E.S.TR.A. S.p.A.
Registered office in Via Ugo Panziera, 16- 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
Subject to management and coordination by Alia Servizi Ambientali S.p.A.

MANAGEMENT REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS AS OF 31 DECEMBER 2023

OFFICERS

Board of Directors

Chairman Francesco Macrì
Vice Chairman Alessandro Fabbrini
Chief Executive Officer Nicola Ciolini
Director Maria Cristina Rossi
Director Daria Orlandi

Board of Statutory Auditors

Rita Pelagotti *(Chairperson)*
Alessandro Mannelli
Athos Vestrini

Independent Auditors

EY S.p.A.

1. HIGHLIGHTS OF THE YEAR

Despite an uncertain and volatile scenario, 2023 saw the Estra Group achieve excellent financial and operating results, recovering strongly compared to the previous year, when the results of the Gas and Electricity Sales SBU had been affected by turbulence on the markets, characterised by lower physical availability of energy commodities, and increased and high volatility in prices.

2023 closed with an adjusted gross operating margin (adjusted EBITDA) of € 142.9 million, a considerable increase of € 38.5 million (+37%) compared to 2022 (€ 104.5 million). Referring to the analysis by business sector for a more in-depth assessment, all businesses of the Group recorded better performance than in 2022, but growth was driven especially by solid results in the Gas and Electricity Sales SBU and energy efficiency activities.

The adjusted net operating profit/(loss) (adjusted EBIT) stood at € 69.6 million, an increase of € 34.2 million compared to 2022 (€ 35.4 million), following higher amortisation for € 6.0 million mainly due to higher investments for customer acquisition and allocations to the provision for write-downs which was lower by € 1.8 million.

Adjusted financial management shows a negative balance of € 25.9 million (€ 12.2 million in 2022), significantly higher as a result of the considerable increase in average interest rates and due to the increase in financial debts undertaken, mostly in the final months of 2022 to support the growth in working capital.

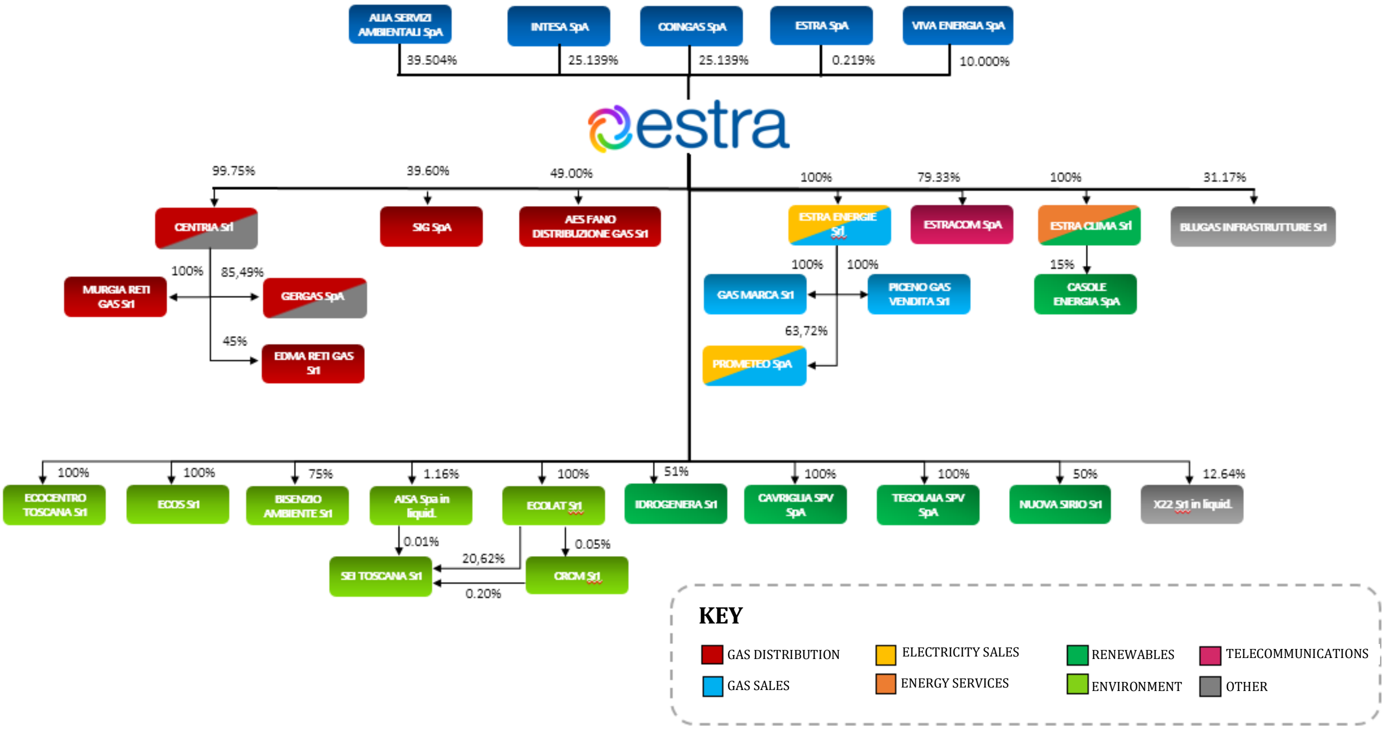
The adjusted profit before taxes came out at € 43.8 million (€ 23.2 million in 2022).
Income taxes amounted to € 15.7 million with a tax rate of 35.8%, down compared to the 39.2% in 2022.
Adjusted net profit was € 28.1 million (€ 14.1 million in 2022).

Shareholders' equity at 31 December 2023 amounted to € 437.7 million (€ 423.2 million at 31 December 2022), mainly as a result of the profit for the period and the distribution of dividends.

The Group closed financial year 2023 with net financial debt of € 447.3 million, an increase of € 95.5 million compared to 31 December 2022 (€ 352.0 million) mainly due to the cash absorption generated by the increase in net working capital. In particular, the trend refers to the sector of energy efficiency for redevelopment works on properties from the 110% superbonus and the Sale of Gas and Electricity SBU for higher volumes sold in the final quarter compared to the previous financial year and for credit disposal operations carried out in late 2022 and not re-proposed in the current financial year.

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.



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, IT management), and special purpose entities operating in the following business segments:

- 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, redevelopment and energy efficiency activities, waste selection and storage.

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 free-market activities for the sale of natural gas and electricity, natural gas trading, technical and operational management of telecommunication networks and marketing of telecommunication services, management of heating plants owned by third parties and heat management, redevelopment and energy efficiency activities, waste selection, treatment and storage.

The Estra Group operates, through subsidiaries, in joint ventures and associates, mainly in Tuscany, Umbria, Marche, Abruzzo, Molise, Apulia, Campania, Calabria and Sicily operating on a national basis in the sale of natural gas and electricity.

3. SIGNIFICANT EVENTS OF THE YEAR 2023

3.1 ENTRY INTO THE ALIA GROUP

With deed dated 26 January 2023, the merger by incorporation of Consiag S.p.A., Publiservizi S.p.A. and Acqua Toscana S.p.A. into Alia Servizi Ambientali S.p.A. was completed, with effect from 1 February 2023.

As a result of the incorporation of Consiag S.p.A., Alia Servizi Ambientali S.p.A. took over 90,200,000 shares, equal to a 39.50% stake in the share capital of Estra S.p.A. (hereinafter "Estra"), as well as all assets, liabilities and dealings of any kind in place.

Alia Servizi Ambientali S.p.A. (hereinafter also "Alia"), concession holder of the integrated management service of municipal and similar waste, pursuant to Art. 26, paragraph 6 of Tuscany Regional Law no. 61/2007, for the respective area of the ATO Central Tuscany, is controlled by the Municipalities of Florence (36.99%), Prato (18.07%), Pistoia (5.46%), Empoli (3.41%) and other Tuscan municipalities (36.06%).

Through a shareholders' agreement drawn up on 15 June 2023 between Alia and Coingas S.p.A., the holder of 57,400,000 shares, equal to 25.14% of the share capital of Estra, the two shareholders, holders of 64.64% in total of the capital, governed, through a coordinated exercise of the voting right, the composition of the Board of Directors and the roles attributed to the parties respectively and other provisions related, in the broad sense, to the governance of Estra, for which Alia is assigned the responsibility of corporate management and the possibility to exercise substantial decision-making powers over the financial, managerial and strategic policies of the subsidiary.

The contents of the agreement, jointly with the by-laws, determine that:
- Estra is subject to the dominant influence of Alia and therefore in control pursuant to Art. 2359, no. 2) of the Italian Civil Code;
- Alia exercises activities of direction and coordination over Estra;
- From the second half of 2023, Alia has consolidated the Estra financial statements.

The direction and coordination by Alia strives, in harmony with the other shareholders, for an ambitious strategy of industrial strengthening and enhancement of the company's history and strong territorial roots, and reinforces the journey to overcome the fragmentation of Tuscan public services and allow for progression on an industrial scale capable of consolidating the many local public services businesses into one Tuscan Multiutility.

The consolidation also strives to bring together the key expertise and best practices of Alia and Estra while creating benefits for the entire Group, economies of scale for a better distribution of the tariff costs, a single point of contact for the Customer, and adequate management of risk and compliance. The guiding principles of the new governance for achieving the full potential of the Multiutility will be the strengthening of the role of the business areas, interaction between the business areas and Corporate, and interfunctional coordination between the Corporate structures.

The shareholders' meeting to approve the Estra 2022 financial statements appointed the company's new Board of Directors, which named Nicola Ciolini as Chief Executive Officer, and Alberto Irace as General Manager, Alia Vice Chairman and Chief Executive Officer respectively, while Francesco Macrì was named Executive Chairman. The Board of Directors is also formed of Alessandro Fabbrini (who also takes on the role of Vice Chairman), Daria Orlandi and Maria Cristina Rossi. Fabio Cannari was appointed to the role of joint manager.

At the Board of Directors meeting on 6 July 2023, with the aim of ensuring better management and precise control over the company's activities, the Executive Committee was formed, made up of the Chairman, the Chief Executive Officer and the General Manager, as was the Control and Risks Committee, made up of Director Maria Cristina Rossi as Chairwoman and by Directors Daria Orlandi and Alessandro Fabbrini, and the Related Parties Committee, formed of Director Daria Orlandi as Chairwoman and Directors Maria Cristina Rossi and Alessandro Fabbrini.

3.2 ACQUISITION OF MONTE URANO S.R.L.

On 13 January, through the subsidiary Prometeo S.p.A., the Group completed the acquisition of 100% of the stakes in the company Monte Urano Energie S.r.l., taking up the 51% stake in the share capital held by the Municipality of Monte Urano for € 928,000. The company was merged by incorporation into Prometeo S.p.A. during the final quarter of the year.
The company has around 3,000 natural gas customers and 800 electricity customers.

For the accounting effects of the business combination, please refer to the specific paragraph in the notes to the financial statements.

4. MARKET SCENARIO

Macroeconomic context

2023 proved to be a complex year in which several trends that began in the previous three-year period were consolidated and new dynamics of crucial importance to the balance of the market emerged[1]. The European Union's response to the war between Russia and Ukraine continued through various measures including those related to energy savings, source diversification and the acceleration of the transition towards clean energy, also understood as a means to increase energy independence. Significant progress was recorded in the change in energy routes and supplies, in the upgrading of natural gas infrastructure and in the increase in the percentage of renewables in the energy mix. To offset the impact of high energy prices, the EU introduced support measures for citizens and, despite an increase in energy poverty, government measures helped to mitigate the effect of the energy crisis on the cost of living[2]. Thanks to the restructuring of procurement routes, in 2023 fossil fuel prices fell from the peaks recorded in 2022; however, due to ongoing geopolitical tensions, the global energy market has continued to be volatile[3].
In late 2023, the resurgence of the war in the Middle East between Hamas and Israel caused a new wave of uncertainty, which joined an ongoing unstable geopolitical panorama.

In this scenario, the OECD estimated that in 2023 the international GDP had grown by 2.9%, recording a slight contraction compared to 2022 (-0.2%)[4].
As for international trade, in 2023 the fluctuating trend seen in the previous year continued, which concluded with a clear slowdown, mainly determined by a contraction in global demand. Following a hesitant recovery at the start of the year, trade flows eased in the second and third quarter of 2023, mainly caused by the ongoing geopolitical uncertainty and persistent inflation, which in the main advanced economies[5] stood at high levels, before growing slightly in the fourth quarter[6].
On the whole, in 2023 commercial trade showed deceleration, recording 0.6% growth, compared to 5.4% in the previous year.

