an appeal to the Council of State.

The Authority approved the definitive 2018 and provisional 2019 tariffs, and in applying Resolution 66/2016 confirmed the curtailment of revenues referring to the investments for San Potito and Cotignola, regarding the capacity made available to commercial operators.

Without prejudice to the fact that the Company deems its arguments underlying the appeal to be valid, from estimates undertaken on the impact on the multiple year project plan's revenue, there are no impairment indicators, in consideration of both the economic results that are positive, expected cash flows, and the implicit gains under the company's assets; no write-down for impairment was thus made on the equity investment and the financial receivables.

With regard to the 11.05% shareholding in Sinergie Italiane S.r.l. we remind you that the company was put into liquidation in terms of the shareholders' meeting resolution dated 13 April 2012. Previously, on 29 March 2012, the shareholders meeting had balanced the deficit of € 88.7 million and reconstructed the share capital to € 1 million, through a cash contribution of € 89.7 million.

During 2017 and 2018, the company continued its business, mainly limited to the purchase of gas from the Russian supplier Gazprom Export LLC and reselling the same to the vendor companies controlled by shareholders (Estra Energie S.r.l. for the shareholder Estra S.p.A.). The interim liquidation financial statements at 30 September 2018, prepared in compliance with art. 2490 of the Italian Civil Code, closed with negative shareholders' equity of € 6.5 million (€ 10.5 million at 30 September 2017), after liquidation adjustments of € 32.8 million and profit for the period of € 4 million. Given the positive results expected over future years, it is reasonable to expect a return to a balance in the Company's balance sheet with future profits able to cover the current deficit.

10.1.7 Other non-current financial assets

In the financial periods ended 31 December 2018 and 31 December 2017, other non-current financial assets amounted to € 12,762 thousand and € 9,560 thousand respectively.

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Loans to companies subject to joint control	150	407
Loans to associates	4,937	4,153
Loans to others	7,676	5,000
Other non-current financial assets	**12,762**	**9,560**

The tables below show the composition of loans to subsidiaries and their changes at 31 December 2018 compared to the previous financial period:

(amounts in thousands of euro)	**Balance at 31 December 2017**	**Increases**	**Decreases**	**Other changes**	**Balance at 31 December 2018**
Nuova Sirio S.r.l.	150				150
Idrogenera S.r.l.	257			(257)	-
Loans to companies subject to joint control	**407**			**(257)**	**150**

(amounts in thousands of euro)	**Balance at 31 December 2017**	**Increases**	**Decreases**	**Other changes**	**Balance at 31 December 2018**
Blugas Infrastrutture S.p.A.	4,153				4,153
A.E.S. Fano Distribuzione Gas S.r.l.	-			784	784
Loans to associates	**4,153**			**784**	**4,937**

The zero balance for loans to Idrogenera at 31 December 2018 result from the company's full consolidation with the acquisition of control.

The increase in loans to AES Fano Distribuzione Gas S.r.l. results from the reclassification of trade receivables.

The loans to others refers mainly to:

- for € 5,000 thousand to the amount paid at the time of being awarded the gas distribution tender for the Municipality of Rieti, and which will be refunded once the concession ends, and all plants, networks and other distribution service installations are returned to the replacement operator;
- for Euro 2,348 as a security deposit to acquire the remaining 78% portion of Ecolat's share capital, finalised at the beginning of 2019.

The valuation of the fair value of the trade receivables take in consideration the shareholders supports of the solvency of counterparts.

10.1.8 Other non-current assets

In the financial periods ended 31 December 2018 and 31 December 2017, other non-current financial assets amounted to € 4,713 thousand and € 4,585 thousand respectively and mainly refer to long term guarantee deposits issued in favour of the Customs Agency by the subsidiary Estra Energie S.r.l. and to various suppliers for sales activities and gas storage.

10.1.9 Deferred tax assets

In the financial periods ended 31 December 2018 and 31 December 2017, deferred tax assets amounted to € 27,295 thousand and € 25,353 thousand respectively.

The table below shows the composition of deferred tax assets and their changes at 31 December 2018 compared to the previous financial period:

(amounts in thousands of euro)	Balance at 31 December 2017	First IFRS 9 application	Corporate acquisitions	Reversals/Uses	Allocations	Balance at 31 December 2018
Amortisation/ depreciation	5,475		14	(121)	1,025	6,393
Risk provisions	1,759			(883)	400	1,276
Provision for write-downs	10,191	531	257	(1,568)	2,052	11,463
Contributions received on connections	3,376			(99)	25	3,302
Write-down of fixed assets	1,310			(760)		550
Provision for early retirement of employees	125			(30)		95
Lease accounting	131			(1)	14	143
Reversal intangible assets	474		4	(274)	19	223
Fair value derivatives	360			(59)		302
Discounted employee severance indemnity	167		3	(48)	5	127
Other	1,985		11	(874)	2,299	3,420
Total	**25,353**	**531**	**289**	**(4,717)**	**5,839**	**27,295**

The table below shows the composition of deferred tax assets and their changes at 31 December 2017 compared to the previous financial period:

(amounts in thousands of euro)	31 December 2016	Corporate acquisitions	Corporate contributions	Corporate sales	Reversals/Uses	Allocations	31 December 2017
Amortisation/ depreciation	4,611				(99)	963	5,475
Risk provisions	3,154			(687)	(786)	78	1,759
Provision for write-downs	9,921	238			(683)	715	10,191
Contributions received on connections	3,198				(90)	268	3,376
Write-down of fixed assets	1,510			(656)	(505)	961	1,310
Provision for early retirement of employees	365				(240)		125
Lease accounting	209	127			(209)	4	131
Reversal intangible assets	631				(186)	29	474
Fair value derivatives	553	725			(890)		388
Discounted employee severance indemnity	164	8			(9)	4	167
Other	1,224	54	65		(861)	1,473	1,955
Total	**25,540**	**1,152**	**65**	**(1,343)**	**(4,558)**	**4,495**	**25,351**

The Group has accounted for the deferred tax assets relating to temporary differences between values which are significant for tax purposes and carrying values, where it considers probable that future taxable amounts will absorb the temporary differences that generated them. In determining deferred tax assets, reference was made to the IRES tax rate (corporate income tax) and, where applicable, the IRAP tax rate (regional production tax) applicable at the time the temporary difference are expected to be reversed.

There are no problems expected regarding recoverability given the extent of the expected taxable income.

10.2 CURRENT ASSETS

10.2.1 Inventories

In the financial periods ended 31 December 2018 and 31 December 2017, inventories amounted to € 8,674 thousand and € 22,690 thousand respectively.

The item is broken down as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Materials inventories	4,028	3,916
Natural gas storage inventories	4,585	18,626
LPG inventories	309	341
Provision for stock devaluations	(249)	(193)
Inventories	**8,674**	**22,690**

Inventories primarily comprise:

- spare parts intended for the maintenance and operation of the gas distribution plants for € 2,916 thousand as of31 December 2018 (€ 2,675 thousand as of 31 December 2017, recognised at purchase or production cost, including ancillary charges, that resulted less than the fair value;
- stored gas intended for supplies to end customers, measured at the lower value between the purchase cost including ancillary charges, and the presumed realisable value from the market trend for € 4,585 thousand (€ 14,323 thousand as of 31 December 2017);

The balance at 31 December 2017 also included stored gas held for trading for € 4,303 thousand, measured at fair value in relation to official listings on reference markets at the reporting date.

There was a decrease in stored natural gas inventories in 2018 compared to the previous year.

10.2.2 Trade receivables

In the financial periods ended 31 December 2018 and 31 December 2017, trade receivables amounted to € 351,022 thousand and € 294,030 thousand respectively.

The item is broken down as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Receivables from users and customers	340,435	279,728
Receivables from subsidiaries	6,687	10,287
Receivables from associates	1,175	1,964
Receivable from holding companies	2,726	2,051
Trade receivables	**351,022**	**294,030**

The adjustment of the nominal value of receivables to their estimated realizable value was obtained using a write-down provision established for doubtful debts, referring mainly to trade receivables for the sale of gas and electricity to end customers. Changes in the provision are shown in the table below:

(amounts in thousands of euro)	Balance at 31 December 2017	First IFRS 9 application	Business combinations	Uses during the year	Allocations for the year	Balance at 31 December 2018
Provision for write-downs	**47,813**	2,213	1,800	(6,953)	8,320	**53,193**

(amounts in thousands of euro)	Balance at 31 December 2016	Business combinations	Uses during the year	Allocations for the year	Balance at 31 December 2017
Provision for write-downs	**45,498**	1,526	(8,751)	9,539	**47,813**

Trade receivables primarily refer to receivables from customers for the provision of gas and electricity and include the provision for invoices still to be issued, referring to current year and last years, for the estimate of the gas and electricity supplied to end customers and not yet invoiced at 31 December.

The Group adopted a method to calculate the Provision for write-downs based on which the credit positions are analysed according to different risk profiles, determined in terms of creditor category and the stratification of prior credit. At each overdue level, based on the category, write-down percentages are applied that are calculated on a historical basis and subdivided according to credit ageing time brackets and customer clusters. For additional information on the calculation of the Provision for write-downs and the provision for invoices still to be issued for the gas and electricity supplied, reference is made to the note "Significant accounting estimates".

For information on the receivables from Shareholders, companies subject to joint control and associates, reference is made to table referring to related parties transactions in the note "Transactions with Related parties".

The payment terms generally applied to customers are managed by legislation or regulations in force and are in line with the standards of the free market; in the event of non-payment, interest on arrears is charged in the amount indicated in the supply contracts and provided by existing legislation.
Reference is made to the paragraph "Credit Risk" for additional information on credit ageing.

10.2.3 Tax receivables

In the financial periods ended 31 December 2018 and 31 December 2017, tax receivables amounted to € 19,881 thousand and € 35,777 thousand respectively.

The item is broken down as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
VAT credit	6,749	17,912
IRES/IRAP credit	9,644	4,076
UTIF	2,428	12,508
Other tax receivables	1,059	1,281
Tax receivables	**19,881**	**35,777**

10.2.4 Other current assets

In the financial periods ended 31 December 2018 and 31 December 2017, other current assets amounted to € 20,006 thousand and € 19,986 thousand respectively.

The item is broken down as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Receivables from the AEEG and GSE	8,333	9,757
Advances	4,453	3,428
Other receivables	5,037	4,781
Guarantee deposits	-	79
Prepaid expenses	2,183	1,941
Other current assets	**20,006**	**19,986**

The item “Receivables from the AEEG” mainly regards the amounts due in application of the equalisation mechanism relative to the restriction of total distribution revenues for subsidiaries operating in the sector, and for contributions relative to reaching the energy saving targets.

The item “Advances” mainly includes the payment made by the parent company to the Municipality of Prato for € 1,700 thousand against the agreement signed in 17 November 2011, referred to in paragraph “Main pending disputes”.

“Guarantee deposits” mainly refer to deposits paid on behalf of the supplier Sinergie Italiane S.r.l. and the subsidiary Estra Energie S.r.l. for trade supplies for the current thermal year.

Receivables recognised under current assets are all payable within twelve months.

All the receivables relate to entities operating in Italy, except for negligible amounts from EU and non-EU entities for gas sales.