In 2023, economic growth in the largest advanced countries was uneven: the United States reported the most sustained increase in GDP, equal to 2.4%, while Japan saw more contained growth, equal to 1.7%. The United Kingdom recorded 0.5% growth compared to 4.3% in the previous year, as a result of high inflation values and interest rates[7].
The estimates available generally show increases in relation to the emerging economies: Russia, which in 2022 had declined by 2.1% as a direct result of the impact on the economy of the sanctions imposed following invasion of Ukraine, recorded a 1.3% increase in GDP in 2023. China showed +5.2% growth, albeit well below the pre-pandemic period mainly due to the continuation of the crisis in the real estate sector.
A positive trend was also seen in India (GDP 6.3% provisional on OECD data, the highest among emerging economies) and Brazil (GDP 3.0% provisional on OECD data)[8].

The economy in the Euro Area weakened in the second half of 2023 as a result of more stringent lending conditions, weakened confidence levels, and losses in competitiveness: the estimates on the economic projections in this area indicate a decrease in the average annual increase of the GDP from 3.4% in 2022 to 0.6% in 2023[9]. GDP in the area decreased slightly in the first quarter, before increasing slightly in the second and falling once again in the summer months, as well as in the final part of the year, slowed by domestic and overseas demand. Inflation continued to decrease for reasons attributable to the fall in the energy component, the impact of the worsening of the monetary policy and the ongoing attenuation of inflationary drivers and bottlenecks in supply[10].

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[1] GME Newsletter no.177 – January 2024
[2] ENEA Annual Energy Efficiency Report 2023
[3] International Energy Agency - World Energy Outlook 2023
[4] *Bollettino economico* (*Economic Bulletin*) – Bank of Italy 1/2024, page 8
[5] *Bollettino economico* (*Economic Bulletin*) – Bank of Italy 2/2023 page 5
[6] *Bollettino economico* (*Economic Bulletin*) – Bank of Italy 1/2024, page 8
[7] *Bollettino economico* (*Economic Bulletin*) – Bank of Italy 1/2024, page 7
[8] *Bollettino economico* (*Economic Bulletin*) – Bank of Italy 1/2024, page 7
[9] European Central Bank | Eurosystem – Economic projections for the euro area
[10] European Central Bank | Eurosystem – Economic projections for the euro area

In this context, according to preliminary estimates, Italian GDP slowed significantly in 2023 to 0.7%[11]. After the first quarter, when product grew slightly, driven by the recovery in household spending and the development of investments, it fell in the second, reflecting the decrease in added value in the industry and the lack of expansion in services[12]. In the third quarter, activity proved once again to be weak in manufacturing and in the services sector, and growth remained all but non-existent in the final months of 2023, slowed by restrictive monetary policy, high energy prices, and weakness in overseas demand[13].
Household spending grew again in the initial months of 2023, driven by the increase in employment, the deceleration in inflation and a gradual (but partial) recovery in remuneration[14]. The economic indicators show additional expansion in spending in the second quarter, driven in particular by items connected to tourism, an expansion that also extended to the third quarter, before remaining nearly unchanged in the final months of 2023. The consumer confidence climate dropped in the middle of the year: this especially reflects the worsening in opinions on the general economic situation, while ratings on the personal component appear more resilient[15].
With reference to the Italian labour market, employment trends in 2023 were positive. As a matter of fact, employment grew in every quarter of the year; initially in a more sustained manner until summer, before a slightly lower pace in the second part of the year, driven by permanent employment and, to a lesser extent, freelance work[16]. A marked increase was recorded in construction, which recovered following a decrease in the previous four quarters, while a more moderate increase was seen in the services sector. Lastly, employment fell slightly in the industry in the strict sense[17].
Industrial production in Italy followed a fluctuating trend in 2023, with a negative first quarter; this was influenced by the fall in production of capital goods and, to a lesser extent, of intermediate goods, following the increase in the production of consumer goods. A large gap remains between the level of activity in sectors with high use of energy input and the remainder of the manufacturing segment. Production then continued to fall, but more markedly this time, in April-May: this decrease was affected by the prolonged weakness in the global manufacturing cycle – especially in Germany – as well as previous energy price hikes and residual shortfalls in intermediate inputs in certain segments, such as production of machinery and equipment. The decrease seen since the second half of 2022 was interrupted in the third quarter, before resurfacing in October-November, when industrial production shrank by 0.9% in the third quarter[18].
In 2023, the real estate market encountered a negative trend which lasted from the final quarter of 2022 until the third quarter of 2023: purchases and sales rose slightly only at the end of the year[19].
On the other hand, with reference to overseas trade, following the decrease in the first half of the year, in the third quarter exports in volume resumed their growth (0.6%), driven by the recovery in the goods component which more than offset the reduction in services: the increase was attributable to engineering and pharmaceutical products and, to a lesser extent, refined oil products and chemicals[20]. Exports were mainly supported by non-European markets, whereas there was a slowdown in sales in the main partners in the European area[21].
Imports, on the other hand, experienced a falling trend: after remaining stationary in the first half of the year, they decreased in the third quarter (-2.0%), mainly due to lower purchases of goods by countries outside of the Euro Area.

Trends in the energy market

In 2023, fossil fuel prices fell from the peaks recorded during 2022, as a result of the restructuring of procurement routes and the slowdown in pressures attributable to the Russia/Ukraine conflict[22]. Nevertheless, during the year the global energy market continued to be tense and volatile, characterised by turbulence linked to the ongoing geopolitical tensions, such as the continued conflict in Ukraine and the emergence of a new crisis in the Middle East[23].
In particular, in 2023 the oil markets confirmed the trends seen over the years in the post-pandemic recovery, with demand for oil in constant growth but with supply that did not keep up. Overall, demand for oil reached 102 million barrels/day, with 2.4 million more than in 2022, one of the largest increases in the last 50 years[24]. This growth is mainly attributable to non-OECD countries and in particular China, while demand in OECD countries remained rather

[11] ISTAT – Prospects for the Italian economy in 2023-2024
[12] *Bollettino economico* (*Economic Bulletin*) – Bank of Italy 4/2023, page 21
[13] *Bollettino economico* (*Economic Bulletin*) – Bank of Italy 4/2023, page 21
[14] *Bollettino economico* (*Economic Bulletin*) – Bank of Italy 1/2024, page 25
[15] *Bollettino economico* (*Economic Bulletin*) – Bank of Italy 1/2024, page 26
[16] *Bollettino economico* (*Economic Bulletin*) – Bank of Italy 4/2023, page 29
[17] *Bollettino economico* (*Economic Bulletin*) – Bank of Italy 1/2024, pages 30-31
[18] *Bollettino economico* (*Economic Bulletin*) – Bank of Italy 2-3-4/2023, *Bollettino economico* (*Economic Bulletin*) – Bank of Italy 1/2024
[19] *Bollettino economico* (*Economic Bulletin*) – Bank of Italy 2-3-4/2023, *Bollettino economico* (*Economic Bulletin*) – Bank of Italy 1/2024
[20] *Bollettino economico* (*Economic Bulletin*) – Bank of Italy 2/2023, page 33
[21] *Bollettino economico* (*Economic Bulletin*) – Bank of Italy 1/2024, page 31
[22] Staffetta Quotidiana (daily bulletin), "The 2023 of Energy" 29/12/2023
[23] International Energy Agency - World Energy Outlook 2023
[24] UNEM – Preconsuntivo petrolifero 2023 (2023 Preliminary Oil Balance)

stable. Oil supply in 2023 stood at 101.8 million barrels/day, a volume lower than demand, mainly due to the decisions of OPEC Plus countries to slow down their production in a bid to curb the drop in prices[25].
In this context, oil prices were therefore affected by turbulence in the geopolitical context attributable to the ongoing Russia/Ukraine conflict and new outbreaks in the Middle East.
In 2023, prices saw a downward trend in the first months of the year, followed by a phase of upswings as a result of the announcements of new reductions in supply by Saudi Arabia and Russia, culminating, lastly, in new downturns at the end of the year as a result of the weakening in the macroeconomic context. On average in 2023, the price of the Brent was 83 dollars/barrel, a 16% decrease compared to prices in 2022.
For 2024, analysts predict the continuation of the downturn phase, with average prices that should reach 75-85 dollars/barrel. However, these prices could suffer from fluctuations linked to developments in the international context[26]. On the other hand, with reference to the trend in market volumes, the International Energy Agency (IEA) estimates a progress in the demand for oil of approximately 900,000 barrels/day for 2024. Supply is also expected to rise according to IEA estimates, exceeding 103 million barrels/day, prevalently supported by production in non-OPEC countries.
Regarding the electricity market, however, the price to purchase energy changed course in 2023 in Italy from the upward trend of the previous year, coming to € 127.24/MWh, 58.1% lower than in 2022[27]. This price variation was impacted heavily by the reduction in the price of gas, alongside the fall in purchases and the increase in renewable volumes, as well as the high level of net imports.
In particular, the PUN showed a trend strongly driven by the drop in the price of gas, presenting a decreasing trend in the first half of the year and subsequent growth until October, also in line with the outbreak of conflict in the Middle East. The final two months of the year experienced downturns in the prices[28].
2023 saw a new reduction in electricity volumes traded on the Day Ahead Market (DAM) at 278.0 TWh (-3.9% compared to 2022). Over-the-counter trading exchanged on the Electricity Power Exchange (PCE) and nominated on the DAM reached record lows of 68.1 TWh, falling by 13%. Volumes traded on the Stock Exchange, on the other hand, came to 209.9 TWh, a slight decrease of 0.5% on 2022[29].
The same downward dynamics were also observed with reference to the price of natural gas on the Virtual Exchange Point (PSV), which settled at € 43.05/MWh, decreasing by € 82.33/MWh compared to the record levels reached in 2022.
The downward trend characterised the entire year, hitting the lowest prices in July (€ 32.33/MWh); a slight recovery was seen in October, when the price exceeded € 40/MWh, in line with the stiffening of tensions in the Middle East and the beginning of winter. The price of gas on the PSV followed similar trends to those recorded by the main European hubs, with the TTF[30] down at € 40.79/MWh (- € 83.87/MWh compared to 2022). The PSV-TTF spread stood at around €2/MWh, compared to € 0.7/MWh in 2022[31].
In relation to prices on the Italian market, in July 2023 the GME introduced the new IG Index (IGI price index), with the aim of providing a tool to interpret and evaluate the dynamics seen on the gas markets delivering to the PSV. In the initial months when the IGI was active, its value stood at € 37.78/MWh, in line with the price dynamics of the main European hubs[32].
2024 began with gas prices falling sharply, coming to below the threshold of € 30/MWh: the current price is twelve times lower than the peak records of August 2022, when Europe was the epicentre of the energy crisis[33]. Nevertheless, gas prices in the first weeks of the year were nearly three times lower than the values recorded in winter 2023. Instability in the Middle East continues, however, to dominate the international political scene, made uncertain once again by tensions in the Red Sea, which are slowing down the passage of commercial ships. Gas carriers headed for Europe are making changes to their routes that pass through the Suez Canal, with considerably longer delivery times. The International Energy Agency warns that the ongoing dynamics and geopolitical risks, in addition to concerns about supply, could trigger renewed volatility in gas prices, with repercussions also in terms of consumption[34].

[25] UNEM – Preconsuntivo petrolifero 2023 (2023 Preliminary Oil Balance)
[26] UNEM – Preconsuntivo petrolifero 2023 (2023 Preliminary Oil Balance)
[27] Gestore Mercati Energetici (Energy Markets Operator) – Newsletter no.177 January 2024, p.2
[28] Gestore Mercati Energetici (Energy Markets Operator) – Newsletter no.177 January 2024, p.2
[29] Gestore Mercati Energetici (Energy Markets Operator) – Newsletter no.177 January 2024, p.3
[30] The TTF (Title Transfer Facility) is the natural gas trading hub of reference at European level.
[31] Gestore Mercati Energetici (Energy Markets Operator) – Newsletter no.177 January 2024, p.15
[32] Gestore Mercati Energetici (Energy Markets Operator) – Newsletter no.177 January 2024, p.13
[33] Il Sole 24 Ore, "Gas, prices below 30 euro despite cold and geopolitics", 23/01/2024
[34] QualEnergia.it, 29 January 2024

Overview of the Italian markets

The natural gas market

NATURAL GAS (Million m^3)	Financial year 2023	Changes %
Imports	60,639	-11.7
Domestic production	2,802	-9.7
Delivery from storage	7,971	-12.9
Total issued	**71,712**	**-11.7**
Services and domestic use	26,641	-7.4
Industrial use	11,445	-4.0
Thermoelectric use	21,091	-16.2
Exports, third-party networks and system consumption*	3,949	+28.5
Total demand	**63,127**	**-8.4**
Injections into storage	8,285	-30.7
Total drawn down	71,412	-11.7

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

In 2023, natural gas consumption in Italy fell by 8.4% compared to 2022, standing at the lowest levels since 2015, at 63,127 million cubic metres[35]. The decrease affected the three distribution sectors, with a more marked decrease in the thermoelectric segment, which stood at 21,091 million cubic metres (-16.2%), followed by the domestic segment, which, with a volume of 26,641 million cubic metres, fell by 7.4%; unlike 2022, the industrial segment saw the least defined drop, with a volume of 11,445 million cubic metres (-4.0%). The positive trend in exports and other consumption was confirmed, with 3,949 million cubic metres (+28.5%).
With reference to supply dynamics, with 2,802 million cubic metres, domestic production is at a historical high, accompanied by a fall in imports which stood at 60,639 million cubic metres, these too at their lowest levels since 2015. The distribution of flows by type and point of entry reflects the changes caused by the start of the Russia/Ukraine conflict, with restructuring of supplies from Russia and consolidation of the positive trend in imports of LNG.
In detail, the strategic role of LNG is fostered by the start-up of the new terminal in Piombino (LI) and in the increase recorded at Cavarzere (VE) (import +6.0%) and Livorno (import +1.8%). Imports via gas pipelines, on the other hand, were down in 2023 largely caused by the reduction in flows from Russia to Tarvisio (-76.9%). Also down were flows from Algeria to Mazara (-2.2%), from Azerbaijan to Melendugno (-3.4%), from Libya to Gela (-3.6%), and European ones to the Gries Pass (-9.4%)[36].