Also note that:

- certain receivables and payables with the same counterparties are recognised separately amount receivables and payables as they cannot be offset by law as a result of specific agreements between the parties;
- there were no receivables subject to constraints or restrictions of any kind or receivables for which it was decided to discount in compliance with sound accounting principles;
- there were no transactions with compulsory buy-back on maturity;
- there were no receivables in foreign currency.

10.2.5 Other current financial assets and other current financial liabilities

In the financial periods ended 31 December 2018 and 31 December 2017, other current financial assets amounted to € 17,422 thousand and € 12,259 thousand and € 18,168 respectively, whereas other current financial liabilities amounted to € 20,814 thousand and € 13,131 thousand.

Current financial assets are broken down as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Interest income from banks	448	625
Derivative instruments	16,974	11,634
Other current financial assets	**17,422**	**12,259**

Derivative instruments included in other current financial assets are made up as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Forward commodity contracts	16,704	11,511
Commodity Swaps	269	123
Derivative instruments	**16,974**	**11,634**

Current financial liabilities are broken down as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Derivative instruments	20,814	13,131
Other current financial liabilities	**20,814**	**13,131**

Derivative instruments included in other current financial liabilities are made up as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Forward commodity contracts	15,393	11,427
Commodity Swaps	4,305	175
Cash flow hedge Interest Rate Swaps	545	789
Non designated Interest Rate Swaps as hedging instruments	571	740
Derivative instruments	**20,814**	**13,131**

Receivables from banks refer to the interest accrued on cash at the reporting date, credited by the bank on a subsequent date.

The forward contracts (to buy or sell) envisage the physical delivery of gas during future years, used in the gas trading activity. These financial instruments are measured at fair value at the reporting date with recording of the effects in the income statement under "Expenses/(income) from commodity risk management".
Forward contracts used for gas sales and entered into to optimise one's own procurement and sales portfolio do not fall within the scope of application of IAS 39 (so-called "own use"). These contracts are recognised at the time of the physical delivery of the underlying commodity.

Commodity Swaps do not envisage the physical exchange of gas, but are stipulated to hedge price indices for volumes sold, in order to limit price risk deriving from specific gas purchase transactions at a fixed price and resale at a variable price (or vice versa) at different times. This category includes derivatives stipulated in the scope of trading activity and derivatives in the scope of gas sales that do not meet for the conditions required by IAS 39 (including formal conditions), to qualify as hedging.

Interest Rate Swap (IRS) contracts hedge the risk of unfavourable interest rates on loans or long-term leasing plans. The effective portion of changes in the fair value of derivatives is directly recognised in shareholders' equity under a specific equity provision called the "Cash flow hedge reserve", whereas the ineffective portion is recorded in the income statement. Amounts that are directly recognised in shareholders' equity are reflected in the comprehensive income statement.

The table below shows the due dates, notional value and fair value of existing IRS contracts at 31 December 2018 and 31 December 2017:

	Year ended 31 December 2018		Year ended 31 December 2017	
(amounts in thousands of euro)	**Positive/(negative) Fair Value**	**Notional**	**Positive/(negative) Fair Value**	**Notional**
IRS Fixed Rate/Variable Rate maturing 30/06/2018 (MPS)			(5)	424
IRS Fixed Rate/Variable Rate maturing 31/12/2018 (BNL)			(4)	133
IRS Fixed Rate/Variable Rate maturing 28/06/2019 (Intesa)	(16)	1,389	(59)	1,944
IRS Fixed Rate/Variable Rate maturing 28/10/2019 (Cariparma)	(6)	2,046	(18)	4,061
IRS Fixed Rate/Variable Rate maturing 30/06/2021 (MPS)	(47)	1,229	(83)	1,694
IRS Fixed Rate/Variable Rate maturing 28/12/2021 (UniCredit)	(571)	9,000	(740)	9,000
IRS Fixed Rate/Variable Rate maturing 28/06/2024 (Intesa)	(475)	3,652	(619)	4,214
IRS	**(1,116)**	**17,317**	**(1,529)**	**21,471**

Reference is made to the paragraph "Interest rate Risk" for additional information.

10.2.6 Cash and cash equivalents

In the financial periods ended 31 December 2018 and 31 December 2017, cash and cash equivalents amounted to € 228,693 thousand and € 299,774 thousand respectively.

The item is broken down as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Bank and postal deposits	228,678	229,754
Cash and cash equivalents	15	20
Cash and cash equivalents	**228,693**	**229,774**

Deposits held with banks accrue interest based on variable daily deposit rates. Short-term deposits have various call dates, between one day and three months, in relation to the Group's financial requirements and accrue interest at short-term rates. Cash and cash equivalents recorded in the financial statements are free from usage restrictions.

10.2.7 Assets held for sale and the directly associated liabilities

In the financial periods ended 31 December 2018 and 31 December 2017, assets held for sale amounted to € 930 thousand and € 2,350 thousand respectively, whereas directly associated liabilities amounted to € 280 thousand and € 95 thousand.

Assets held for sale and the directly associated liabilities refer to the subsidiaries Serenia S.r.l. , which existed up until 2016 and merged with Estra during 2017, and Useneko S.p.z.oo., a Group equity investment held for sale/discontinued as outlined in the note Discretionary assessments and significant accounting estimates and Net result for discontinued/held for sale assets.

In terms of IFRS 5, the assets and liabilities were consolidated on a straight line basis under "assets/liabilities held for sale", eliminating the infragroup accounts.

Assets were measured at their presumed realisable value in the consolidated financial statements ended 31 December 2018 and 31 December 2017.

The table below shows the main asset classes classified as held for sale and the liabilities included in the discontinued groups classified as held for sale:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Tangible assets	301	1,944
Trade receivables	294	241
Other current assets	32	17
Cash and cash equivalents	303	148
Assets classified as held for sale	**930**	**2,350**
Medium/long-term loans	-	-
Trade payables	100	61
Other current liabilities	180	34
Liabilities included in discontinued groups held for sale	**280**	**95**

During 2018, assets held for sale recorded an increase of € 715 thousand for loans provided and a decrease of € 2,320 thousand for adjustments to the presumed realisable value, as outlined in the paragraph "Net result for discontinued/held for sale assets", and other changes for € 35 thousand.

10.3 SHAREHOLDERS' EQUITY

In the financial periods ended 31 December 2018 and 31 December 2017, shareholders' equity amounted to € 325,253 thousand and € 331,920 thousand respectively.

As set out in the paragraph "IFRS 9 Financial instruments", with the first application of the new standard, shareholders' equity at 31 December 2017 was adjusted for € 1,683 thousand, of which € 1,361 thousand related to the Group and € 326 thousand to third parties.

The change in the Group's equity at 31 December 2018 compared to 31 December 2017 is mainly due to:
- distribution of dividends to shareholders by the Parent Company (- € 12,173 thousand);
- Effects resulting from the acquisition of minority interests in companies already controlled (+ € 259 thousand). Reference is made to "Business combinations and corporate sales and acquisitions and disposals in the
- Group' comprehensive income statement (+€ 7,682 thousand);

The change in the Group's equity at 31 December 2017 compared to 31 December 2016 is mainly due to:
- distribution of dividends to shareholders by the Parent Company (- € 10,874 thousand);
- Estra share capital increase with the contribution of assets by Viva Servizi S.p.A., including the consequent effects from the full consolidation of EDMA S.r.l. (+ € 29,697 thousand);
- Effects resulting from the acquisition of minority interests in companies already controlled (- € -9,554 thousand). Reference is made to "Business combinations and corporate sales and acquisitions and disposals of minority interests";
- Effects resulting from the acquisition of control in companies with investments Cavriglia and Tegolaia (- € 1,034 thousand). Reference is made to "Business combinations and corporate sales and acquisitions and disposals of minority interests";
- Reversal of the cash flow hedge to the income statement, which had been recorded against the derivatives hedging medium/long-term loans acquired in the scope of the acquisition of Cavriglia and Tegolaia, following their early extinguishing (+ € 2,010 thousand);
- Group' comprehensive income statement (+€ 11,353 thousand);
- Portion of the comprehensive income statement result acquired by the Group due to changed interests in subsidiaries (+ € 4,999 thousand), as the result related to minority interests represented in third party income statement results up until the completion of the operation.

The change in the Group's equity at 31 December 2016 compared to 31 December 2015 is mainly due to:
- distribution of dividends to shareholders by the Parent Company (- € 9,984 thousand);
- acquisition of 50.50% of Prometeo with exchange of Estra Energie S.r.l. shares (+ € 14,003 thousand);
- Group result of period (+ € 11,016 thousand);
- change to actuarial profit (loss) reserve (- € 170 thousand);
- change to cash flow hedge reserve (- € 25 thousand).

The change in shareholders' equity attributable to minority interests at 31 December 2018 compared to 31 December 2017 is mainly due to:
- Effects resulting from the acquisition of minority interests in companies already controlled (- € -534 thousand). Reference is made to "Business combinations and corporate sales and acquisitions and disposals of minority interests";
- distribution of dividends to third party Shareholders (- € 996 thousand).
- Group' comprehensive income statement related to minority interests (+€ 381 thousand);

The change in shareholders' equity attributable to minority interests at 31 December 2017 compared to 31 December 2016 is mainly due to:
- Contribution by Viva Servizi S.p.A. to Estra of 55% of EDMA S.r.l. with consequent reduction in the minority interest in Estra Energie, held directly by EDMA S.r.l. and the subsidiaries of Estra Energie, held indirectly by EDMA S.r.l. (- € 9,449 thousand);
- Effects resulting from the acquisition of minority interests in companies already controlled (- € 6,977 thousand). Reference is made to "Business combinations and corporate sales and acquisitions and disposals of minority interests";

- Effects resulting from the sale of 6.5% of Promoteo from the Group to third parties (€ 3,468 thousand). Reference is made to "Business combinations and corporate sales and acquisitions and disposals of minority interests";
- distribution of dividends to third party Shareholders (- € 3,709 thousand).
- Group' comprehensive income statement related to minority interests (+€ 5,090 thousand);
- Portion of comprehensive income statement result acquired by the Group from changes to interests held in subsidiaries (- € 4,999 thousand)

The change in shareholders' equity attributable to minority interests at 31 December 2016 compared to 31 December 2015 is mainly due to:

- full consolidation of Prometeo S.p.A. and assignment of their portion of net assets to third parties (+ € 32,205 thousand);
- Third party result of period (+ € 4,033 thousand);
- distribution of dividends to third party Shareholders (- € 831 thousand).

10.4 NON-CURRENT LIABILITIES

10.4.1 Provisions for risks and charges

In the financial periods ended 31 December 2018 and 31 December 2017, the provisions for risks and charges amounted to € 9,869 thousand and € 11,351 thousand respectively.

The table below shows the changes occurring in 2018:

(amounts in thousands of euro)	31 December 2017	Corporate acquisitions	Allocations	Uses	Reversal	31 December 2018
Agency indemnities	232		32		(126)	138
Disputes and legal defence expenses	4,199			(38)		4,161
Energy Efficiency Certificates	525		935	(509)		951
Employees early retirement	28				(28)	
Other risks	5,906	31	861	(218)	(2,443)	4,137
Plant dismantling provision	461		21			482
Provisions for risks and charges	**11,351**	**31**	**1,849**	**(765)**	**(2,597)**	**9,869**

The table below shows the changes occurring in 2017:

(amounts in thousands of euro)	31 December 2016	Corporate acquisitions	Allocations	Uses	Reversal	Corporate sales	31 December 2017
Agency indemnities	156		96	(20)			232
Disputes and legal defence expenses	5,222		417	(90)	(1,350)		4,199
Energy Efficiency Certificates	175		350				525
Employees early retirement	674				(646)		28
Other risks	10,343	78	866	(567)	(2,204)	(2,610)	5,906
Plant dismantling provision		456	5				461
Provisions for risks and charges	**16,570**	**534**	**1,734**	**(677)**	**(4,200)**	**(2,610)**	**11,351**

The item Disputes and legal defence costs is allocated based on the best estimate at the reporting date of the risk relating to expenses and obligations arising from ongoing lawsuits involving Group companies. Given that the time period to resolve the disputes cannot be reasonably predicted, the Group has not discounted the posting.

Energy Efficiency Certificates refers to the risks associated with market trends in energy efficiency certificates, considering the remainder of the mandatory bonds to be purchased and the most recent estimate available for the contribution that will be recognised by the Authority.

Other risks refers mainly to the risks associated with the plants producing energy from renewable sources, technological equipment for telecommunications and penalties pertinent to the gas distribution activity.
The change during 2018 referred mainly to:

- The reversal of the risk provision allocated for the indemnity obligation in favour of Andali in the case of the enforcement of the surety issued by GSE to guarantee the realisation of the investment, subsequent to the

release of said obligation, as detailed in the paragraph "Agreements related to the sale of Andali Energia S.r.l." (€ 2,205 thousand);
- Provisions for € 416 thousand primarily referring to the estimate for the risk of sanctions and/or penalties pertinent to the gas distribution activity.

The item agency indemnities refers to the severance indemnity for sales agents of the Group's vendor companies.

The plant dismantling provision related to the concessionary relationship between the subsidiaries Cavriglia and Tegolaia and the granting Municipality. recognised in terms of IAS 17.50 as a sale and leaseback transaction (IAS 17.59), where after construction of the plant and the transfer of ownership, the Group does not lose control thereof; it is therefore recorded as a tangible asset, at the construction cost plus the dismantling and depreciation costs across the term of the concession. The value of the tangible asset also includes the current value for the future concession expenses recorded as indirect construction costs, and where a counter financial liability entry was made.

10.4.1.1 Main pending disputes

Dispute referring to the determination of the compensation due to the outgoing operator for the gas distribution service Municipality of Prato Toscana Energie

Following the awarding of the tender for the assignment of gas distribution services in the Municipality of Prato to Toscana Energie, on 31 August 2015, Centria, Toscana Energie and the Municipality of Prato signed the network delivery report (with the relative installations and assets making up the gas distribution system), with the concurrent payment by Toscana Energie to Centria of compensation for the network of € 85,538 thousand plus VAT.
During 2016, Estra and Centria submitted an application before the Court of Prato against the Municipality of Prato and Toscana Energia to order Toscana Energia, or in the alternative the Municipality of Prato, to pay the amount of € 9,613 thousand, as the lesser amount recognised to the outgoing operator Centria for the networks' delivery compared to what had been provided for in the tender, due to the application of a disputed indexing and revaluation mechanism used by the latter in relation to the intervening time that had lapsed between the announcement of the tender and the networks' delivery.
Based on the application in the alternative in respect of the Municipality of Prato, inter alia, an agreement signed by Estra and the Municipality of Prato on 17 November 2011 with which the parties had intended to settle mutual disputes concerning the amount of network compensation owed by the incoming operator to the outgoing operator, in view of Estra's commitment to pay € 7,700 thousand to Toscana Energie (of which, € 1,700 thousand paid on 17 November 2011).
In the proceedings pending before the Court of Prato, Toscana Energie and the Municipality of Prato, argued for the unsubstantiated nature of the proposed application and presented a series of counter questions, and specifically:
- the Municipality of Prato submitted a counter-claim to obtain the payment of € 6,000 thousand due to the aforementioned settlement agreement provisions signed in 2011 to determine, inter alia, the value of the compensation due to the outgoing operator;
- Toscana Energia counter-claimed to obtain the payment of an amount of € 1,742 thousand based on an alleged different composition to the network to what had been represented by the outgoing operator.

The Company, supported by the legal opinions it received, will legitimately oppose the application from the Municipality of Prato for the payment of the residual amount of € 6,000 thousand.
With regard to reserves advanced to Toscana Energia at the signing of the networks delivery report, some of which appear to already have been accepted by the Municipality of Prato, it was deemed prudent to retain the risk provisions for € 1,742 thousand.
At 20 December 2017, the Judge handed down an order, whereby, inter alia:
- the court-appointed technical expert requested by Estra/Centria was allowed, limited to the alleged different extent of the network compared to what was represented by the outgoing operator;
- the court-appointed technical expert request by Toscana Energia was denied, regarding the estimate of the benefits that Estra/Centria would have obtained from running the plant in the intervening period between 1 July 2011 (reference date for plant estimate) and 31 August 2015 (date plant delivered to the new operator).

In addition to what is set out above, the Judge raised (i) a question on the possible invalidity of the aforementioned settlement agreement of 2011, based on the possible non-availability of the compensation due to the outgoing operator pursuant to articles 14-15 of Italian Legislative Decree 164/2000, and (ii) a question on the effects of the invalidity on the clause relating to determining the compensation could have on the validity of the entire agreement. The Judge then requested that the parties file a defence statement referring to the two questions raised by the Judge, which were submitted by both parties to the proceedings on 20 February 2018. In the event that the Judge should confirm the invalidity of the clause in the 2011 settlement agreement governing the determination of the compensation due to the outgoing operator, the validity of the tender deeds and contracts signed between the Municipality of Prato and Toscana Energia (as well as between Centria and Toscana Energia) could be brought into question.
At the hearing on 13 September 2018, the lawyers from Toscana Energia challenged certain points of the technical report with specific reference to the question on the status of the cogenerator and relative reactivation costs, and the question regarding the benefits gained by Toscana Energia by external lawyer for the company Estra/Centria, challenged these arguments, arguing for the complete nature of the technical report and asking that a hearing be set down to set out the closing arguments. The Judge, upheld the complete nature of the technical report accepted the company's request, and referred closing arguments to the hearing set for 21.11.2019.

Estra and Centria, supported by their legal team, believe that they have good arguments to support the validity of the settlement agreement. Nonetheless, in the light of the order issued by the Judge on 20 December 2017, the Company believes that there is the risk of the losing party having to pay legal costs.

Formal tax audit report issued in respect of Coopgas S.r.l. and subsequent notices of assessment

On 19 December 2017, the Finance Police [Guardia di Finanza] in Modena issued a formal tax audit report ["processo verbale di constatazione (PVC)"], against CoopGas S.r.l., a company acquired by the Group in February 2016 and subsequently merged by incorporation into Estra Energie S.r.l., whereby it formulated findings referring to (i) the alleged inaccuracy of the IRES and IRAP tax returns for the deduction of costs relating to non-existent transactions for € 195 thousand during 2014 and sponsorship costs deemed to be non-deductible donations for € 325 thousand in 2015, e (ii) the non-deductible VAT on the invoices for the non-existent costs for about € 43 thousand, with reference to 2014.

The findings relating to 2014 gave rise to a report to the judicial authorities against the company representative at the time for having committed the fact, from the time, according to the Finance Police, that the documentation for the costs was constituted by invoices relating to non-existent transactions.

It should be noted that the PVC is an act occurring during the course of proceedings and does not involve the penalties that could be imposed by the tax authorities when issuing a confirmation order of the PVC criteria, and consequently does not allow us to accurately quantify the risk related to the claim. Based on the findings and documentary evidence in the PVC, the Group has estimated the tax at around € 211 thousand and about € 401 thousand for the maximum penalties that could apply with the tax assessment.

Considering that there are not sufficient elements to open a dispute and challenge the above findings (related to conduct dating back to financial periods prior to the acquisition date of Coopgas), the Group believes it is plausible to accede to the assessment notices, which in terms of the ordinary deadlines, should be notified by 31 December 2023, failing which they lapse. The Group has therefore provided € 350 thousand in the consolidated financial statements at 31 December 2017 to cover the probable burden for taxes and penalties, with the latter reduced by one third as provided in the case of acquiescence to the assessment notices.

In 2019, based on the assessment notices issued for 2014 relating to IRES, IRAP and VAT, a total of € 132 thousand was paid in total for taxes, penalties and interest, by acceding to the assessment notices.

Given that what was paid to settle the findings relating to 2014 does not diverge substantially from the provisions made at 31 December 2017, and considering that no notices have been received for 2015, the provision for € 350 thousand cannot be confirmed at the reporting date for the financial statements at 31 December 2018.

Notice of assessment on deductibility of goodwill

In June 2018, the Regional Tax Office [DRE] for Marche served Prometeo with an assessment notice for 2014, where the main finding referred to the derecognition for IRES, IRAP and Robin Tax purposes of the amortisation, quantified at € 148,614, applied to goodwill for around € 6,690,000, acquired on the basis of a business unit conferral operation.
Essentially, the tax authorities hold that in a business unit conferral operation recognised by the transferee is always irrelevant for tax purposes, even when as in the case in question, the transferor transfers goodwill that is not subject to taxation.

The first instance hearing was held in March, and we are awaiting the provisions of the judgement.

Supported by its consultants, the Group believes the assertion raised to be unfounded, and therefore no provision has been made against the risk a possible legal costs for the losing party in the dispute.

10.4.2 Employee severance indemnity

In terms of Art. 2120 of the Italian Civil Code, the employee severance indemnity [TFR] from the perspective of recording in the financial statements, qualifies as a defined benefit pension plans, and as such, is treated according to IAS 19, which requires the measurement of the relevant liability based on actuarial criteria.

The table below shows the changes during 2018 to the obligations for defined benefits and the fair value of the plan's assets:

Obligations for defined benefits 01.01.2018	Acquisitions	Costs for services	Interests	Settled benefits	Expected obligations 31.12.2018	Actuarial losses (gains) from experience	Actuarial losses (gains) from changes to financial assumption	Obligations for defined benefits 31.12.2018
7,605	234	74	108	(561)	7,460	6	(224)	7,242

The table below shows the changes during 2017 to the obligations for defined benefits and the fair value of the plan's assets:

Obligations for defined benefits 01.01.2017	Acquisitions	Contributions	Costs for services	Interests	Settled benefits	Expected obligations 31.12.2017	Actuarial losses (gains) from experience	Actuarial losses (gains) from changes to financial assumption	Obligations for defined benefits 31.12.2017
7,124	172	118	209	102	(96)	7,628	(21)	(2)	7,605

The main assumptions are summarised in the table below:

Summary of the Economic Technical Basis

	Year ended 31 December 2018	Year ended 31 December 2017
Annual discount rate	1.57%	1.30%
Annual inflation rate	1.50%	1.50%
Annual severance indemnity increase rate	2.63%	2.63%
Annual salary increase rate	1.00%	1.00%

The discount rate used to determine the current extent of the obligation was taken from the Iboxx Corporate AA Index over 10+ years recorded at the assessment date, in accordance with paragraph 83 of IAS 19. In this respect, the yield was chosen with a term that was comparable to the duration of the workers collective agreement under valuation.