In 2023, total trades on the gas spot markets (MP-GAS) managed by the GME (Gestore Mercati Energetici - Energy Markets Operator) showed a 12% reduction from the record high of 2022, of 155 TWh. The decrease in volumes is attributable to the different system context and is concentrated in the AGS (system gas procurement) segments, since the national stockpiling emergency no longer exists.

The gas distribution sector

In the gas distribution sector, 2023 was a year that saw, in terms of the weighted average cost of capital, the confirmation of the values from the previous year. In this sense, resolution 654/2022/R/com of 6 December 2022 had defined the WACC parameter values at 5.6% for both the distribution service and for gas metering, confirming what was already in place in 2022.
As for 2024, there will be an increase in the weighted average cost of capital. As a matter of fact, in the wake of the increase in inflation, with resolution 556/2023 of 28 November, ARERA recognised the release of the "trigger"[37]

[35] Gestore Mercati Energetici (Energy Markets Operator) – Newsletter no.177 January 2024, p.13
[36] Gestore Mercati Energetici (Energy Markets Operator) – Newsletter no.177 January 2024, p.13
[37] The updated WACC is linked to the so-called "trigger effect", i.e. the fact that the trend in certain market variables in the previous year led to a recalculation of the Allowed WACC by 50 basis points higher than the WACC defined by the Authority for the 2022-2024 period.

mechanism (something that did not happen last year), increasing the WACC values from 5.6% to 6.5% for the gas distribution and metering segments.
In relation to the performance of ATEMs bidding, which should have ensured greater efficiency and investments in the networks but also lower prices for users, they currently remain at a standstill despite regulatory changes in recent years.
In particular, the Draft Law (DDL) on Competition, converted with Law no. 118 on 5/08/2022, contains regulatory adjustments that aim to adequately develop the gas distribution networks owned by local entities, to relaunch investments in the natural gas distribution sector, and to accelerate at the same time the procedures for performing tenders for natural gas distribution services. The legislation also provides for a review of Ministerial Decree 226/11 (regulation on ATEMs bidding) initially expected in early 2023, but not yet issued.
On the whole, a situation of widespread stagnation persists, consequently resulting in the provisional management of expired concessions continuing (*ope legis* management), and an increase in potential disputes with the awarding entities regarding the concession fees payable during this phase, which is extending far longer than the concession itself.
In summary, at the end of 2023, the tenders published compared to those initially provided for in the calendar of the Ministry of Economic Development were small in number. In particular, during 2023, only the Trento ATEM reached the end of the process for the publication of the tender to award the natural gas distribution service on a concession basis. The updated situation as at 31 December 2023 is as follows:
5 ATEM with call for tenders published still active: Lodi 1, Varese 3, Vicenza 4, Potenza 2, Trento;
24 ATEMs with calls for tenders revoked, cancelled, suspended: Cremona 2 and 3, Alessandria 2, Turin 3, Udine 1, Perugia 2, Massa Carrara, Udine 3, Como 1, Bergamo 3, Brescia 1, Trieste, Bergamo 2, Milan 4, Milan 3, Verona 2, Monza Brianza 1, Genoa 2, Venice 1, Lucca, Monza and Brianza 2, Biella, Prato, Varese 2, Vicenza 4;
8 ATEMs awarded: Belluno (Italgas award), Milan 1 (UnaReti - A2A Group award), Turin 2 (Italgas award), Aosta (Italgas award), Udine 2 (AcegasApsAmgas spa - Hera Group award), Turin 1 (Italgas award), Naples 1 (2I Rete Gas award), La Spezia (Italgas award);
3 ATEMs with calls for tenders published and expired: Turin 5 (deadline for submitting application for participation passed on 04/02/22, pending next stage), Catanzaro-Crotone (deadline for submitting bids passed on 15/09/2023), Rimini (opening of tenders already carried out, pending definitive awarding to Adrigas).

The market for electricity and renewable energy sources

In 2023, the demand for electricity in Italy fell by 2.8% compared to the previous year, recording 306.1 TWh (compared to approximately 315.0 TWh in 2022).

Electricity Balance Sheet (TWh)[38]			
Electricity (TWh)	**Financial year 2023**	**Financial year 2022**	**Changes %**
Net production (of which):	257.023	274.607	-6.4
- Thermoelectric	157.934	191.276	-17.4
- Hydroelectric	38.244	28.094	36.1
- Photovoltaic	30.595	27.674	10.6
- Wind	23.374	20.304	15.1
- Geothermal	5.347	5.449	-1.9
Net import/export balance	51.252	42.987	19.2
Pumping consumption	2.185	2.586	-15.5
Total demand	**306.090**	**315.008**	**-2.8**

*Total demand= Net production + Foreign balance – Pumping consumption.
Total net production intended for consumption[39], recording a decrease of 6.3%, with 254.838 TWh, met 83.25% of the domestic electricity requirement. The contraction in electricity demand is the result of major negative changes in the first part of the year, followed by moderately positive changes from September. This performance was affected by the comparison with the previous year, characterised by a significant reduction in demand as a result of the energy crisis. It follows that the decrease seen in the second half of 2022 has remained constant until now, at lower levels than the previous historical trend[40].

In terms of supply, there was consistent growth in renewable production: in particular, hydroelectric generation returned in line with historical values, up by 36% compared to 2022, at 38.244 TWh. Photovoltaic production also increased (30.595 TWh, +10.6%), as did wind (23.374 TWh +15.1%). Geothermal production, on the other hand,

[38] Terna – Monthly Report on the Electrical System, December 2023
[39] Total net production intended for consumption = Total net production – Pumping consumptions.
[40] Staffetta Quotidiana (daily bulletin), "Terna, in 2022 consumption down -2.8%", 22/01/2024

recorded a slight drop of 1.9%, at 5.347 TWh. With reference to non-renewable components, thermoelectric production fell by 17.4% with 157.934 TWh and, in particular, coal experienced a 41.7% reduction. The pronounced decrease is mainly attributable to the interruption in initiatives to maximise coal-fired plants, initiated to address the energy crisis in 2022[41].

The energy efficiency market

The Conference of the Parties in Paris (COP21) in 2015, marked the moment when the world became actively concerned about the risks arising from climate change, translating these into the tangible goals discussed by subsequent Climate Conferences, and which mainly concerned the regulation of the carbon market and the alignment of the various interests of countries in the actions to be undertaken.
The 28th and most recent Conference of the Parties was held between November and December 2023 in Dubai, in the United Arab Emirates. During the proceedings, the first global stocktake was created in the context of the Paris Agreement. The stocktake highlighted the need to reach peak global greenhouse gas emissions by 2025 and to reduce them by 43% by 2030, then by 60% by 2035 compared to 2019 levels, in order to limit global warming to 1.5ºC. It also revealed the delay of several countries in achieving the Paris Agreement targets. The parties therefore agreed to present their updated climate plans for 2035 before COP 30[42]. Among the objectives strictly related to energy and the transition away from fossil fuels, the parties agreed to progressively phase out fossil fuels in the energy sector by 2050. With reference, on the other hand, to renewable energies and energy efficiency, the mutual agreement of the parties is to triple the capacity for renewable energy at international level and to double the rate of improvement in energy efficiency by 2030.
At European level, the regulatory framework on energy and climate by 2030 is continuously evolving and for years attention has been on the process of decarbonisation. According to the provisions of European climate regulations, the aim of the European Union is to achieve climate neutrality by 2050. In this area, the European Green Deal presented in 2019 is the EU's strategy to achieve the aim of transforming Europe into the first zero-climate-impact continent, also establishing the requirement for all EU policies and regulations to be consistent with this goal. Another step towards decarbonisation was made by the approval of the "Fit for 55" package, presented in 2021 and containing a set of proposals setting the target to reduce greenhouse gas emissions in the EU by at least 55% by 2030. The package also takes action on the EU Emissions Trading System[43], renewable energy and energy efficiency, setting out standards also on CO2 emissions for cars and vans.
The climate and energy targets of the Green Deal, subsequently expanded in the "Fit for 55" package of proposals, were further validated by the REPowerEU emergency package, adopted in May 2022 in a highly volatile and delicate geopolitical context. The REPowerEU Plan proposed a series of measures that aimed to put a swift end to Europe's reliance on the import of Russian energy, while moving towards the energy transition to tackle climate change. Lastly, in 2023, in the context of the Recovery Fund, Italy presented a proposed amendment to its National Recovery and Resilience Plan (NRRP), including a new chapter on REPowerEU. The European Commission expressed a favourable opinion of the amended NRRP, which was approved by the EU in December 2023.

In the context of construction and buildings, 2023 and the start of 2024 marked a radical change in the so-called "Superbonus" concession, introduced in the middle of the COVID emergency to provide a boost for recovery in the construction sector. Over the years, the regulatory structure of the Superbonus has been subject to numerous measures and changes, implemented to address the irregularities and fraud that emerged during audits by the Authority, as well as to ensure the sustainability of the tool within tax policy. With application of the 110% percentage introduced in the main formulation now shelved, on 1 January 2024 the superbonus experienced another reduction, from 90% to 70% (with the exception of seismic crater areas where the concessions is still 110%)[44]. The tool will also remain in force exclusively for condominiums. The percentage will be reduced once again in 2025 to 65%, when, subject to change, the tax concession will end. Lastly, in terms of numbers, based on figures presented by Enea in its 110% Superbonus Report, there were 461,433 building interventions under way at 31 December 2023 in terms of the incentive, for approximately € 102.6 billion in investments eligible for deductions[45].
With reference to the Mechanism of White Certificates (EEC), introduced by Ministerial Decrees in 2001 and comprising a mandatory regime of primary energy savings imposed on electricity and gas distributors with over 50,000 customers, it should be noted that the legislative and regulatory framework relating to the market of energy efficiency certificates has experienced considerable changes over the years. More recently, Italian Ministerial Decree

[41] Staffetta Quotidiana (daily bulletin), "Terna, in 2022 consumption down -2.8%", 22/01/2024
[42] Council of the European Union and European Council – COP 28
[43] The Emissions Trading System of the European Union (EU ETS) is one of the main tools on which EU policy to combat climate change is based.
[44] Sole 24 Ore, "Superbonus at 70% in 2024: what is changing and other tax benefits", 19/12/2023
[45] Chamber of Deputies Parliamentary Documentation – ENEA Report on the Superbonus

of 21 May 2021 set the national energy savings targets, which must be pursued by electricity gas distribution companies for 2021-2024[46]. In order to comply with national objectives, the mechanism envisaged primary energy saving obligations assigned to obligated entities, defined in millions of White Certificates, to be achieved in the 2021-2024 period. Lastly, with the publication of Directorial Decree of 4 May 2023, the list of standardised projects eligible for the mechanism of White Certificates was updated, while in October 2023, the updated and non-exhaustive list of eligible energy efficiency projects was published, grouped by type of project and form of energy saved, with indication of the values of useful life for the purposes of granting White Certificates[47].
During 2023, the GSE recognised a total of 1,029,558 EECs, with a 33% increase in certificates recognised compared to 2022, a year in which approximately 774,000 certificates were recognised. The average price recorded on the organised market in 2023 fell by 2.4%, bringing it to € 251.73/toe, while the volumes traded on the EEC market remained substantially unchanged compared to the previous year (+0.4%).