Summary of the Demographic Technical Basis

Death	RG48 Mortality table published by the State General Accounting Office
Disability	National Pension Fund [INPS] table according to age and gender
Pension	100% on reaching mandatory general insurance [AGO] requirements

Annual frequency of Turnover and early retirement

Early retirement frequency	Turnover frequency
1.05%	0.50%

A quantitative analysis follows below summarising sensitivity in respect of the significant assumptions at 31 December 2018 and 2017:

Assumptions	Changes	Year ended 31 December 2018	Year ended 31 December 2017
Turnover frequency	+1/4%	7,121	7,479
	- 1/4%	7,206	7,609
Inflation rate	+1/4%	7,311	7,682
	- 1/4%	7,014	7,401
Discount rate	+1/4%	6,943	7,331
	- 1/4%	7,388	7,758

The sensitivity analyses above were done on the basis of extrapolating the impact on the net obligation for the defined benefits plan from reasonable changes in the key assumptions that arise at the reporting date. The sensitivity analysis is based on the variation in one of the significant assumptions, whilst keeping the other assumptions constant. The sensitivity analysis may not represent the effective changes in the defined benefits obligation because it is improbable that isolated changes could occur on single assumptions.

The following payments are the envisaged contributions that will be made in future years against the defined benefit plan obligations:

Payments envisaged					
	2019	2020	2021	2022	2023
Total	422	267	190	341	300

The average duration of the defined benefit plan obligation at the close of the 2018 financial period is approximately 16.7 years (approx. 19.7 at 31 December 2017).

10.4.3 Medium/long terms loans

In the financial periods ended 31 December 2018 and 31 December 2017, medium/long-term loans amounted to € 477,857 thousand and € 435,503 thousand respectively.

The item is broken down as follows:

	Year ended 31 December 2018		Year ended 31 December 2017	
(amounts in thousands of euro)	**Carrying value**	**Nominal value**	**Carrying value**	**Nominal value**
Bonds maturing within 12 months	35,691	36,000	-	-
Bonds maturing after 12 months	147,584	150,000	213,922	218,200
Total payables for bonds	**183,275**	**186,000**	**213,922**	**218,200**
Shareholders' loans maturing within 12 months	1,435	1,435	1,435	1,435
Shareholders' loans maturing after 12 months	9,675	9,675	11,110	11,110
Total Shareholders loans	**11,110**	**11,110**	**12,545**	**12,545**
Loans maturing within 12 months	67,322	67,322	65,507	65,507
Loans maturing after 12 months	210,724	212,149	137,782	138,280
Total payables for loans	**278,046**	**279,472**	**203,289**	**203,787**
Leasing within 12 months	331	331	322	322
Leasing after 12 months	5,094	5,094	5,425	5,425
Total payables for leasing	**5,425**	**5,425**	**5,747**	**5,747**
Total within 12 months	104,780	105,089	67,263	67,263
Total after 12 months	373,077	376,918	368,240	373,015
Total medium/long term loans	**477,857**	**482,007**	**435,503**	**440,278**

The changes during 2018 are shown below:

(amounts in thousands of euro)	Balance at 31 December 2017	Amount granted	Amount repaid	Interest amortised cost	Balance at 31 December 2018
Bonds	213,922		(32,200)	1,553	183,275
Loans	203,289	162,000	(86,318)	(925)	278,046
Leases	5,747		(322)		5,425
Shareholders' loans	12,545		(1,435)		11,110
Total medium/long term loans	**435,503**	**162,000**	**(120,275)**	**628**	**477,857**

We note the partial buy back of bonds for a nominal value of € 32,200 thousand, of which € 30,000 thousand relating to the bond loan called "E.S.TR.A. S.p.A. Euro 80,000,000, 2.45 per cent. maturing in 2023 and € 2,200 thousand relating to the original minibond for 50 million and the residual € 35,691 thousand at 31 December 3018 falling due in 2019.

The changes during 2017 are shown below:

(amounts in thousands of euro)	Balance at 31 December 2016	Business combinations	Contribution from Viva Servizi	Amount granted	Amount repaid	Interest amortised cost	Balance at 31 December 2017
Bonds	213,046					876	213,922
Loans	153,189	26,211	1,668	107,000	(85,011)	232	203,289
Leases	6,735	5,826			(6,814)		5,747
Shareholders' loans	13,980				(1,435)		12,545
Total medium/long term loans	**386,950**	**32,037**	**1,668**	**107,000**	**(93,260)**	**1,108**	**435,503**

The change during the year in "Business combinations" refers entirely to the acquisition of the companies Cavriglia SPV S.p.A. and Tegolaia SPV S.p.A., of which € 32,037 was for medium/long-term loans granted to the companies prior to the acquisition to build photovoltaic plants. For the purposes of rationalising financial expenses, the Group decided to extinguish these at the end of year, concurrently with the underlying hedging derivatives.

The table below shows the carrying value at 31 December 2018 and 31 December 2017 for each bond loan issued:

	Year ended 31 December	
(amounts in thousands of euro)	2018	2017
MINIBOND 2014-2019	35,691	37,563
BOND 2015-2022	98,744	98,463
BOND 2016-2023	48,840	77,895
Bonds	**183,275**	**213,922**

Shareholders' loans includes amounts due to shareholders for medium/long term loans, subordinate to bank and bond debt agreed by the shareholders Consiag and Intesa and, in particular:

- debt to the shareholder Consiag originally for € 15,000 thousand, repayable in 24 instalments starting from 30 June 2015, with constant principal amounts at an annual rate of 3% and the residual debt at 31 December 2018 for € 10,000 thousand;
- debt to the shareholder Coingas originally of € 1,850 thousand repayable in 20 bi-annual instalments starting from 30 June 2015, with constant principal amounts at an annual rate of 3% and residual debt at 31 December 2018 for € 1,110 thousand.

10.4.4 Deferred taxes liabilities

In the financial periods ended 31 December 2018 and 31 December 2017, deferred tax liabilities amounted to € 41,834 thousand and € 38,667 thousand respectively.

The composition and changes in 2018 in the item are as follows:

(amounts in thousands of euro)	Balance at 31 December 2017	Corporate acquisitions	Allocations	Utilisation/Reversal	Balance at 31 December 2018
Dividends not collected	460		13	(447)	26
Amortised cost bond loans	572			(206)	365
Deferrals on capital gains	4,097			(2,048)	2,048
Capital gains on assets under concession	3,410	3,220		(145)	6,485
Capital gains on intangible assets	29,997	4,290	237	(1,781)	32,743
Capital gains on tangible assets	55				55
Other	76		36	(1)	111
Deferred taxes liabilities	**38,667**	**7,510**	**286**	**(4,629)**	**41,834**

The composition and changes in 2017 in the item are as follows:

(amounts in thousands of euro)	Balance at 31 December 2016	Corporate acquisitions	Conferment	Allocations	Utilisation/Reversal	Balance at 31 December 2017
Dividends not collected	318	14		280	(152)	460
Amortised cost bond loans	765				(193)	572
Deferrals on capital gains	6,145				(2,048)	4,097
Capital gains on assets under concession	3,223		103	135	(51)	3,410
Capital gains on intangible assets	25,602	5,743		236	(1,584)	29,997
Capital gains on tangible assets		55				55
Other	56			20		76
Deferred taxes liabilities	**36,109**	**5,812**	**103**	**671**	**(4,028)**	**38,667**

10.4.5 Other non-current liabilities

In the financial periods ended 31 December 2018 and 31 December 2017, other non-current liabilities amounted to € 1,721 thousand and € 767 thousand respectively and mainly refer to multiple year deferred income for fibre optic rentals for the year relating to data transmission in the telecommunication sector.

10.5 CURRENT LIABILITIES

10.5.1 Short-term borrowings

In the financial periods ended 31 December 2018 and 31 December 2017, short-term borrowings amounted to € 10,528 thousand and € 10,322 thousand respectively.

The item is broken down as follows:

	Year ended 31 December	
(amounts in thousands of euro)	2018	2017
Bank advances and current account uses	7,495	7,193
Payables to bondholders for interest accrued	3,034	3,129
Short-term borrowings	**10,528**	**10,322**

10.5.2 Trade payables

In the financial periods ended 31 December 2018 and 31 December 2017, trade payables amounted to € 250,364 thousand and € 209,824 thousand respectively.

The item is broken down as follows:

	Year ended 31 December	
(amounts in thousands of euro)	2018	2017
Payables to suppliers	244,069	204,659
Payables to subsidiaries	4,259	2,342
Payables to holding companies	2,034	2,817
Payables to associates	2	7
Trade payables	**250,364**	**209,824**

Amounts due to suppliers refer to payables on invoices received and still to be received mainly from gas and electricity suppliers. These are posted net of commercial discounts; cash discounts, however, are registered at the time of payment. The nominal value of these payables has been adjusted if returns or rebates exist (invoicing adjustments), according to the amount agreed upon with the counterparty.

All the receivables are due within 12 months and relate to entities operating in Italy, except for negligible amounts from EU and non-EU entities for gas sales.

For information on the payables to Shareholders, companies subject to joint control and associates and for the terms and conditions related to payables to related parties, reference is made to the note "Transactions with Related parties".

10.5.3 Tax liabilities

In the financial periods ended 31 December 2018 and 31 December 2017, tax liabilities amounted to € 15,283 thousand and € 21,833 thousand respectively.

The item is broken down as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Irpef withholding agents	889	878
VAT payable	4,285	2,154
IRES/IRAP payables	2,795	1,198
Excise duty and additional taxes	7,310	17,599
Other payables	4	5
Tax liabilities	**15,283**	**21,833**

10.5.4 Other current liabilities

In the financial periods ended 31 December 2018 and 31 December 2017, other current liabilities amounted to € 47,343 thousand and € 51,236 thousand respectively.

The item is broken down as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2018**	**2017**
Payables due to staff for salaries	4,460	3,870
Payables to social security institutions	1,794	1,624
Payables to Electricity Equalisation Fund [CSEA]	9,516	6,031
Payables to purchase equity investment in Tegolaia and Cavriglia	2,611	2,611
Payables to purchase of the equity investment in Eta3	-	3,990
Accruals and deferrals	2,700	1,658
Payables for employees early retirement	337	462
Guarantee deposits	20,876	25,932
Other payables	5,048	5,058
Other current liabilities	**47,343**	**51,236**

The item's balance mainly refers to the guarantee deposits made by customers as guarantees on gas consumption.

10.5.5 Financial instruments and measurement at fair value

In terms of IFRS 13, the table below shows the carrying value for existing financial instruments, per category, compared with the corresponding fair values at 31 December 2018 and 31 December 2017.

FINANCIAL ASSETS	Year ended 31 December 2018		Year ended 31 December 2017	
	Carrying value	Fair value	Carrying value	Fair value
Financial assets at fair value with changes recognised in income statement	**16,974**	**16,974**	**11,634**	**11,634**
Forward commodity contracts	16,704	16,704	11,512	11,512
Commodity Swaps	269	269	123	123
Receivables and loans	**361,270**	**361,270**	**303,800**	**303,800**
Loans to companies subject to joint control	150	150	407	407
Loans to associates	4,937	4,937	4,153	4,153
Medium/long term guarantee deposits	4,713	4,713	4,585	4,585
Trade receivables	351,022	351,022	294,030	294,030
Receivables from banks	448	448	625	625
Cash and cash equivalents	**228,693**	**228,693**	**229,774**	**229,774**
Assets held for sale	**930**	**930**	**2,350**	**2,350**
TOTAL ASSETS	**607,868**	**607,868**	**547,558**	**547,558**

FINANCIAL LIABILITIES	Year ended 31 December 2018		Year ended 31 December 2017	
	Carrying value	Fair value	Carrying value	Fair value
Financial liabilities at fair value with changes recognised in income statement	**20,269**	**20,269**	**12,343**	**12,343**
Forward commodity contracts	15,393	15,393	11,427	11,427
Commodity Swaps	4,305	4,305	176	176
Non designated IRS as hedging instruments	571	571	740	740
Financial liabilities at fair value with changes recognised in shareholders' equity	**545**	**545**	**789**	**789**
Cash flow hedge IRS derivatives	545	545	789	789
Liabilities at amortised cost	**758,311**	**758,311**	**681,581**	**681,581**
Trade payables	250,364	250,364	209,824	209,824
Medium/long terms loans	477,857	477,857	435,503	435,503
Short-term borrowings from banks	10,528	10,528	10,322	10,322
Guarantee deposits	19,562	19,562	25,932	25,932
Liabilities directly associated with assets held for sale	**280**	**280**	**95**	**95**
TOTAL LIABILITIES	**779,405**	**779,405**	**694,807**	**694,807**

Given their nature, in the case of most postings, the carrying value was considered to be a reasonable approximation of the fair value.

In all other cases, fair value was determined according to Level 2 methodologies in the hierarchy of the levels of significance of the data used in determining fair value as defined under IFRS 13 (input data different from the listed prices at Level 1 that are observable for assets or liabilities, both directly (as in the case of prices), and indirectly (i.e. deriving from prices).

The Group used internal assessment models. which are generally used in financial practice, based on the prices provided by market operators or by listings recorded on active markets by primary info providers.

To determine the fair value of derivatives on commodity rates or prices, a pricing model is used based on the market forward curve at the reporting date, when the underlying of the derivative is traded on markets that present official and liquid forward price listings. In the case that the market does not present forward listings, provisional price curves are used, based on internal evaluation techniques.

In so far as non-performance risk is concerned, i.e. the risk that one of the parties may not honour their contractual obligations due to a possible default before the derivative's due date, both in respect of counterparty risk (Credit Value Adjustment: CVA), and own non-performance risk (Debt Risk Adjustment: DVA) any adjustments are not deemed significant, in consideration of the type of derivative instruments in the portfolio (represented exclusively by buy or sell short-term forward commodity contracts and financial derivatives with primary credit institutions) and the ratings of both the counterparties with whom the contracts were entered into and the Group.

The Group is not offsetting financial instruments as per IAS 32 and has no significant offsetting agreements. There were no changes in the valuation methods used compared to previous years, nor transfers from one level to another in the hierarchy of assets or liabilities measured at fair value.

Financial assets held for sale were measured at fair value determined as the best estimate for the realisable price obtainable on their disposal.

11. Earnings per share (basic and diluted)

As required by IAS 33, information is provided on the data used to calculate the net result and result from operating activities per share and diluted. The basic result per share is calculated by dividing the economic result for the period, profit or loss, attributable the Parent Company shareholders by the average weighted number of shares in circulation during the reference period. There were no diluted effects of the result per share in three years.
The values used to calculate the result per basic share are shown below.

	Year ended 31 December	
	2018	**2017**
Net income pertinent to Parent Company shareholders (thousands of Euro)	7,331	11,020
- Operating activities	9,651	11,397
- Assets held for sale	(2,320)	(377)
Average number ordinary shares in circulation in period	227,834,000	205,125,118
Result per basic and diluted ordinary shares (Euro)	**0.03**	**0.05**
Result from operating activities per basic and diluted ordinary shares (Euro)	**0.04**	**0.06**

In this regard we note that the exclusion from the calculation of the 500,000 treasury shares held by the Parent following the merger by incorporation in 2018 of Eta3, which was fully consolidated at 31 December 2017.

We also remind you that on 28 December 2017 following the extraordinary shareholders' meeting, Estra resolved a share capital increase, with the exclusion of pre-emptive rights in terms of Art. 2441, paragraph 6 of the Italian Civil Code, up to a maximum of € 228,334,000, based on the offering of 22,834,000 newly issued shares with a nominal value of € 1.00 each, reserved to Viva Servizi S.p.A.
The 22,834,000 newly issued shares were subscribed by Viva Servizi S.p.A. through a contribution in kind.

12. Guarantees and undertakings

The Group had provided the following guarantees at 31 December 2018 and 2017:

Guarantees issued on behalf of associates	**31 December 2018**	**31 December 2017**
Surety issued to Banca Popolare Emilia and UniCredit in favour of Sinergie Italiane S.r.l.	9,169	9,169
Guarantee issued to Cassa di Risparmio di Firenze on behalf of Vaserie Energia S.r.l.	895	895
Guarantee issued to Unicredit in favour di Blugas Infrastrutture S.r.l. for funding	4,257	4257
Guarantee issued to Sace BT on behalf of Blugas Infrastrutture on VAT credit reimbursement	-	664
Total	**14,321**	**14,985**

Guarantees granted in the interests of others	**31 December 2018**	**31 December 2017**
Sureties issued to the Tax/Customs Authorities for tax refunds	3,872	4,016
Sureties to other parties	789	1,002
Guarantees issued on behalf of local entities for work or concessions relating to the use of public land	10,046	6,988
Sureties issued to INPS	1,084	1,801
Surety issued to GSE for connection of the Andali wind park	-	4,410
Total	**15,791**	**18,217**

Total guarantees	**30,112**	**33,202**

Bank or other guarantees, such as parent company commitments were also given in the interests of fully consolidated companies for conducting normal Group activities, for which the related amount payable is generally already recognised in the consolidated financial statements.

Furthermore the Group as of December 31, 2018 has rent and operating leases with an average leasing duration of 4,5 years and minimum lease payment for € 15,374 thousands.

13. Objectives and criteria for financial risk management

The Group's main financial liabilities, other than derivatives, include bank loans and funding, bond loans, trade payables, various payables and financial guarantees. The main objective of these liabilities is to fund the Group's operating activities. The Group has trade receivables and other commercial and non-commercial receivables, cash and cash equivalents and short-term deposits, originating directly from operating activities. The Group also holds equity investments held for sale and subscribes to derivative contracts.

The Group is exposed to market risk, credit risk and liquidity risk. The Group's Management is assigned the management of these risks. The Group has also initiated the process to define an integrated risk management model, based on internationally recognised standards in the context of Enterprise Risk Management (ERM), developed according to the reference model generally accepted at international level in the area of internal audit, issued by the Committee of Sponsoring Organizations of the Treadway Commission (known as the CoSO Report).

This ERM Model also aims to support Management so that activities involving financial risk are governed by appropriate company policies and adequate procedures, and that financial risks are identified, measured and managed in accordance with the Group's policies and procedures.

13.1 Interest rate risk

Interest rate risk is the risk that fair value or future cash flows for a financial instrument will alter due to changes in the market interest rates. The Group's exposure to changes in market interest rates is related firstly to long-term debt with variable interest rates.
The Group manages its interest rate risk based on a balanced portfolio of loans and funding at fixed and variable interest rates by subscribing to interest rate swaps (IRS), where at defined intervals, the Group agrees to swap the

difference on the amount between the fixed and variable rate, calculated with reference to an agreed notional capital amount. These swaps are designated to hedge the underlying debt.

At 31 December 2018, after evaluating the effects of IRS, around 55% (60% in 2017) of the Group's loans were at a fixed rate.

13.2 Sensitivity to interest rate

The table below shows the sensitivity to a reasonably possible change in interest rates carried out to the following procedures:

- an upward or downward change of 50 basis points in the Euribor interest rates recorded during the period was applied to the medium/ long term financial debt;
- in the case of a hedging relationship, the shock on rates was jointly applied to the debt position and the relevant hedging derivative instrument, with a very contained effect on the income statement;
- with regard to the hedging derivative contracts existing at the reporting date, an upward and downward shift of 100 basis points was applied to the forward curves of the interest rates used to determine fair value on the contracts.

The table below shows the outcome of the sensitivity analysis conducted with reference to 31 December 2018 and 2017:

SENSITIVITY OF FINANCIAL FLOWS	31-dec-18				31-dec-17			
	FINANCIAL EXPENSES		CASH FLOW HEDGE RESERVE		FINANCIAL EXPENSES		CASH FLOW HEDGE RESERVE	
	50 BP INCREASE	50 BP DECREASE	50 BP INCREASE	50 BP DECREASE	50 BP INCREASE	50 BP DECREASE	50 BP INCREASE	50 BP DECREASE
TOTAL DEBT FOR DERIVATIVES AND LEASES	(312)	85			(323)	(59)		
CHANGES TO FAIR VALUE	106	(107)	102	(73)	152	156	122	(116)
TOTAL	(206)	(23)	102	(73)	(171)	(97)	122	(116)

13.3 Credit Risk

Credit risk is the risk that a counterparty will not fulfil its obligations associated with a financial instrument or commercial contract, thereby resulting in a financial loss. The Group is exposed to credit risk deriving from its operating activities (particularly, trade receivables deriving from the sale of gas and electricity) and its financial assets, including deposits held at banks and financial institutions.

Trade receivables

The risk for trade receivables is managed on the basis of policies set by the Group and according to the procedures and controls for credit risk management.
As a consequence of the persisting economic crisis, the Group has improved its control over credit risk by strengthening its monitoring and reporting procedures, in order to implement countermeasures to be adopted for cases identified as soon as possible. To control credit risk, with regard to the portfolio existing at the reporting date, which is deemed to be the maximum exposure for the Group, methodologies have been defined to monitor and manage receivables as well as defining strategies to limit credit exposure, such as customer credit checks at the time of acquisition through credit rating analysis to limit insolvency risk, the assignment of receivables of terminated customers to external credit collection services and the management of legal action on receivables associated with services provided.

An analysis is done at each reporting date, as to whether write-downs are required in respect of the more significant customers. Furthermore, for most of the minor credits, grouped into similar categories, an evaluation is also done as to whether to reduce the total value. The calculation is based on historic data. The maximum exposure to credit risk at the reporting date is the carrying value for each financial asset class shown in the note Trade receivables.

The table below provides details on gross trade receivables and relevant provision for write-downs at 31 December 2018 and 2017:

Trade receivables	**Year ended 31 December**			
(amounts in thousands of euro)	**2018**		**2017**	
Gross trade receivables	404,215	100%	341,843	100%
Provision for write-downs	(53,193)	(13%)	(47,813)	(14%)
Trade receivables	**351,022**	**87%**	**294,030**	**86%**

The table below provides details on gross trade receivables according to ageing at 31 December 2018 and 2017:

Trade receivables	**Year ended 31 December**			
(amounts in thousands of euro)	**2018**		**2017**	
Falling due	334,341	83%	264,284	77%
Due from 0-30 days	7,125	2%	13,571	4%
Due from 31-90 days	4,718	1%	6,823	2%
Due from 91-180 days	3,726	1%	5,046	1%
Due from 181-365 days	13,568	3%	15,816	5%
Due over 365 days	40,737	10%	36,303	11%
Gross trade receivables	**404,215**	**100%**	**341,843**	**100%**

Financial instruments and bank deposits

Credit risk related to accounts with banks and financial institutions is managed by the Group's Treasury in accordance with Group policies. The investment of available funds is only undertaken with approved counterparties and within defined limits so as to minimise the concentration of risk, and consequently mitigate any financial loss generated by the counterparty's potential bankruptcy. The Group's maximum exposure to credit risk in respect of the items in the balance sheet at 31 December 2018 are the carrying values shown in the Note Financial instruments and measurement at fair value, with the exception of financial guarantees.