Energy efficiency certificates – cumulative data[48]				
Year	Price (€/TOE)			Volumes traded
	Weighted average	Minimum	Maximum	(TOE)
2023	251.73	242.00	259.00	1,756,866

On the other hand, as regards the electric mobility sector, 2023 was a positive year for electric vehicle registrations. In January-November 2023, 59,478 electric cars were registered in Italy, an increase of 33.6% compared to the first 11 months of 2022. The market share of electric cars is 4.1%, a slight increase on the 3.7% of 2022. In total, the fully electric fleet circulating in Italy was 217,422 units at 30 November[49].
With reference to electric charging infrastructure, in 2023 there were a total of 50,678 charging stations in Italy. In detail, in the year just ended, there were 13,906 installations of new charging stations, of which 3,450 recorded in the last quarter.
58% of the total charging stations are installed in the North, followed by the South with 23%, and finally Central Italy with 19%[50]. During the year, growth in installations also continued along the motorway network, where at 31 December 2023 there were 932 charging stations (+436 compared to one year ago), distributed in nearly one third of Italian service areas. Approximately 86% of the charging stations on the motorway are direct current (DC), while 61% exceed 150 kW. Lastly, at regional level, Lombardy is the region with the most charging stations distributed by region, followed by Piedmont and Veneto[51].

The telecommunications and digital services market

In the first half of 2023, the Telecommunications sector consolidated its solidity shown in the previous two-year period at global level, growing by 2.4% compared to the first half of 2022. These results were driven by the leading Asian Telco groups, especially by Chinese companies. The results of European groups remained stable, while American telco companies recorded a slowdown in revenues[52].
The Italian market nevertheless shows milder results in terms of revenues: in the first half of 2023, domestic revenues of the leading Italian operators were almost unchanged (-0.1% compared to the same period in the previous year), figures that confirm the falling trend in revenues in place since 2020. Specifically, the mobile segment recorded -3.9%, while landline showed a positive trend of +3%[53].
According to Assintel (National Association of ICT and Digital Companies) data, in 2023, growth continued in the digital market in Italy, which stands at € 39 billion, +4.8% compared to the previous year. At macroeconomic level, according to the data published, growth in the IT segment was driven by Software (+11.8%) and IT Services (+5.2%), while there was a slowdown in the segment of Hardware (-1.5%) and Telecommunications (-0.8%)[54]. Forecasts for 2024 envisage further improvement in the Italian digital sector, where an 8.4% growth to € 41 billion is estimated.
With reference, on the other hand, to the digital transformation, in the progression towards a digital economy and society (measured by DESI – Digital Economy and Society Index of the European Commission), Italy is positioned 18th in the EU, with a score of 49.3 out of 100, compared to 52.9 in Germany, 53.3 in France, and 60.8 in Spain. Italy also

[46] GSE, Annual White Certificates Report 2023
[47] GSE, Annual White Certificates Report 2023
[48] GSE, Annual White Certificates Report 2023
[49] QualEnergia on Motus-E data, December 2023
[50] Motus-E, Charging infrastructure in Italy
[51] Staffetta Quotidiana (daily bulletin) on Motus E data, 15/02/2024
[52] Press release - Mediobanca Study Areas – Report Telco (ed. 2023).
[53] Press release - Mediobanca Study Areas – Report Telco (ed. 2023).
[54] Assintel Report 2023 – The ICT and Digital Market

came out on top for 5G coverage, even in rural areas [55]. The largest gaps concern human capital (Italy is last in terms of number of graduates in ICT disciplines) and Digital Intensity (an index that measures the use of digital technologies by companies).

With reference to landlines, AGCOM reported in 2023 a decrease of 215,000 accesses compared to the overall figure in the same period in 2022, with total lines amounting to approximately 20 million. A breakdown of the above value finds that the majority of accesses (49.6%) took place through FTTC (Fibre to the Cabinet), while 21.4% refer to FTTH (Fibre to the Home), 18.7% accesses via Copper and 10.3% accesses via FWA (Fixed Wireless Access). Compared to 2022, the figures showed a significant increase in accesses via fibre (+4.7%), while accesses via copper continued to fall (-4.0%). The FWA and FTTC sources remain in line with the previous year[56]. Broadband accesses in 2023 exceeded 18.89 million, decreasing by 100,000 units on an annual basis. The downward trends in ADSL lines was confirmed (- 22.5%), reaching 2.56 million.

As for mobile telephony, at the end of the third quarter of 2023, the market shares of the main operators were similar to 2022: TIM was confirmed in first place with a share of 27.9%, followed by Vodafone (27.2%)[57], while Wind Tre was third at 23.7%. The French operator Iliad continued to grow, once again confirmed as the fourth operator in Italy with a 9.7% market share[58].
Total active SIMs in Italy have risen to 108.5 million: this growth was supported by "M2M"[59] SIMs, which reached 29.7 million with a 3.7% increase. "Human" SIMs remained the most prevalent with 78.9 million, stationary compared to the same period in 2022.
Lastly, MVNOs covered 11.6% of the market share by number of total SIMs and 15.59% in total Human SIMs.

The environment market

The integrated waste cycle market is characterised by a high degree of complexity and managerial heterogeneity. The waste sector is made up of two main segments: Municipal Waste (MW) of domestic origin and Special Waste (SW) mainly from productive activities. The municipal and special waste chains include different stages from the collection/pick-up and transport to recycling, treatment, recovery and disposal. Waste sector operators can operate in one, several or all the chain stages.
As regards the municipal waste market, the country is organised into 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 updated Ispra data on the situation in Italy reveal that 29.1 million tons of municipal waste was produced in 2022, down by 1.8% compared to the previous year (approximately 500,000 tons less). This trend represents the combination of several factors, such as the introduction of different accounting methods of the data relating to municipal waste and the possibility for non-domestics users to make use of alternative collection methods to the traditional public service.
The decrease was recorded across all macro-geographic areas: North (-2.2%), Centre (-1.5%) and South (-1.5%). In absolute terms, the higher production of municipal waste was registered in the North (approximately 14 million tons), followed by the South (9.0 million), and the Centre at 6.2 million tons. Production decreased across all Italian regions, with the exception of Aosta Valley.
The average pro capita was 494 kilograms per inhabitant (down by 1.6% compared to the previous year). Emilia Romagna was the region with the highest numbers at national level (with 633 kilograms per inhabitant), while Basilicata was the region with the lowest (357 kilograms per inhabitant).
In 2022, there were 654 municipal waste management plants operating in Italy (657 in 2021): 348 in the North, 117 in Central Italy and 189 in the South. Of these, 358 are dedicated to treatment of the organic fraction of separate collection, 132 for the mechanical or biological treatment of waste, 117 landfill sites, with the addition of 36 incineration and 11 industrial plants that incinerate municipal waste.[60]
Over the years, the increase in separate waste collection has resulted in a growing demand for new treatment plants, especially for the organic fraction. At national level, there are not currently sufficient structures to treat the quantities produced.

[55] The European House – Ambrosetti – OBSERVATORY ON THE DIGITAL TRANSFORMATION OF ITALY, 2023 Report, Executive Summary p. 4
[56] AGCOM - COMMUNICATIONS OBSERVATORY NO.4/2023
[57] The data of operators TIM and Vodafone include the lines of their subsidiaries, respectively Kena Mobile and VEI (which offers "ho." mobile telephony services)
[58] AGCOM - COMMUNICATIONS OBSERVATORY NO.4/2023
[59] M2M (Machine-to-Machine) SIMs are SIMs that allow for the exchange of data, information and commands between equipment and devices with limited or no human interaction.
[60] Press release Ispra Municipal Waste Report publication edition 2023.

Over the last few years, the number of processing plants has increased with respect to landfills, in line with the European guidelines to replace dumping in landfills with the recovery of material and energy, contained in the Circular Economy Package, which also sets the target of 65% of separate collection by 2035.[61]

According to the most up-to-date figures available, in 2022 more than 50% of the waste produced and collected separately was sent to material recovery plants. Full recycling, calculated using the new methods established by European regulations, stood at 51.9% and referred to the following fractions: organic, paper and cardboard, glass, metal, plastic and wood.

18% of municipal waste was disposed of in landfills, the equivalent of 5.2 million tons, coming down by 7.1% compared to 2021. This figure is still well off the 10% target set by the European Union, demonstrating the need for an improvement in the quality of separate waste collection, an increase in the recycling rate and the creation of plants used to close the waste cycle. The current situation requires that improvements to the management system are accelerated in order to achieve the new challenging targets required by European legislation, especially in certain areas of Italy (regarding waste treatment, only the North is at an advanced stage, maximising the recovery of materials and energy, thanks to the widespread availability of plants). Disposal at landfill sites needs to be halved over the next 15 years, the percentage of waste forwarded to material recovery treatments must increase significantly to ensure the targets of 55% for recycling by 2025, 60% by 2030 and 65% by 2035 are achieved.[62]

The rate of separate waste collection increased again in terms of percentage compared to 2022, reaching 65.2% of national production (18.9 million tonnes). The North was the most virtuous area in this activity, with 71.8%, whereas the Centre and the South stopped at 61.5% and 57.5% respectively. Generally, all macro-geographic areas showed increases in the percentage of separate waste compared to the previous year. In 2022, nearly half of the Italian regions achieved or surpassed the 65% target (Veneto, Sardinia, Lombardy, Trentino Alto Adige, Emilia Romagna, Marche, Friuli Venezia Giulia, Umbria and Piedmont, Tuscany, Aosta Valley), Abruzzo was very close to the target (with 64.5%), whereas Sicily was at the tail-end with 51.5%, despite a strong increasing trend in recent years. Focusing on Tuscany, there are approximately 50 municipal waste treatment and disposal plants in the region, but an increase is envisaged for the coming years driven by expected funding.

Organic at 38.3% of the total, was confirmed as the most collected fraction in Italy. Paper and cardboard represented 19.3% of the total, followed by glass at 12.3% and plastic at 9%.

In 2021, 858,000 tons of municipal waste was exported (mainly sent to the Netherlands, Austria and Germany), and 296,000 tons imported.

Over the last year, the average domestic pro capita cost to manage urban waste was € 192.3/inhabitant (decreasing on the € 194.5/inhabitant in 2021). The Central regions recorded the highest costs with an average of € 228.3/inhabitant, followed by the South with an average of € 202.3/inhabitant and then the North with € 170.3/inhabitant.

With regard to the Special Waste segment in Italy, the latest data available in the 2023 edition ISPRA Special Waste Report refers to 2021. Figures show that production increased by 12.2% on the previous year (18 million tons), to reach 165 million tons. The substantial increase is attributable to the general recovery in the industrial, artisanal, and services sectors, following the closures imposed by the previous health emergency.

Non-hazardous waste, representing 93.5% of the total waste produced, increased by around 17 million tons (+12.5%), whereas hazardous waste increased by 820,000 tons (+8.3%). Most of this production was recorded in the North, where the industrial fabric is more developed, with 96.4 million tons (58.4% of the total at national level). Production in Central Italy was at 27.2 million tons (16.5%), and in the South at 41.3 million tons (25.1%).

Among the economic activities that contribute most to the production of special waste, the construction and demolition sector is confirmed as the highest with over 78 million tons (47.7% of the total), followed by waste processing and reclamation activities (around 40 million tons produced accounting for 23.6 % of the total) and manufacturing activities producing around 30.1 million tons at just over 18% of the total. Other economic activities account in total for 9.9% of the total of special waste produced (16.2 million tons).

A total of 178.1 million tonnes were managed in Italy in 2021, of which 168 million referring to non-hazardous waste (94.4%) and 10 million relating to hazardous waste (5.6%). There was a 11.4% increase in the overall waste managed compared to the previous year; in particular, the quantities sent for recovery treatment (from R1 to R3) increased by 12.6% and quantities sent for disposal by 6%.

The recovery of materials was predominant at 72.1% (128.3 million tons), followed by other disposal treatments, representing around 15.7% (28 million tons), and landfills at 5.7% (10.1 million tons). Residual quantities were sent to co-incineration (1.0%) and incineration (0.6%).

There were 10,763 special waste management plants operating during the year, of which 5,928 in the North, 1,899 in Central Italy and 2,936 in the South. There are 4,601 plants dedicated to the recovery of materials (42.7% of national plant assets) [63].

In 2021, over 3.9 million tons were exported (of which 67% non-hazardous and 33% hazardous), faced with 7.4 million tons imported.

[61] Directive 2018/851/EU.

[62] "*ISPRA - Rapporto Rifiuti Urbani 2023*" (2023 Municipal Waste Report)

[63] ISPRA - 2023 Special Waste Report (Summarised Data).