13.4 Liquidity Risk

The Group monitors the risk of a shortfall in liquidity by using a cash planning tool.
The Group's objective is to maintain a balance between continuity in the availability of funds and flexibility in use, by adopting financial instruments such as bank overdrafts, bank loans, bonds, financial leases and rental and purchasing contracts.
The Group Finance Department is centralised in order to optimise the identification and use of financial resources. In particular, the centralised cash flow management in the Group, whether through a cash pooling system or a system of centralisation in the Group current accounts for the prevalence of receipts and payments, allows for the allocation of available funds at Group level according to the needs that arise from time to time within single Companies. The current and forecast financial situation is constantly monitored, as is the availability of adequate credit. The accounts held by the Group with the main Italian and International Banks make it possible to identify the most suitable types of loans and the best market conditions.

The table below shows an analysis of due dates based on the non-discounted refund obligations in terms of contracts as they relate to bond loans, medium/long-term bank loans, leases and medium/long-term loans to shareholders as at 31 December 2018.

(amounts in thousands of euro)	Total cash flow	CF < 1 Y	1 Y < CF < 2 Y	2 Y < CF < 5 Y	CF > 5 Y
Bond loans	186,000	36,000	-	150,000	-
Bank loans	279,472	67,327	74,339	119,210	18,596
Leases	5,425	331	341	1,090	3,663
Medium/long terms loans to shareholders	11,110	1,435	1,435	4,305	3,935
Total	**482,007**	**105,093**	**76,115**	**274,605**	**26,194**

13.5 Default risk and covenants

The Group has bank loans and bond loans in place, where according to the type of instrument in line with the market, contract conditions entitle counterparties (whether banks or bondholders) to request the immediate repayment of the amounts loaned from the debtor, should specific events arise.
These contract conditions usually envisage in favour of bondholders/credit institutions, that control may not be changed and financial parameters need to be complied with, such as the net financial debt/EBITDA ratio, net financial debt/RAB ratio and net financial debt/shareholders' equity ratio.
The composition of net financial debt at 31 December 2018 and 2017 is shown below, resulting from the consolidated financial statements for the years ended on the same dates, in compliance with the ESMA update of the CESR recommendations. The consistent implementation of Commission Regulation (EC) No 809/2004 implementing the "Prospectus Directive" dated 20 March 2013 (formerly CESR Recommendation 05-054b of 10 February 2005).

	(amounts in thousands of euro)	Period ended Dec-18	Period ended Dec-17
A.	Cash	15	20
B.	Cash equivalents	228,678	229,754
C.	Securities held for trading		
D.	**Cash and cash equivalents (A) + (B) + (C)**	**228,693**	**229,774**
E.	Current financial receivables	17,422	12,259
	- current derivative financial instruments	16,974	11,635
	- Interest income due from banks	448	625
F.	Current bank debt	10,528	10,322
G.	Current portion of non-current debt	104,780	67,263
H.	Other current financial debt	20,814	13,131
	- current derivative financial instruments	20,814	13,131
I.	**Current financial debt (F) + (G) + (H)**	**136,122**	**90,717**
J.	**Net current financial debt (I) - (E) - (D)**	**(109,993)**	**(151,317)**
K.	Non-current bank debts	210,724	137,782
L.	Bonds issued	147,584	213,922
M.	Other non-current debt	14,769	16,535
	- payables to other lenders for leases	5,094	5,425
	- payables to shareholders for loans	9,675	11,110
No.	**Non-current financial debt (K) + (L) + (M)**	**373,077**	**368,240**
O.	**Net financial debt (J) + (N)**	**263,084**	**216,923**

At 31 December 2018, net financial debt stood at € 263,084 thousand up on the € 216,924 thousand the previous year.
At 31 December 2018, 22% of the Group's debt fell due in under twelve months, calculated on the basis of the notional debt value in the financial statements. The Group assessed the concentration of risk regarding debt refinancing and found that it was low.

There was sufficient access to funding sources and debts falling due within 12 months may be extended with the current lenders.

At 31 December 2018, the Group holds extensive unused lines of credit, mainly concentrated with the Parent Company, for € 328 million.

It should be noted that the Group has bank loans and bond loans in place, where according to the type of instrument in line with the market, contract conditions entitle counterparties (whether banks or bondholders) to request the immediate repayment of the amounts loaned from the debtor, should specific events arise.

In particular, the settlement of bond loans requires:

- undertakings by the Group, including in particular, a negative pledge, whereby the Group undertakes not to create, or allow the creation, whether partial or total, of any constraints on its present or future assets or revenue;
- non-performance in line with market practice for similar types of transactions. With specific reference to the latter, it should be noted, by way of example, inter alia:

non-performance of the obligations arising from convictions, on condition that predetermined relevance threshold are exceeded;

a) disposal and/or company restructuring operations (including, cases of winding-down and liquidation and the termination, be it total or a substantial portion of its business) not falling within the scope of those defined as permitted, as well as the winding down or liquidation of the Group or its subsidiaries defined as being relevant; and
b) change in the control structure, in respect of which, following the notice for bondholders to exercise the put option, the Group must fully (and not partly) reimburse whatever forms the subject of the put option at the bonds' nominal value, plus the interest accrued from the previous interest payment date.

The bond loan regulations also require the Group to comply with specific asset-financial indices for the entire duration of the loan, with compliance checked on an annual basis (or with reference to the reporting date of each period based on the results of the relative consolidated financial statements). Failure to comply with these parameters could result in the execution of the acceleration clause and an earlier repayment obligation arising for the debtor.

The financial parameters relating to these rules are summarised below:

- the ratio between net financial debt and EBITDA (higher than 4.5x);
- the ratio between net financial debt and RAB (higher than 1.30 x);
- the ratio between net financial debt and shareholders' equity (lower than 1.2 x);
- the ratio between EBITDA and interest payable (higher than 3.3 x)

With regard to the net financial debt and RAB ratio, the parameter originally set at 0.85 was:

- at the bondholders' meeting of 18 December 2018, eliminated from the original bond loan of € 100,000,000 issued on 13 July 2015, listed on the multilateral Irish Global Exchange Market ("GEM") system.
- At the bondholders' meeting of 7 March 2019, raised to 1.30 for the original bond loan of € 80,000,000 issued on 28 November 2016 and listed on the regulated Dublin Stock Exchange market, with the earlier partial repayment option remaining in favour of Bondholders, on the ratio going higher than 1.

Furthermore, these bond loans contain cross default clauses for the Group or companies it control in the event of defaults for amounts higher than the thresholds set respectively for each regulation.

Finally, in line with market practises for similar transactions, bond loans require the Group to respect a series of negative content obligations, i.e. limits to the options of carrying out certain transactions, such as by way of example:

- termination of a significant part of its business;

In addition, the specific limitations envisaged for the bond loan issued in 2014 are detailed below:

- distribution of available reserves and profits for the period to the extent of 75% of annual profits achieved and available for distribution, on condition that, at the relative distribution date, no events occurred or are pending that could give rise to a cause for earlier repayment;
- operations to reduce the Group's share capital, without prejudice to the mandatory cases set by law; and
- extraordinary transactions of any kind, including by way of example, extraordinary transaction on one's own capital, transformations in the company structure, merger or demerger, without prejudice to the permitted transactions (such as, listing, transactions characterised by institutional investments in the Group's capital, which involve a specialised financial investor temporarily acquiring a portion of the

Group's capital, aimed at realising an earning on the capital account over the medium/long term or share capital increases by payment).

Furthermore, the existing bank loans impose, inter alia, specific obligations (in certain cases, also referring to companies in the Group), in terms of which the Group undertakes:

- not to use the amounts received on the basis of the loan contracts for other purposes than those agreed on;
- not to substantially change the core business;
- not to carry out extraordinary transactions or the disposal of assets other than those expressly permitted (without prejudice, where applicable, with the prior written consent of the relevant lender bank);
- not create, or allow for the creation of constraints or encumbrances on its assets, other than the constraints and encumbrances expressly permitted (negative guarantee); and
- to keep in place all authorisations, permits and administrative licences required or appropriate to allow the Group to conduct its core business;
- not to give rise to changes in the control structure.

In addition, certain loan contracts entered into by the Group also specify that for the entire duration of the loan, the Group must respect predetermined asset-financial indices (similar to those for the Bond Loan Regulations above), with compliance checked on an annual basis (or with reference to the reporting date of each period based on the results of the relative consolidated financial statements or financial statements of the Group contracting company). Failure to comply with these parameters could result in the execution of the acceleration clause and an earlier repayment obligation arising for the debtor.

The existing loan contracts also specify a series of default events (in certain cases, also referring to companies that are part of the Group), including:

- bankruptcy status or being subject to bankruptcy procedures (or similar procedures);
- cross-default clauses (and in some cases, cross-acceleration) for amounts higher than predetermined materiality thresholds;
- the implementation of extraordinary transactions on its share capital (other than listing) without prior written consent from the relative lender bank;
- the occurrence of events that determine a serious stability crisis and/or liquidity in financial markets that make the funding excessively onerous for the relative lender bank; and
- non-compliance with any of the Group's obligations (including, the infringement of any one of the financial parameters set in the relevant loan contract), unless this non-compliance can be remedied, and this is not done within the deadline granted.

In 2018 and 2017 there were no infringements of covenants associated with loans and bond loans.

14. Public funding received

With reference to the new aspects introduced by Law no. 124 of 4 August 2017 “Annual competition law”, under Art. 1 para. 125-129, excluding the amounts received as payment for supplies and services rendered, during 2018, the Group received the following contributions from public Entities.