With regard to Tuscany, in 2021, regional production of special waste was at around 10 million tons, 6% of the national total. 95.4% of which (around 9.5 million tons) refers to non-hazardous waste and the remaining 4.6 % (just under 455 thousand tons) to hazardous waste. The main types of waste produced referred to construction and demolition operations. There was an increase in the total number of plants (733 in 2020 to 788 in 2021), Tuscany remains the region with the highest concentration of plants compared to other regions in central Italy, (41.5% of the infrastructure assets in the macro-area)[64].
In October 2023, the Tuscany Region adopted the "Regional plan for waste management and reclamation of polluted sites - Regional plan for the circular economy". This document represented the response to the implementation of EU sustainable development strategies, as well as the programming tool through which the Tuscany Region defines policies on prevention, recycling, recovery and disposal of waste in an integrated manner, in addition to the management of polluted sites to be reclaimed[65].
Finally, in the environmental reclamation segment, 42 Sites of National Interest (SNIs) are operational at national level [66]. In Tuscany, there are 5,145 sites involved in reclamation procedures, of which 2,337 with procedures closed due to no need for intervention, 539 certified for completed reclamation, while 2,269 sites involved in reclamation procedures are active with a total area of 18,502 ha. The contamination of the sites involved derives mainly from industrial activities, waste management and disposal and fuel distribution[67].

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 (IFRS);

(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 and/or early repayment, even if these occurred in previous years or are likely to occur in subsequent ones.
- **Total Revenue** is calculated adding together "Revenue from sales and services" and "Other operating revenue" indicated in the Group's consolidated income statement.
- **Total Adjusted Revenue** corresponds to Total Revenue, defined above, adjusted to exclude non-recurring revenue 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** correspond to External Costs, defined above, adjusted to exclude Non-recurring items as defined above.

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[64] ISPRA – Special Waste Report 2023.
[65] Tuscany Region (https://www.regione.toscana.it/piano-regionale-di-gestione-dei-rifiuti-e-bonifica-dei-siti-inquinati.-piano-regionale-dell-economia-circolare).
[66] ISPRA (https://www.isprambiente.gov.it/it/attivita/suolo-e-territorio/siti-contaminati/siti-di-interesse-nazionale-sin) with update in December 2021.
[67] ARPAT – Annuario dei Dati Ambientali (Environmental Data Yearbook) 2023.

- The **gross operating margin 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 revenue and costs as defined above. This parameter is not identified as an accounting measure in the context of the EU-IFRS standards 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/(loss), coming from the Group's consolidated financial statements, adjusted to exclude significant non-recurring revenue and costs as defined above. This parameter is not identified as an accounting measure in the context of the EU-IFRS standards 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 revenue and costs as defined above. This parameter is not identified as an accounting measure in the context of the EU-IFRS standards 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 indices and 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 indices

- Days sales outstanding are defined as the ratio between Trade receivables and Revenue 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 indices and ratios

- The EBITDA margin is calculated as the ratio between Adjusted EBITDA and Total Adjusted Revenue.
- 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 2023 and 2022 are shown in the table below:

Reported Income Statement	**Period ended**				**Change Dec 23 - Dec 22**	
(amounts in thousands of euro)	**31/12/2023**		**31/12/2022**			
	Amount	**Proportion**	**Amount**	**Proportion**	**Absolute**	**%**
Total Revenue	**1222,216**	**100%**	**1,778,292**	**100%**	**(556,076)**	**-31%**
External consumption	(1,020,184)	-83%	(1,626,222)	-91%	606,038	-37%
Personnel costs	(48,941)	-4%	(46,595)	-3%	(2,346)	5%
Portion of income/(expenses) from measurement of non-financial investments using the equity method	0	0%	0	0%	0	#DIV/0!
Gross operating margin (EBITDA)	**153,091**	**13%**	**105,475**	**6%**	**47,616**	**45%**
Amortisation/depreciation and write-downs	(66,285)	-5%	(55,921)	-3%	(10,364)	19%
Provisions	(11,931)	-1%	(13,746)	-1%	1815	-13%
Operating profit/(loss)	**74,876**	**6%**	**35,808**	**2%**	**39,068**	**109%**
Financial income and charges	(27,638)	-2%	(11,638)	-1%	(16,000)	137%
Measurement of non-financial equity investments using the equity method	(2,349)	0%	(577)	0%	(1,772)	307%
Profit before taxes	**44,889**	**4%**	**23,593**	**1%**	**21,296**	**90%**
Income taxes for the year	(16,710)	-1%	(9,203)	-1%	(7,508)	82%
Net profit/(loss) from continuing operations	**28,179**	**2%**	**14,390**	**1%**	**13,789**	**96%**
Net profit/(loss) from discontinued operations / assets held for sale	0	0%	0	0%	0	0%
Net profit	**28,179**	**2%**	**14,390**	**1%**	**13,789**	**96%**
Profit/(loss) of non-controlling interests	916	0%	(271)	0%	1,186	-438%
Group profit/(loss)	27,263	2%	14,661	1%	12,602	86%

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 2023 and 2022:

Adjusted Income Statement (amounts in thousands of euro)	**ADJUSTED Year ended 31 December**				**Change Dec 2023 - Dec 2022**	
	2023		**2022**			
	Amount	**Proportion**	**Amount**	**Proportion**	**Absolute**	**%**
Total Revenue	**1,212,046**	**100%**	**1,776,856**	**100%**	**(564,810)**	**-32%**
External consumption	(1,020,184)	-84%	(1,625,790)	-91%	605,606	-37%
Personnel costs	(48,941)	-4%	(46,595)	-3%	(2,346)	5%
Portion of income/(expenses) from measurement of non-financial investments using the equity method	0	0%	0	0%	0	#DIV/0!
Adjusted gross operating margin (Adjusted EBITDA)	**142,921**	**12%**	**104,471**	**6%**	**38,450**	**37%**
Amortisation/depreciation and write-downs	(61,352)	-5%	(55,321)	-3%	(6,031)	11%
Provisions	(11,931)	-1%	(13,746)	-1%	1,815	-13%
Adjusted operating result (Adjusted EBIT)	**69,639**	**6%**	**35,404**	**2%**	**34,235**	**97%**
Financial income and charges	(25,729)	-2%	(11,638)	-1%	(14,091)	121%
Measurement of non-financial equity investments using the equity method	(154)	0%	(577)	0%	423	-73%
Adjusted gross profit	**43,757**	**4%**	**23,189**	**1%**	**20,567**	**89%**
Adjusted income taxes for the year	(15,665)	-1%	(9,085)	-1%	(6,580)	72%
Net profit/(loss) from continuing operations	**28,092**	**2%**	**14,103**	**1%**	**13,989**	**99%**
Net profit/(loss) from discontinued operations / assets held for sale	0	0%	0	0%	0	**0%**
Adjusted net profit/(loss)	**28,092**	**2%**	**14,103**	**1%**	**13,989**	**99%**
Profit/(loss) of non-controlling interests	916	0%	(271)	0%	1,186	-438%
Adjusted Group profit/(loss)	27,177	2%	14,375	1%	12,802	89%

The Group's consolidated income statement 2023 and 2022 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 2023 and 2022 is presented below:

Non-recurring item	**Year ended 31 December** **2023**	**2022**
Compensation for damages from natural gas providers	-9,719	
IRMA gas distribution from previous years	-451	-1,436
Total non-recurring revenue	**-10,170**	**-1,436**
Capital losses on disposal of electronic meters		432
Total non-recurring costs and revenue with impact on EBITDA	**-10,170**	**-1,004**
Impairment of district heating plants	2,728	
Impairment of gas distribution meters	2,205	600
Total non-recurring costs and revenue with impact on Operating Profit/(Loss) (EBIT)	**-5,237**	**-404**
Impairment of Blugas Infrastrutture S.r.l.	2,195	
Provision for interest payable due to delayed payment on disputes (gas distribution)	1,909	
Total non-recurring costs and revenue with impact on Profit before taxes	**-1,133**	**-404**
Tax effect on non-recurring costs and revenue	1,046	118
Total non-recurring costs and revenue with impact on Net Result	**-87**	**-286**

In the 2023 financial year, the following non-recurring elements are noted (with a total positive impact on the net result of € 368,000):

- Higher revenue for compensation received following the positive resolution of several disputes involving Estra Energie S.r.l. as an active part in the request for economic damages from several providers (€ 9,719,000);
- Higher revenue relating to fees on the residual amount for foregone amortisations on initial installation electronic meters disposed of early paid to Group companies operating in the distribution of natural gas as a recovery on previous years' tariffs, pursuant to ARERA Resolution 737/2022/R/gas of 29 December 2022 (€ 451,000);

- Impairment of district heating plants, as described in the paragraph in the explanatory notes "Impairment testing on tangible assets" (€ 2,620,000)
- Impairment of electronic meters, as described in the paragraph in the explanatory notes "Impairment testing on intangible assets – Assets under concession" (€ 2,205,000)
- Write-down of the investment in Blugas Infrastrutture as described in the paragraph in the explanatory notes relating to investments in associates (€ 2,195,000)
- Allocation to the provision for risks for interest payable that the Group may have to pay for delayed payment of payable items subject to dispute, in the event of losing the dispute (€ 1,909,000).

The adjustments have a fiscal effect of € 87,000 (lower income taxes).

The adjustments almost entirely affected the Group's profit.

In the 2022 financial year, the following non-recurring elements are noted (with a total positive impact on the net result of € 286,000):

- Higher revenue for the IRMA fees (residual amount on foregone amortisations on electronic meters disposed of early) paid to Group companies operating in the distribution of natural gas as a recovery on tariffs for previous years, following ARERA Resolution 737/2022/R/gas of 29 December 2022, ARERA paid a fee to refund the distribution companies related to the IRMA (residual value of the smart meters from the initial installation disposed of early), for € 1,436,000;
- Capital losses realised during the year from the disposal of malfunctioning electronic meters, largely covered by the fee set out in the previous point, for € 432,000;
- Adjustment of the provision for write-downs allocated in previous years to adjust the net carrying amount of malfunctioning electronic gas meters to the recoverable value in the tariff, taking account of the update carried out during the year to the related plan for progressive replacement, for € 600,000.

The adjustments have a fiscal effect of € 118,000 (lower income taxes).

The adjustments almost entirely affected the Group's profit.

The Group's business model is currently structured on the basis of Strategic Business Units (SBUs) which are attributable to the segments of the sale of natural gas and electricity ("Gas and Electricity Sales" SBU), the activities of natural gas distribution and sale of LPG ("Regulated Market" SBU), the activities carried out by the Parent Company ("Corporate" SBU), and the segments of digital services (telecommunications), energy efficiency (energy services and renewables), waste selection, treatment and storage (environment) ("Other Services" SBU).
For a better presentation of the results, these consolidated financial statements separate the "Corporate" SBU from the "Other" SBU, while restating the corresponding values from financial year 2022.
Revenues and costs of the "Corporate" SBU were reallocated to the business lines on the basis of the percentages of absorption of the service activities carried out by the parent company.

The Gas and Electricity Sales sector also includes trading activity, carried out both for the purpose of improving the purchase and procurement conditions through the optimisation of the Group's assets (natural gas storage and transport capacity and flexibility of the long-term supply contract) ("Industrial portfolio"), and for the purpose of seizing opportunities for short-term additional profit, within predefined risk limits.
The division into SBUs reflects the reporting used by the Management for the analysis and planning of the businesses managed.

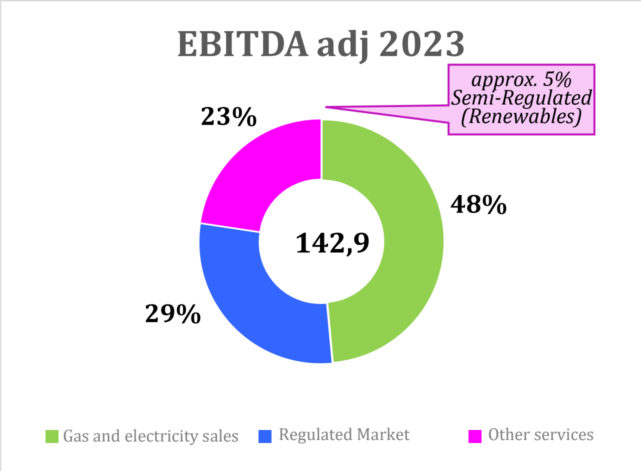
The table below illustrates total adjusted revenue, including revenue from sales and services and other revenue of each business area of the Estra Group for the financial years ended 31 December 2023 and 2022, with an indication of the significance, in percentage terms, compared to the Group's total consolidated revenue.

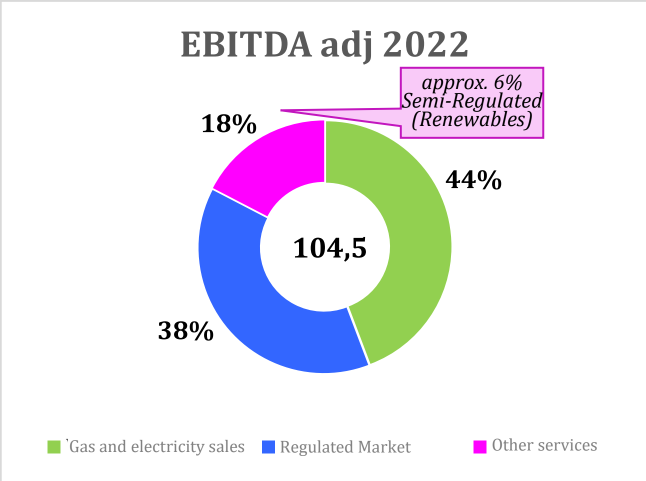
	Year ended 31 December				**Change in the period**	
Total Adjusted Revenues (amounts in thousands of euro)	**2023**	**% of Adjusted Revenues**	**2022**	**% of Adjusted Revenues**	**2023 vs 2022**	**%**
Sale of natural gas and electricity	1,026,434	85%	1,651,457	93%	-625,023	-38%
Regulated Market	145,339	12%	130,350	7%	14,988	11%
Other services	121,725	10%	77,975	4%	43,751	56%
Adjustments and eliminations	-81,451	-7%	-82,926	-5%	1,475	-2%
Total Adjusted Revenues	**1,212,046**	**100%**	**1,776,856**	**100%**	**-564,810**	**-32%**

At 31 December 2023, the Group had achieved revenue of € 1,212.0 million, decreasing by 32% compared to 31 December 2022. The change is attributable to Gas and Electricity Sales and is due to the decrease in the prices of commodities and lower sales to the PSV and GME with the aim of optimising purchases.
Revenues from the Regulated Market rose due to an increase in the gas distribution tariffs for new investments and due to higher internal and external capitalised costs. Revenues from Other Services increased due to the development of activities in the energy efficiency segment, also thanks to tax incentives for contractors.

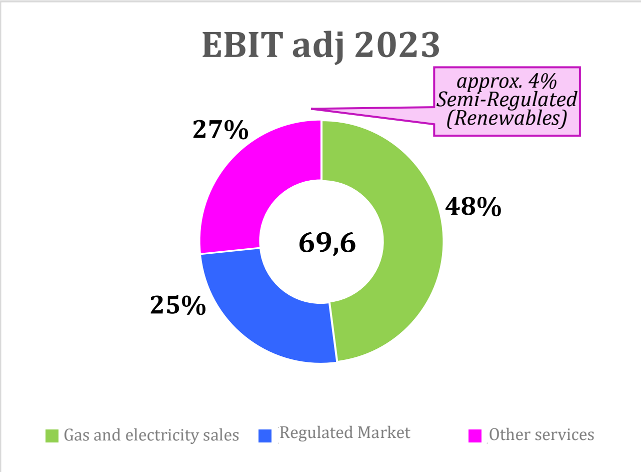
External costs went from € 1,625.8 million to € 1,020.2 million (-37%), accounting for 84% of revenue (91% in 2022). The main changes are due to the reduction in costs for raw materials for € 718.8 million, mainly related to the reduction in energy prices.
The cost of labour was € 48.9 million compared to € 46.6 million in 2022, with a 5% change mainly due to the renewal of the National Collective Labour Agreement (CCNL).

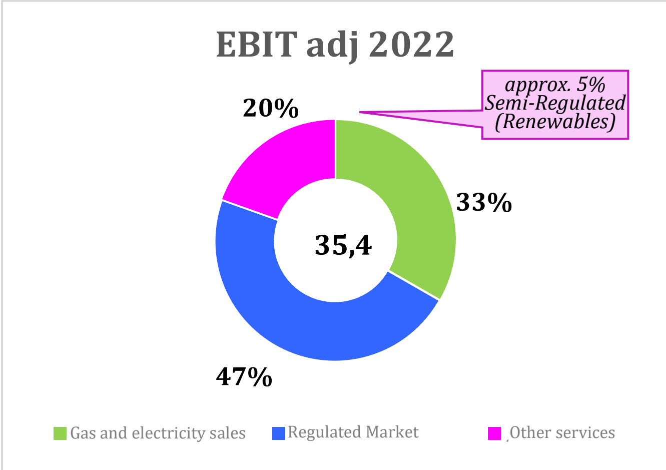
Adjusted EBITDA amounted to € 142.9 million, significantly up compared to € 104.5 million in 2022. The main changes are related to the higher margins of the Gas and Electricity Sales SBU, for the development of commercial activities with expansion of the customer base and the recovery of margins resulting from greater stability on the energy markets compared to financial year 2022. The results in the energy efficiency segment also saw considerable growth.
Details are provided below on the breakdown of EBITDA among the various SBUs for years ended 31 December 2023 and 2022, which shows a higher percentage incidence on adjusted EBITDA for the Gas and Electricity Sales SBU, which went from 44% to 48%, the reduction from 38% to 28% of the percentage incidence on adjusted EBITDA of the Regulated Market SBU, and the increase from 17% to 24% of the Other services SBU.





Amortisation/depreciation and write-downs amounted to € 61.4 million (€ 55.3 million at 31 December 2022). The change is due almost entirely to higher investments for customer acquisition in the Gas and Electricity Sales segment.
Provisions decreased from € 13.7 million to € 11.9 million and are mainly attributable to provisions for impairment of receivables in Gas and Electricity Sales.
As a result of the increased gross operating margin, the adjusted operating profit went from € 35.4 million in 2022 to € 69.6 million in 2023 with a positive change of € 34.2 million (+97%).





Financial management shows a negative balance of € 25.9 million compared to 12.2 million in 2022, as a result of the considerable increase in average interest rates and due to the increase in financial debts undertaken, mostly in the final months of 2022 to support the growth in working capital.
The adjusted profit before taxes came out at € 43.8 million (€ 23.2 million in 2022).
Income taxes amounted to € 15.7 million with a tax rate of 35.8%, down compared to the 39.2% in 2022.
Adjusted net profit was € 28.1 million (€ 14.1 million in 2022).

7. BUSINESS PERFORMANCE - STATEMENT OF FINANCIAL POSITION

The main financial position data at 31 December 2023 and 2022 are provided below.

7.1 2023 FINANCIAL MEASURES COMPARED WITH 2022

Reclassified Balance Sheet	Period ended 31 December 2023		Year ended 31 December 2022		Change Dec 23 - Dec 22	
(amounts in thousands of euro)	**Amount**	**Proportion**	**Amount**	**Proportion**	**Absolute**	**%**
Intangible fixed assets	552,428	62.4%	534,216	68.9%	18,212	3.4%
Property, plant and equipment	134,370	15.2%	141,147	18.2%	(6,777)	-1.3%
Equity investments and non-current financial assets	31,222	3.5%	36,429	4.7%	(5,207)	-1.0%
Fixed assets	**718,020**	**81.3%**	**711,792**	**91.8%**	**6,228**	**1.2%**
Other non-current assets and liabilities	(19,424)	-2.2%	(16,432)	-2.1%	(2,992)	-0.6%
Net working sales capital	165,854	18.7%	56,689	7.3%	109,165	20.4%
Other current assets and liabilities	20,579	2.3%	23,163	3.0%	(2,584)	-0.5%
Net Invested Capital	**885,029**	**100.0%**	**775,212**	**8.2%**	**109,817**	**20.6%**
Shareholders' Equity	**437,715**	**49.5%**	**423,249**	**54.6%**	**14,466**	**2.7%**
Net current financial debt	40,082	4.5%	(162,119)	-20.9%	197,651	37.0%
Non-current financial debt	407,232	46.0%	514,082	66.3%	(106,850)	-20.0%
Net Financial Debt	**447,314**	**50.5%**	**351,963**	**45.4%**	**95,351**	**17.8%**
Total sources of financing	**885,029**	**100.0%**	**775,212**	**100.0%**	**109,817**	**20.6%**

(*) For a better understanding of the data, the extraordinary items relating to credit notes to be received from suppliers for gas settlement and the credit notes to be received from gas distribution companies for a total of € 31.9 million in 2023 and € 96.1 million in 2022 and regarding the Gas and Electricity Sales SBU have been reclassified from "*Other current assets and liabilities*" to "*Net working sales capital*".

Fixed assets went from € 711.8 million at 31 December 2022 to € 718.0 million at 31 December 2023, due to the amortisations/depreciations in the period and investments in tangible fixed assets and intangible assets and equity investments for € 80.1 million, as detailed below:

Investments per operating sector	2023	2022	Changes	Changes %
Regulated Market	40,827	32,188	8,639	27%
Gas and Electricity Sales	29,010	11,769	17,241	146%
Corporate	3,277	4,213	-936	-22%
Other services	7,001	47,324	-40,323	-85%
Total investments	**80,115**	**95,494**	**24,944**	**26%**

The increase in fixed assets is mainly due to investments for customer acquisitions in gas and electricity, due to more intense commercial activity. Investments in the Regulated Market also grew, related to extending the networks and replacing the traditional meters with electronic meters in the natural gas distribution operations. In the Other Services segment, investments were related to the creation of FTTH networks (Telecommunications) and revamping of plants in the environment segment. The change to investments in the Other Services segment compared to financial year 2022 is due to the M&A operations carried out in the previous year.

Commercial working capital increased from € 56.7 million to € 165.9 million. This change is mainly due to the combined effect of: *i)* reduction in inventories of stored gas for € 23.4 million mainly due to the price effect; *ii)* increase in net trade receivables for € 36.1 million in the energy efficiency segment, for redevelopment works on properties from the 110% superbonus, *iii*) increase in net trade receivables for € 88.7 million in the Gas and Electricity Sales SBU due to higher volumes of gas and electricity sold in the 4th quarter compared to the previous financial year and to operations to optimise working capital carried out in 2022 and not re-proposed in the current financial year relating to the transfer without recourse of receivables from the public administration and industrial customers; *iv)* increase of € 7.9 million in net trade receivables on the regulated market which had been characterised in 2023 by regulatory measures to reduce so-called system charges invoiced by the sales companies.
Other current assets and liabilities fell by € 2.6 million mainly due to the reduction in receivables for gas and electricity excise related to the decrease in volumes sold following payments on account determined on the basis of the turnover of the previous year, partially offset by the decrease in payables to shareholders for payment of dividends. Net invested capital amounted to € 885.0 million, increasing by 21% compared to 31 December 2022.
Shareholders' equity at 31 December 2023 amounted to € 437.7 million (€ 423.2 million at 31 December 2022). The changes that occurred in the year are attributable to the net profit for the period and to the distribution of dividends. Shareholders' equity represented 49.5% of the financing sources, compared to the 54.6% for the year ended 31 December 2022.
The absorption of cash for investments and for operations resulted in an increase in net financial debt that went from € 352.0 million in 2022 to € 447.3 million at 31 December 2023, with the percentage on capital raised rising from 45.4% at 31 December 2022 to 50.5% at 31 December 2023.

7.2 FINANCIAL STRUCTURE 2023 COMPARED WITH 2022

On 4 March 2021, the European Securities and Markets Authority (ESMA) published the Guidelines on disclosure obligations pursuant to Regulation EU 2017/1129 (so-called "Prospectus Regulation").
In its "Warning Notice" no. 5/21" of 29 April 2021, CONSOB stated its intention to ensure its supervisory practices on net financial positions complied the aforementioned ESMA Guidelines. More specifically, CONSOB states that the prospectuses it had approved, as from 5 May 2021, needed to comply with the aforementioned ESMA Guidelines.
Therefore based on the new provisions, as from 5 May 2021, listed issuers needed to present a new prospectus in the Notes to annual and interim financial statements, regarding debt, which was to be drawn up according to the specifications in paragraphs 175 and following of the aforementioned ESMA Guidelines.
In this respect, the ESMA Guidelines include the following main amendments to the debt prospectus:
a. reference is no longer made to the "Net financial position", but to "Total financial debt";
b. in the scope of non-current financial debt, trade payables and other non-current debt must be included, i.e. non-remunerated debt, which presents a significant component of implicit or explicit financing;
c. in the scope of current financial debt, the current portion of non-current financial debt must be specified.
The composition of net financial debt at 31 December 2023 and 2022 is shown below. This derives from the consolidated financial statements for the years ended on the same dates:

	Financial debt (amounts in thousands of euro)	2023.12	2022.12
A.	Cash and cash equivalents	157,915	345,872
B.	Cash equivalents		
C.	Other current financial assets	3,207	25,442
	- current derivative financial instruments	*1,976*	*18,096*
	- Receivables from banks	*1,231*	*7,346*
D.	**Cash and cash equivalents (A) + (B) + (C)**	**161,122**	**371,314**
E.	Current financial payables (including debt instruments, but excluding the current portion of non-current financial debt)	194,789	202,997
	- current financial debt	*7,259*	*44,681*
	- current derivative financial instruments	*1,026*	*12,632*
	- bank debts	*186,504*	*125,782*
	- bonds issued	-	*19902*
F.	Current portion of non-current financial debt	6,416	6,198
	- payables to other lenders for financial leases	*386*	*375*
	- payables to other lenders for operating leases	*4,428*	*4,388*
	- payables to shareholders for loans	*1,602*	*1,435*
G.	**Current financial debt (E) + (F)**	**201,205**	**209,195**
H.	**Net current financial debt (G) - (D)**	**40,083**	**(162,118)**
I.	Non-current financial debt (excluding the current portion and debt instruments)	23,583	27,040
	- payables to other lenders for financial leases	*3,277*	*3,663*
	- payables to other lenders for operating leases	*17,141*	*18,442*
	- payables to shareholders for loans	*3,166*	*4,935*
J.	Debt instruments	383,649	487,043
	Non-current bank debts	*237,449*	*341,603*
	Bonds issued	*146,199*	*145,439*
K.	Trade payables and other non-current debt	-	-
L.	**Non-current financial debt (I) + (J) + (K)**	**407,232**	**514,082**
O.	**Total financial debt (H) + (L)**	**447,314**	**351,963**

At 31 December 2023, net financial debt was € 447.3 million, down on the € 95.3 million at 31 December 2022, mainly due to the increase in net working capital in the gas and electricity sales segment and the increase in receivables relating to energy efficiency works.
The main changes to the composition of net financial debt are related to liquidity and non-current financial debt as a result of medium/long-term loan repayments carried out in the year.