Beneficiary	Granting entity		Type of operation	Amount
	Company name	Tax number		
CENTRIA SRL	TUSCANY REGION	94200620485	Plants account contribution (gas distribution networks)	75,816
CENTRIA SRL	MUNICIPALITY SCANDICCI	00975370487	Plants account contribution (gas distribution networks)	30,287
CENTRIA SRL	PROV. ADMIN. SIENA	80001130527	Plants account contribution (gas distribution networks)	26,590
CENTRIA SRL	MUNICIPALITY ASCIANO	80002090522	Plants account contribution (gas distribution networks)	12,000
ESTRA SPA	SVILUPPO TOSCANA SPA	00566850459	Contribution to energy efficiency works	41,000

15. Related parties

The tables below show the economic and asset transactions during the period ended 31 December 2018 with related parties. The related parties identified are shareholders, subsidiaries, companies subject to joint control and associates, directly or indirectly by Estra S.p.A.:

- Economic transactions

Financial year 2018

	Year ended 31 December 2018								
Related parties/ FS item	Revenue from contracts with customers	Other revenues	Raw materials, ancillary materials and goods	Costs for services	Costs for Rentals and Leases	Personnel costs	Other operating costs	Financial income	Financial expenses
Consiag S.p.A.	1,006	167			1,022	(251)			328
Intesa S.p.A.	408	136		1	633	(297)			
Coingas S.p.A.	80	17	30		365				37
Viva Servizi S.p.A.		14		712		69	1		
Shareholders	**1,494**	**334**	**30**	**713**	**2,021**	**(479)**	**1**		**366**
Edma Reti Gas S.r.l.	2,536	328	84	13,638		(133)	92		
Nuova Sirio S.r.l.	16	7							
Companies subject to joint control	**2,552**	**335**	**84**	**13,638**		**(133)**	**92**		
Blugas Infrastrutture S.r.l.		14						145	
Monte Urano S.r.l.		13							
A.E.S. Fano Distribuzione Gas S.r.l.	31	43		18				39	
SIG S.r.l.	64	34				(15)			
Associates	**94**	**104**		**18**		**(15)**		**185**	
Total	**4,140**	**773**	**114**	**14,370**	**2,021**	**(627)**	**93**	**185**	**366**
Percentage incidence on corresponding FS item	***0.53%***	***2.07%***	***0.02%***	***7.30%***	***14.87%***	***(1.97%)***	***0.29%***	***8.73%***	***2.38%***

Financial year 2017

Related parties/ FS item	Revenues from sales and services	Other revenues	Raw materials, ancillary materials and goods	Costs for services	Costs for Rentals and Leases	Personnel costs	Other operating costs	Financial income	Financial expenses
	Year ended 31 December 2017								
Consiag S.p.A.	1,083	423			1,022		5		366
Intesa S.p.A.	644	479		11	633				
Coingas S.p.A.	137	16	35		365				43
Viva Servizi S.p.A.				23					
Shareholders	**1,864**	**918**	**35**	**33**	**2,021**		**5**		**409**
Edma Reti Gas S.r.l.	562	806	14	10,394			18		
Nuova Sirio S.r.l.	24	4							
Idrogenera S.r.l.	9	1							
Edma S.r.l.	776	284		2,364		12			
Companies subject to joint control	**1,371**	**1,094**	**14**	**12,758**		**12**	**18**		
Blugas Infrastrutture S.r.l.		14						207	
Sangro Servizi S.r.l.	76	7							
Monte Urano S.r.l.		1							
Gas Marca S.r.l.		1		27					
A.E.S. Fano Distribuzione Gas S.r.l.		34		16					
Associates	**76**	**57**		**43**				**207**	
Total	**3,311**	**2,070**	**49**	**12,834**	**2,021**	**12**	**23**	**207**	**409**
Percentage incidence on corresponding FS item	***0.34%***	***5.54%***	***0.01%***	***9.58%***	***15.72%***	***0.04%***	***0.07%***	***6.20%***	***2.33%***

- Asset transactions

Financial year 2018

Related parties/ FS item	Trade receivables	Other non-current financial assets	Trade payables	Current and non-current financial debt
	Year ended 31 December 2018			
Consiag S.p.A.	1,443		256	10,000
Intesa S.p.A.	512		340	
Coingas S.p.A.	119		232	1,110
Viva Servizi S.p.A.	652		1,206	
Shareholders	**2,726**		**2,034**	**11,110**
Edma Reti Gas S.r.l.	6,630		4,259	
Nuova Sirio S.r.l.	57	150		
Companies subject to joint control	**6,687**	**150**	**4,259**	
Monte Urano S.r.l.	26			
Blugas Infrastrutture S.r.l.	984	4,153		
A.E.S. Fano Distribuzione Gas S.r.l.	112	784	2	
SIG S.r.l.	52			
Associates	**1,175**	**4,937**	**2**	
Total	**10,587**	**5,087**	**6,295**	**11,110**
Percentage incidence on corresponding FS item	***3.01%***	***39.83%***	***2.51%***	***0.23%***

Financial year 2017

	Year ended 31 December 2017			
Related parties/ FS item	Trade receivables	Other non-current financial assets	Trade payables	Current and non-current financial debt
Consiag S.p.A.	1,333			11,250
Intesa S.p.A.	599		391	
Coingas S.p.A.	44		50	1,295
Viva Servizi S.p.A.	75		2,376	
Shareholders	**2,051**		**2,817**	**12,545**
Edma Reti Gas S.r.l.	10,219		2,342	
Nuova Sirio S.r.l.	34	150		
Idrogenera S.r.l.	34	257		
Companies subject to joint control	**10,287**	**407**	**2,342**	
Monte Urano S.r.l.	1			
Blugas Infrastrutture S.r.l.	839	4,153		
A.E.S. Fano Distribuzione Gas S.r.l.	961		2	
Casole Energia S.r.l.	79			
Sangro Servizi S.r.l.	84			
Gas Marca S.r.l.	1		5	
Associates	**1,964**	**4,153**	**7**	
Total	**14,303**	**4,560**	**5,165**	**12,545**
Percentage incidence on corresponding FS item	***4.86%***	***47.70%***	***2.46%***	***2.88%***

Description of main transactions with related parties

The main transactions put in place with related parties were done on the same basis and referred to transactions with Shareholders', companies subject to joint control and associates and are summarised below:

Main transactions with Shareholders'

- Existing service contracts with the shareholders Consiag S.p.A., Coingas S.p.A. and Intesa S.p.A. (the **"Service contracts"**);
- Charge back of costs for staff seconded by companies in the Estra Group to shareholders Consiag S.p.A. and Intesa S.p.A.;
- Rental contracts to lease company offices in Prato, Arezzo and Siena for the ESTRA Group, respectively from shareholders Consiag S.p.A., Coingas S.p.A. and Intesa S.p.A. (the **"Rental contracts"**);
- Existing loan contracts with the shareholders Consiag S.p.A. and Coingas S.p.A. (the **"Loan contracts"**);
- Electricity sales contract with shareholder Intesa S.p.A. for the consumption of public lighting plants, where Intesa S.p.A is the operator awarded the contract by the Municipalities.

Main transactions with companies subject to joint control

- Service contract from Estra Group companies to EDMA Reti Gas;
- Gas distribution services costs from EDMA Gas networks to Estra Group companies Energie and Promoteo.

Main transactions with associates

- Medium/long-term loan contracts aimed at supporting operating activities and investments to associates. For additional information, reference is made to the note on Non-current financial assets.

In particular, the "**Service contracts**" govern the provision by ESTRA of certain services on an ongoing basis, generally referring to administrative and technical services for Shareholders and some of the shareholders' subsidiaries. Specifically, certain of the services provided relate to Administration and Budget, Finance, Legal and Corporate Affairs, information systems and secretarial, protocol an archive functions.
These are year long contracts and are subject to tacit renewal for an equal term; fees are determined according to market pricing in accordance with the Regulatory Accounting standards governed by AEEGSI.

In providing its services, ESTRA is obliged to perform the services based on the contract in accordance with the standards and rules set by company procedures and practices, the methods and procedures set by law and with the levels of competency, diligence, prudence and precaution required of an expert with the relevant competencies undertaking similar services under similar circumstances and conditions. The contracts stipulate an obligation of mutual cooperation for the parties, in accordance with the principles of correctness and good faith, so as to work in conjunction in order to guarantee service quality, efficiency and economic viability. The fees paid by shareholders in 2018 amount to € 1,088 thousand.

The "**Rental contracts"** govern the leases payable for company offices in Prato, Arezzo and Siena for the ESTRA Group, respectively from shareholders Consiag S.p.A., Coingas S.p.A. and Intesa S.p.A. The contracts have a six-year term and are tacitly renewable for an additional six. The first six years in respect of all contracts ended at 31 December 2017. The fees paid to shareholders in 2018 amount to € 2,021 thousand. The fees are subject to annual review given the 75% shift in the Italian National Institute of Statistics [ISTAT] index for the cost of living in the previous year.

The "**Loan contracts**" refer to two existing loans between ESTRA and the shareholders Consiag S.p.A. and Coingas S.p.A., with the following features:

- - existing loan contract with the shareholder Consiag S.p.A. originally for € 15,000,000, repayable in 24 instalments starting from 30 June 2015, with constant principal amounts at an annual rate of 3% and the residual debt at 31 December 2018 for € 10,000 thousand;
- Loan contract provided by the shareholder Coingas S.p.A. originally of € 1,850,000 repayable in 20 bi-annual instalments starting from 30 June 2015, with constant principal amounts at an annual rate of 3% and residual debt at 31 December 2018 for € 1,110 thousand.

Estra is free to totally or partially extinguish its debt at any time with additional payments to the six monthly instalments, without incurring any kind of penalty.
A delayed payment is one made between the fourth and one hundred and eightieth day from the instalment's due date. After the one hundred and eightieth day, the "failed payment" applies, and as such even if a single instalment exceeds this delay, it entitles the creditor to demand the immediate repayment of the entire debt.
In the case of delays in instalment payments, default interest will apply at a rate of 4%, in addition to the 3% rate agreed for the repayment, or at the commercial default rate if this is lower.

- **Managers with strategic responsibilities**

The total amount for emoluments paid at 31 December 2018 for any reason and in any form by the Estra Group to Strategic Managers amounted to € 765 thousand, and included the General Manager Paolo Abati, who in additional to being a strategic manager is also a member of the Board of Directors.

16. Compensation for directors, statutory auditors and independent auditors

The table below shows the emoluments to directors, statutory auditors and independent auditors for 2018 and 2017.

	Year ended 31 December 2018			Year ended 31 December 2017		
Beneficiaries	At the parent company	At other Group companies	Total	At the parent company	At other Group companies	Total
Directors	363	315	678	306	435	741
Board of Statutory Auditors	178	319	497	133	291	424
Independent Auditors	113	224	337	110	233	343

The table below shows the fees paid for 2018 to the independent auditors and entities falling within its network, including the "other services" provided to Estra S.p.A and the subsidiaries of the audit firm EY S.p.A. and entities falling within its network. No appointments were made in respect of EY S.p.A. that are not permitted in terms of application legislation.

Type of service	Service provider	Recipient	2018 fees (Euro thousand)
Independent audit of accounts	Parent Company independent auditor	Parent company	75
		Subsidiaries	161
Certification services (1)	Parent Company independent auditor	Parent company	687
		Subsidiaries	23
Other services	Parent Company independent auditor	Parent company	20
	Parent Company independent auditor network (2)	Parent company	-

(1) The certification services refer to the audit of the schedules prepared for the purposes of Resolution no. 137 of 24 March 2016, by the Regulatory Authority for Energy, Networks and the Environment (former AEEGSI) for the Parent Company and its subsidiaries, and the limited audit of the non-Financial Declaration for the Parent Company, and to the activities to start the process to list on the screen-based market ["Mercato Telematico Azionario"].

(2) This refers to the portion accrued at 31 December 2018.

17. Subsequent events

The following is noted after the reporting date:

- The acquisition on 01 April 2019 of 100% of the share capital of **Murgia S.r.l.**, a company newly established by 2i Rete Gas, to which the ATEM Bari 2 business unit relating to the concessions for the gas distribution service to the Municipalities of Conversano, Putignano, Rutigliano, Triggiano and Valenzano was transferred, and the ATEM Foggia 1 business unit, relating to the concessions for the distribution service in the Municipalities of Chieuti, Lesina, San Severo, Serracapriola and Torremaggiore.
  The acquisition occurred after the Group, through Centria S.r.l., won the disposal procedure launched by 2i Rete Gas on 29 March 2018.
  The acquisition was made for a total price of € 42 million (subject to adjustment).