7.3 MAIN FINANCIAL MEASURES 2023 AND 2022

The main financial measures are presented below on the basis of the consolidated financial statements at 31 December 2023 and 2022:

Consolidated financial measures	Year ended 31 December	
	2023	**2022**
Solvency ratio (total non-current assets / total assets)	52.6%	41.9%
Elasticity ratio (total current assets / total assets)	47.4%	58.1%
Availability ratio (total non-current assets / total current assets)	111.2%	72.0%
Net Financial Debt /Equity Ratio - (Leverage)	1.0	0.8
Net Financial Debt /Adjusted EBITDA Ratio	3.1	3.4
Short-term Financial Debt Ratio/Net financial debt	0.1	-0.5
Long-term Financial Debt Ratio/Net financial debt	0.9	1.5

The main economic measures are presented below on the basis of the adjusted results of the consolidated financial statements at 31 December 2023 and 2022:

Economic measures	Year ended 31 December	
	2023	**2022**
EBITDA margin (Adjusted EBITDA/Revenue)	11.8%	5.9%
ROE (Adjusted net profit/Shareholders' equity)	6.4%	3.3%
ROI (Adjusted EBIT/Net invested capital)	7.9%	4.6%

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

Below are the adjusted income statements and the net invested capital for the strategic business units for the financial years ended 31 December 2023 and 2022:

2023 business segments (amounts in thousands of euro)	Gas and Electricity Sales	Regulated Market	Other services	Adjustments and eliminations	Total
Revenue	1,026,434	145,339	121,725	-81,451	1,212,046
External costs	-938,167	-81,289	-82,144	81,416	-1,020,184
Personnel costs	-18,901	-22,809	-7,266	35	-48,941
Gross operating margin (EBITDA)	**69,366**	**41,240**	**32,315**	**0**	**142,921**
Amortisation/ depreciation	-26,237	-23,405	-11,710		-61,352
Provisions	-9,743	-131	-2,056		-11,931
Operating Income (EBIT)	**33,386**	**17,704**	**18,549**	**0**	**69,639**

2022 business segments (amounts in thousands of euro)	Gas and Electricity Sales	Regulated Market	Other services	Adjustments and eliminations	Total
Revenue	1,651,457	130,350	77,975	-82,926	1,776,856
External costs	-1,586,183	-68,393	-54,122	82,908	-1,625,789
Personnel costs	-19,054	-21,866	-5,694	18	-46,595
Gross operating margin (EBITDA)	**46,220**	**40,092**	**18,158**	**0**	**104,471**
Amortisation/ depreciation	-21,226	-23,366	-10,729		-55,321
Provisions	-13,208	-32	-506		-13,746
Operating Income (EBIT)	**11,787**	**16,694**	**6,923**	**0**	**35,404**

2023 Net Invested Capital (amounts in thousands of euro)	Gas and electricity sales	Regulated Market	Other services	Corporate	Consolidated
Intangible fixed assets	146,473	401,364	7,046	-2,455	552,428
Property, plant and equipment	3,757	4,215	109,857	16,540	134,370
Equity investments and non-current financial assets	23	9,485	11,968	9,746	31,222
Fixed assets	**150,253**	**415,065**	**128,872**	**23,831**	**718,020**
Other non-current assets / liabilities	-2,465	7,209	-24,192	25	-19,424
Net working sales capital	115,219	-25,046	77,892	-2,210	165,854
Other current assets / liabilities	-6,552	29,862	4,590	-7,320	20,579
Net Invested Capital	**256,455**	**427,089**	**187,161**	**14,325**	**885,029**

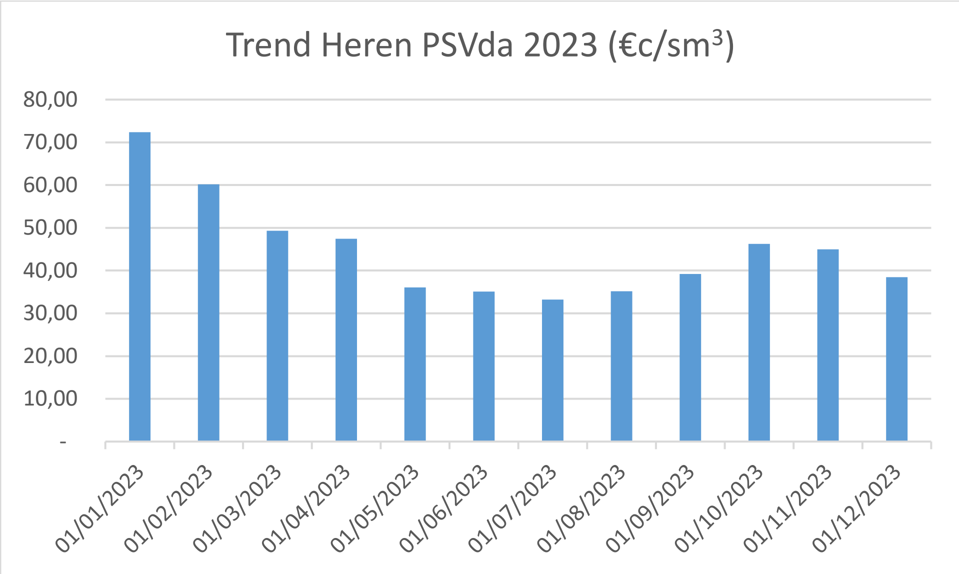
2022 Net Invested Capital (amounts in thousands of euro)	Gas and electricity sales	Regulated Market	Other services	Corporate	Consolidated
Intangible fixed assets	136,087	386,023	6,970	5,136	534,216
Property, plant and equipment	3,306	3,143	117,215	17,483	141,147
Equity investments and non-current financial assets	782	9,522	12,198	13,926	36,429
Fixed assets	**140,175**	**398,688**	**136,383**	**36,546**	**711,792**
Other non-current assets / liabilities	-5,109	9,417	-20,562	-178	-16,432
Net working sales capital	49,950	-32,205	38,711	232	56,689
Other current assets / liabilities	14,027	21,394	7,271	-19,528	23,164
Net Invested Capital	**199,042**	**397,295**	**161,804**	**17,072**	**775,212**

8.1 GAS AND ELECTRICITY SALES

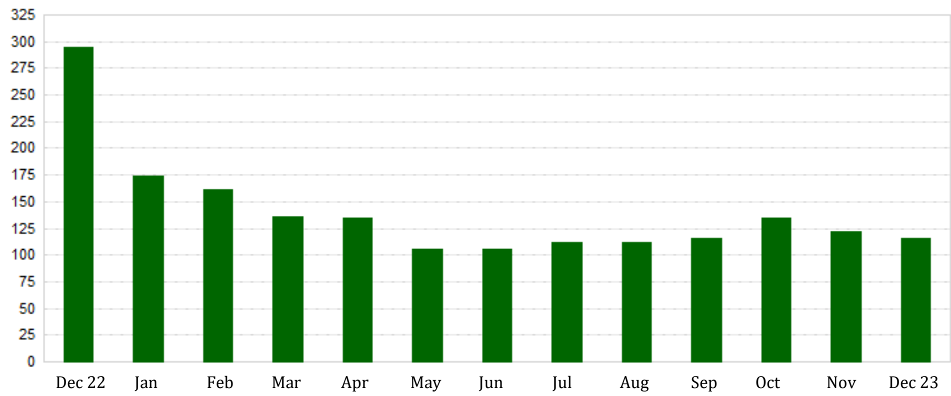
Operational performance

The segment activities are aimed at the sale of natural gas and electricity to end customers. Commercial activities are supported by energy procurement and portfolio optimisation and trading on domestic and overseas markets. At 31/12/2023, 896,000 customers were managed.
The purchase of natural gas took place during 2023 through two main procurement channels:

ReMi (M&R) supply; namely contracts for natural gas procurement delivered by wholesale providers directly to the metering and regulation stations located at the entry points to the gas distribution networks. In 2023, approximately 45% of volumes sold to end customers by the Group were acquired via M&R.
Purchases of methane gas on exchange platforms; namely purchases of natural gas on the Virtual Exchange (PSV) and on futures markets managed by the Gestore dei Mercati Energetici (M-GAS). Both platforms allow sales companies to exploit more favourable market conditions in order to supplement procurement flows. In 2023, 55% of volumes sold to customers were purchased on exchange platforms.
With reference to electricity procurement activities, the Group holds dispatching agreements (with Terna), electricity procurement agreements (with GME) and transport agreements (with local distributors).
The procurement methods reflect the structure of the sales portfolio in terms of products (fixed price/variable price) in order to minimise market risks.
In 2023, the procurement policies were characterised by prudence and diversification of the sources, with the aim of minimising risk, in light of the trend on the markets of the previous year. The year opened with prices in line with the average for 2022 (see charts PVSda and PUN), even if the trend has nearly always been decreasing.



PUN 2023 trend (€/MWh)



The Gas Trading activity involved approximately 187 million cubic metres of volumes purchased and sold with numerous national and international counterparties. Operations took place on the PSV, TTF and CEGH markets with the majority of operations carried out on the Italian market.
Procurement activity of GO (Guarantee of Origin) certificates continued, which guarantee the origin of electricity from renewable sources and offsetting certificates for CO2eq emissions due to the combustion of natural gas, with the aim of pursuing the company’s green policies. Over the year, CO2eq offsetting certificates were used for approximately 227 million cubic metres of natural gas and GO certificates for 416 GWh.
The Russia/Ukraine conflict had significant impacts on the European and global economies, as well as greater market volatility and significant increases in the prices of energy, gas and all raw materials. Management of the customer

portfolio was therefore impacted heavily by this event, as well as the dynamics generated following a regulation that suspended contractual changes for end customers.
Decree Law no. 115 of 9/8/2022 imposed urgent measures for companies in the energy sector, to protect consumers, seeking to prevent possible misconduct by operators that may have renegotiated the sales prices of their customers in advance of the real expiry of the ongoing technical and economic conditions, at a critical moment for price dynamics. Expiring on 30/4/2023, the Decree Law was extended to 31/8/2023.
In April 2023, the supply of electricity to customers in Basilicata, Calabria, and the provinces of Bari and Taranto began, following the awarding of the tender to assign of the incremental protection service for micro-businesses in the electricity sector (Law no. 124 of 4 August 2017 – ARERA Resolution 208/2022).
With publication of ARERA resolution 100/2023/R/com, the process to conclude the Gas Protection Service at 31 December 2023 began, involving approximately 170,000 of the Group's customers. In August, ARERA also published Resolution 362/2023/R/eel, which launched the process to conclude the Electricity Protection Service for domestic electricity customers at 30 June 2024 through the publication of tenders for 26 lots distributed across the national territory. Approximately 5,000 electricity customers are subject to the protection service tenders. This event led to an assessment of the feasibility and possibility of participating in bidding for the assignment of the 26 lots put up for tender.
In 2023, a survey was carried out on all Group stores/branches with the aim of collecting, for strategic/commercial analysis purposes, qualitative information deriving from the field experience of operators in relation to characteristics, needs and origin of customers who use the branches.
Sales activity during the year was focused on the strong drive for the acquisition of Mass Market customers with a net production during 2023 of over 190k Switch Ins (+ 162% compared to 2022) and growth in the Mass Market business margin through adjustment of gas and electricity tariff margins. Furthermore, the partner channels and commercial structures involved in the Mass Market sales activities were also restructured, which led, among other things, to the closure of the Teleselling channel and to the development of the Customer Care commercial capacity which recorded an increase in acquisitions through Stores, Branches, and the Call Centre in 2023.
Alongside the sale of gas and electricity, in 2023 the Group continued to install charging stations on public land, obtaining from local entities the necessary authorisations to install and manage 11 charging stations in 6 municipalities located in the provinces of Florence (Borgo San Lorenzo), Arezzo (Castiglion Fibocchi and Talla), Siena (Monticiano and San Gimignano) and Macerata (Tolentino). Over the year, a total of 5 charging stations were installed between the municipality of Ortignano (AR) and Vernio (PO).