  Through operation, the Estra Group will manage approximately 544 km of distribution network (302 km in Bari 2 and 242 km in Foggia 1), for a total of around 66,000 Points of Delivery (PODs).

- The acquisition of 88% of Ecolat S.r.l., held for 12% by Estra at 31 December 2018. In addition to being a shareholder in SEI Toscana S.r.l., the company owns a selection and sorting plant for waste originating from separate collection in the provinces of Grosseto, Arezzo, Prato and Florence, also operating the waste collection centre in Grosseto and a municipal waste recovery storage platform. The acquisition took place in February 2019 with the sale by ETH S.r.l. for € 6,380 thousand.

Prato, 17 April 2019

On behalf of the Board of Directors
The Chairperson of the Board of Directors
Francesco Macrì

Building a better working world

E.S.TR.A. S.p.A.

Consolidated financial statements as at December 31, 2018

Independent auditor's report pursuant to article 14 of Legislative Decree n. 39, dated 27 January 2010, and article 10 of EU Regulation n. 537/2014

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Independent auditor's report pursuant to article 14 of Legislative Decree n. 39, dated 27 January 2010 and article 10 of EU Regulation n. 537/2014
(Translation from the original Italian text)

To the Shareholders of
E.S.TR.A. S.p.A.

Report on the Audit of the Consolidated Financial Statements

Opinion

We have audited the consolidated financial statements of the E.S.TR.A. Group (the Group), comprised the statement of consolidated financial position as at December 31, 2018, and the consolidated income statement, the consolidated statement of comprehensive income, statement of changes to consolidated shareholders' equity and consolidated cash flows statement for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the financial position of the Group as at December 31, 2018, and of its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union and with the regulations issued for implementing art. 9 of Legislative Decree n. 38/2005.

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISA Italia). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the E.S.TR.A. S.p.A. in accordance with the regulations and standards on ethics and independence applicable to audits of financial statements under Italian Laws. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

We identified the following key audit matters:

EY S.p.A.
Sede Legale: Via Po, 32 - 00198 Roma
Capitale Sociale Euro 2.525.000,00 i.v.
Iscritta alla S.O. del Registro delle Imprese presso la C.C.I.A.A. di Roma
Codice fiscale e numero di iscrizione 00434000584 - numero R.E.A. 250904
P.IVA 00891231003
Iscritta al Registro Revisori Legali al n. 70945 Pubblicato sulla G.U. Suppl. 13 - IV Serie Speciale del 17/2/1998
Iscritta all'Albo Speciale delle società di revisione
Consob al progressivo n. 2 delibera n.10831 del 16/7/1997

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Key Audit Matter	Audit Response
Recognition of revenues for unbilled gas and electricity sales and accruals for invoices to be issued Revenues from sales and services include the estimated revenues accrued for the sale of gas and electricity already delivered to the customers but unbilled as at December 31, 2018, in addition to revenues already invoiced to the customers, measured on the basis of pre-established meter reading schedules, effective or estimated, during the year. The estimated revenues accrued but unbilled are recorded within trade receivables, as accruals for invoices to be issued, that include also accruals related to previous years. Revenue recognition for sales accrued but unbilled involves estimates based on processes and evaluation methodologies developed on complex assumptions. The methodologies used by the Group to estimate gas and electricity consumptions between the date of the last meter reading of each customer and the 31st of December, and therefore to estimate revenues to be accrued, are based on assumptions and complex calculation algorithms, which involve a combination of data extracted from the information systems and non-accounting data. In particular, the estimate of revenues accrued but unbilled is determined as the difference between the consumptions already invoiced to the customers at the end of the year and the quantity of gas and electricity allocated in the distribution network, net of estimated network losses, considering the data communicated at end of the year by the service distributors, subject to potential future adjustments, as required by applicable laws and regulations. Such difference is then prized, based on the customer's cluster, on the basis of gas and electricity volumes already invoiced and the related average fee used during the year. Considering the complexity of the estimate of revenues accrued but unbilled, we have determined that this area constitutes a key audit matter. The disclosures included in note "Significant accounting estimates" of the consolidated financial statements as at December 31, 2018 describe the revenues recognition principles adopted by the Group for gas and electricity sales.	Our audit procedures responsive to this key audit matter included, among others: • assessment of the process and key controls, including controls related to information technology, implemented by the main entities of the Group for the recognition process of gas and electricity sales, and test of key controls, including controls related to estimated and actual volumes billed to the customers; • testing, on a sample basis, of the data used by management to determine revenue accruals for sales unbilled, including information communicated by service distributors on the volumes allocated in the distribution network, data extracted from the information systems, and testing of the arithmetic accuracy; • analysis of the assumptions used by the Management, also compared to the previous year; • look-back analyses of the prior years estimate against the data subsequently reported, and analysis of the variances in order to support the accuracy of the current estimation process. Lastly, we reviewed the adequacy of the disclosures included in the notes to the financial statements.

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Business Combination	
During the financial year 2018, the Group has completed the acquisition of 100% of Metania S.r.l. for Eur 15,3 million, Melfi Reti Gas S.r.l. for Eur 9 million, and the remaining 51% of Gas Marca S.r.l. for Eur 6,7 million. At December 31, 2018 management completed the process for allocating the purchase price to the assets and liabilities acquired, recording intangible assets related to client lists for Eur 15,4 million and distribution networks for Eur 1,6 million, as well as goodwill for Eur 17,4 million. The processes and accounting policies for acquisition transactions are based on complex assumptions , that require, by their nature, management's judgment, in particular with reference to the allocation of purchase price to fair values of the assets acquired and liabilities assumed, the alignment of the accounting principles of the acquiree with those of the Group, and the determination of the results since the acquisition date for the purpose of their inclusion in the consolidated financial statements of the Group. Considering the significance of the purchase price amounts, the degree of management's judgment involved and the complexity of the assumptions made in the identification of the intangible assets acquired and the allocation of the purchase price to fair values of the assets acquired and the liabilities assumed, we have determined that this area constitutes a key audit matter. The disclosures included in note "Business combinations and disposals of assets, and acquisition and disposal of non-controlling interests - Year ended as at December 31, 2018" of the consolidated financial statements as at December 31, 2018 describe the aforementioned business combinationsand related accounting implications.	Our audit procedures responsive to this key audit matter included, among others: • analysis of the executed acquisition agreements in order to gain an understanding of key terms and conditions; • testing of the fair value estimate of the identified assets acquired and liabilities assumed at the acquisition date; • analysis of the reports provided by management's specialists that assisted the Group in determining the fair value, including the assessment of their competence, capability and independence; • assessment of the financial forecasts of the entities acquired and of the reasonableness of the assumptions used in the valuation, such as clients' churn rate, growth rate and discount rate, also involving our valuation specialists; • assessment of the methodologies involved and the arithmetical accuracy of the purchase price allocation; • assessment of the accounting treatment adopted in the consolidated financial statements of E.S.TR.A. S.p.A.. Lastly, we reviewed the adequacy of the disclosures included in the notes to the financial statements in relation to these acquisitions.

Responsibilities of Directors and Those Charged with Governance for the Consolidated Financial Statements

The Directors are responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards as adopted by the European Union and with the regulations issued for implementing art. 9 of Legislative Decree n. 38/2005, and, within the terms provided by the law, for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

The Directors are responsible for assessing the Group's ability to continue as a going concern and, when preparing the consolidated financial statements, for the appropriateness of the going concern assumption, and for appropriate disclosure thereof. The Directors prepare the consolidated financial statements on a going concern basis unless they either intend to liquidate the Parent Company E.S.TR.A. S.p.A. or to cease operations, or have no realistic alternative but to do so.

The statutory audit committee ("Collegio Sindacale") is responsible, within the terms provided by the law, for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with International Standards on Auditing (ISA Italia) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with International Standards on Auditing (ISA Italia), we have exercised professional judgment and maintained professional skepticism throughout the audit. In addition:

- we have identified and assessed the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, designed and performed audit procedures responsive to those risks, and obtained audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- we have obtained an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control;
- we have evaluated the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Directors;
- we have concluded on the appropriateness of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to consider this matter in forming our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern;

- we have evaluated the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation;
- we have obtained sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We have communicated with those charged with governance, identified at an appropriate level as required by ISA Italia, regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We have provided those charged with governance with a statement that we have complied with the ethical and independence requirements applicable in Italy, and we have communicated with them all matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we have determined those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We have described these matters in our auditor's report.

Additional information pursuant to article 10 of EU Regulation n. 537/14

The shareholders of E.S.TR.A. S.p.A., in the general meeting held on January 12, 2017, engaged us to perform the audits of the consolidated financial statements for each of the years ending December 31, 2016 to December 31, 2024.

We declare that we have not provided prohibited non-audit services, referred to article 5, par. 1, of EU Regulation n. 537/2014, and that we have remained independent of the Group in conducting the audit.

We confirm that the opinion on the consolidated financial statements included in this report is consistent with the content of the additional report to the audit committee (Collegio Sindacale) in their capacity as audit committee, prepared pursuant to article 11 of the EU Regulation n. 537/2014.

Report on compliance with other legal and regulatory requirements

Opinion pursuant to article 14, paragraph 2, subparagraph e), of Legislative Decree n. 39 dated 27 January 2010 and of article 123-bis, paragraph 4, of Legislative Decree n. 58, dated 24 February 1998

The Directors of E.S.TR.A. S.p.A. are responsible for the preparation of the Report on Operation and the specific section including the information on corporate governance as provided for by article 123-bis, paragraph 2, subparagraph d) of Legislative Decree n. 58 of Group E.S.TR.A. as at December 31, 2018, including their consistency with the related consolidated financial statements and their compliance with the applicable laws and regulations.

We have performed the procedures required under audit standard SA Italia n. 720B, in order to express an opinion on the consistency of the Report on Operation and of specific section including the information included in the Report on Corporate Governance as provided for by article 123-bis, paragraph 2 subparagraph d), of Legislative Decree n. 58, dated 24 February 1998, with the consolidated financial statements of E.S.TR.A. Group as at December 31, 2018 and on their compliance with the applicable laws and regulations, and in order to assess whether they contain material misstatements.

In our opinion, the Report on Operation and the above mentioned specific section including the information included in the Report on Corporate Governance are consistent with the consolidated financial statements of E.S.TR.A. Group as at December 31, 2018 and comply with the applicable laws and regulations.

With reference to the statement required by art. 14, paragraph 2, subparagraph e), of Legislative Decree n. 39, dated 27 January 2010, based on our knowledge and understanding of the entity and its environment obtained through our audit, we have no matters to report.

Statement pursuant to article 4 of Consob Regulation implementing Legislative Decree n. 254, dated 30 December 2016

The Directors of E.S.TR.A. S.p.A. are responsible for the preparation of the non-financial information pursuant to Legislative Decree n. 254, dated 30 December 2016. We have verified that non-financial information have been approved by Directors.

Pursuant to article 3, paragraph 10, of Legislative Decree n. 254, dated 30 December 2016, such non-financial information are subject to a separate compliance report signed by us.

Florence, , 4 May 2019

EY S.p.A.
Signed by: Beatrice Amaturo, partner

This report has been translated into the English language solely for the convenience of international readers.