Commentary on the results

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 2023 and 2022.

Gas and electricity sales	**Year ended 31 December**		**Change in the period**	
Income statement of the operating segment (amounts in thousands of euro)	**2023**	**2022**	**2023 vs 2022**	**%**
Revenue	**1,026,434**	**1,651,457**	**-625,023**	**-38%**
External costs	-938,167	-1,586,183	648,016	-41%
Personnel costs	-18,901	-19,054	153	-1%
Gross operating margin (EBITDA)	**69,366**	**46,220**	**23,145**	**50%**
% of Revenues	*7%*	*3%*		
Amortisation/depreciation and write-downs	-26,237	-21,226	-5,011	24%
Provisions	-9,743	-13,208	3,464	-26%
Operating Income (EBIT)	**33,386**	**11,787**	**21,599**	**>100%**
% of Revenues	*3%*	*1%*		

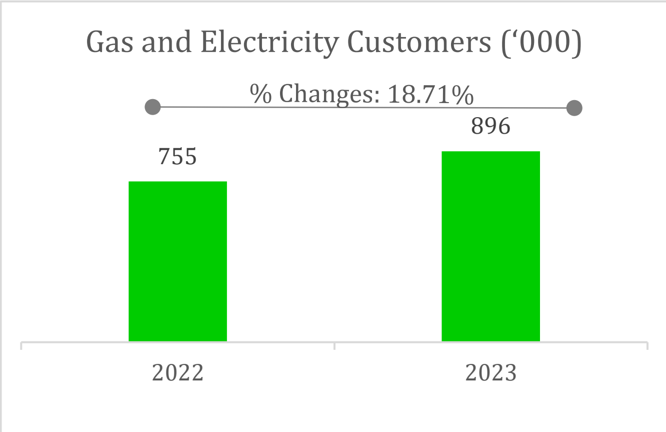
The revenue from the segment recorded a decrease of € 625 million compared to 2022 (-38%) mainly as a result of:
- reduction in the price of gas and electricity raw materials with a negative change in the revenues of € 314 million;
- lower volumes sold in the gas segment with an effect of € 258 million, partially offset by higher sales in the electricity segment with a positive effect of € 71 million;
- a decrease in sales on the PSV, GME and for balancing operations with revenues that went from € 329 million in 2022 to € 143 million in 2023;

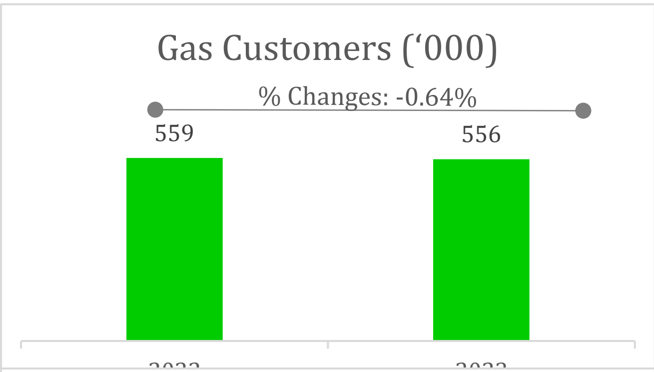
- an increase in gas distribution pass-through components and electricity transport and dispatching for € 62 million, previously characterised by regulatory changes intended to reduce the sales tariffs to end customers.

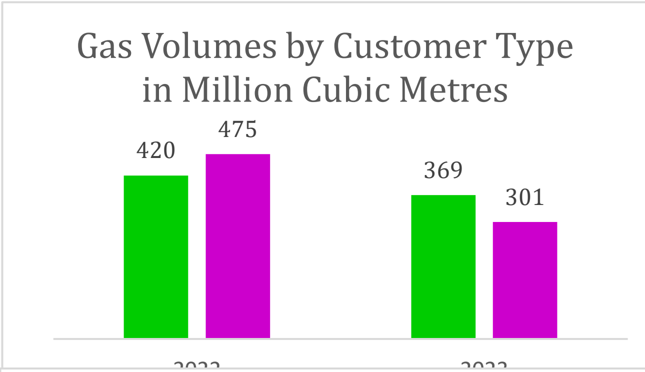
Gas segment revenue represents 71% of the SBU's revenues (79% in 2022).

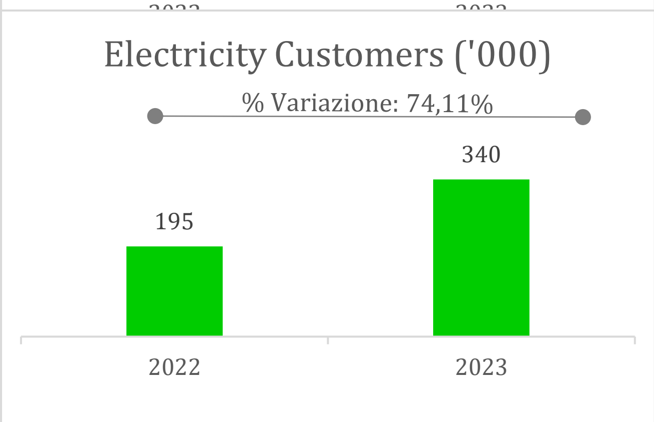
The EBITDA of the Gas and Electricity Sales SBU was € 69.4 million, significantly up from the € 46.2 million in 2022. The increase in the margins is attributable to business development with an increase in the number of customers managed and volumes sold in the electricity segment, and to the higher stability on the energy markets with consequent reduction in balancing expenses. There were also higher operating costs due to the increase in corporate costs.
Amortisation, depreciation and write-downs increased to € 26.2 million (+5.0 million) compared to 2022 due to higher investments for customer acquisition.
Provisions for credit impairment decreased from € 13.2 million to € 9.7 million related to the reduction in credit risk.
The operating result was € 33.4 million (€ 11.8 million in 2022) and accounts for 48% of the consolidated EBIT (33% in 2022).

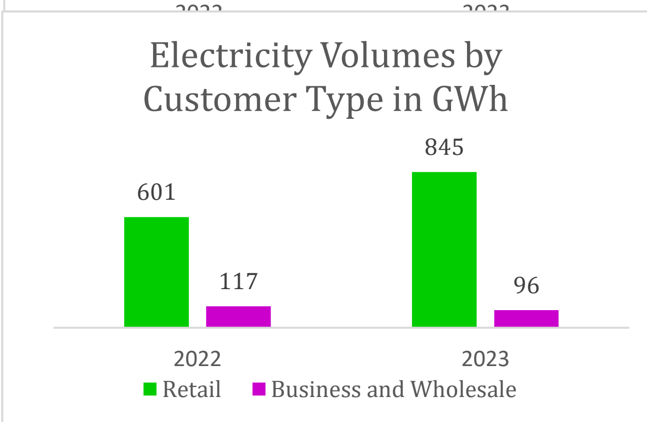
At 31 December 2023, there were 896,000 gas and electricity customers, up compared to 755,000 customers of the previous year. In addition to the development of the customer acquisition business, Lot 9 in the tender for the Incremental Protection Service for Micro-businesses in the electricity segment was awarded (83,000 customers at 31/12/2023). Volumes of electricity sold in the retail segment recorded an increase compared the previous year, due to more customers served. In the gas segment, a decrease in volumes sold was recorded in line with the trend in previous years.











8.2 REGULATED MARKET

Operational performance

In 2023, the Distribution Area was the concession holder of the natural gas distribution service in 151 Municipalities in 16 Provinces (Ancona, Arezzo, Ascoli Piceno, Bari, Campobasso, Florence, Foggia, Grosseto, Lucca, Perugia, Pistoia, Prato, Rieti, Siena, Teramo, Isernia), located in the Regions of Abruzzo, Lazio, Marche, Molise, Puglia, Tuscany and Umbria.
The local distribution network managed in the territory of the aforementioned Municipalities extends for a total of approximately 8,420 km, of which 65% in Tuscany (56% in the provinces of Arezzo, Prato and Siena), 16% in the Marche (Ancona), and 7% in Puglia and Molise. During 2023, over 16 km of new distribution network was created, while 4 km of network was replaced as part of extraordinary maintenance.
In 2023, approximately 695 million metric cubes of natural gas were distributed on behalf of the companies registered for the sale of gas to end customers.
At year-end, there was a total of 635 thousand operational Points of Delivery (PoDs) connected via the local gas pipeline network.
End customers connected to the network at 31/12/2023 were divided as follows:
45.7% supplied by the Group vendor company;
54.3% supplied from the remaining vendor companies accessing the distribution network in 2023.
With reference to the pursuit of its strategy in the context of the energy transition, intended to maximise the use of renewable gas in its networks and the efficient use of energy, during 2023, the Group was one of the successful tenderers awarded: "pilot project for optimising the management and usage of natural gas sector infrastructure" published by ARERA with resolution 404/2022/R/gas. The proposal of the company Centria was considered eligible and was second in the general ranking: the project involves the design and construction (in 2024) of a reverse flow gas plant on the distribution network of Asciano (SI). The plant will make it possible to transform the Asciano gas network from mono-directional to bi-directional, according to an innovative approach, while maximising the issue of biomethane and therefore favouring the dissemination of renewable energy into gas infrastructure. In 2023, 210,000 cubic metres of biomethane were introduced into the network by two plants connected to the distribution network (Mosciano S. Angelo and Arezzo).
In March 2023, the SmartHydroGrid three-year project was also activated in partnership with industrial parties and research organisations. The "SmartHydroGrid - Smart Hydrogen Microgrid for the Energy Transition and Profound Decarbonisation" project was chosen by the MITE – Italian Ministry for the Ecological Transition – and is part of the 15 projects eligible for NRRP (National Recovery and Resilience Plan) funding.
The project envisages the creation of a Power to Gas and Power to Power pilot plant for the efficient management of green hydrogen.
Again in 2023, thanks to the strong focus on the digitalisation of the distribution network and process automation, a digital management system was designed and developed internally for the optimisation of the energy used in the pre-heating process of natural gas and automation of the heating systems of the main plants for reducing gas pressure.
2023 was the fourth year in the 2020-2025 regulatory period. The transition from the third to the fourth year saw a 3.5% reduction in operating costs recognised in the tariff, in line with the recovery in productivity of distribution management costs (t(dis)opex), for a total of approximately 30 percentage points envisaged by ARERA in the 2020-25 regulatory period.
The provisional reference tariffs for 2023 for the natural gas distribution and metering activity were approved by ARERA with Resolution 207/2023/R/gas, while Resolution 156/2023/R/gas approved the final reference tariffs for 2022. The WACC in remuneration of invested capital is set at 5.6% for both years. For 2023, recovery was also seen in the inflation of the VRT parameter components of 3.98%, and a revaluation of the change in gross fixed investments relating to the VRT capex components of 2.4%.
With resolution no. 01/2023 of 12 October 2023, ARERA opened an extraordinary data collection project for the recognition of the residual costs of smart meters in a category below or equal to G6 with year of manufacture between 2012 and 2016 and installed before 31/12/2018, replaced due to their malfunction. The tariffs service estimated the refund of capital losses, unless defined better during data collection.
In relation to the Gas Settlement with Resolution 494/2023/R/gas, ARERA made changes and supplements to the provisions on the accountability of distribution companies in the management of the in-out delta regarding volumes to cover the difference between the quantities introduced at the exit points of the transport network interconnected with distribution networks and the quantities withdrawn by end customers (deltaIO).
As defined in the industry regulations, in the context of the mechanism of Energy Efficiency Certificates and related obligation for energy distributors defined by ARERA on the basis of the quantity of gas distributed in year n-2, the Group companies met such obligations by participating in various market sessions where, during 2023, the average price recorded did not experience strong fluctuations, especially in relation to previous years, with a differential of approximately € 14, between € 244.8/EEC and € 258.8/EEC. The absolute minimum in the listings was at

€ 242.00/EEC, with the market peak at € 259.0/EEC. During 2023, 29,000 energy efficiency certificates were purchased.
In 2023, the activity of the Distribution Area companies as outgoing operators also continued, for the supply of data essential for ATEMs bidding envisaged by Ministerial Decree 226/11. In particular, all information required for the publication of the tender and for the development of the networks of the outgoing operator was produced, updated as at 31/12/2021 for ATEMs in Siena and Ancona and at 31/12/2022 for the ATEM in Arezzo, respectively.
As for the tender to assign the natural gas distribution public service in the Municipalities of the Territorial Area of Prato, in 2023, the contracting authority withdrew the tender published in 2020 and communicated the desire to update the entire data set functional for the tender as at 31/12/2023. Therefore, the Group is still involved in producing this update.

Commentary on the results

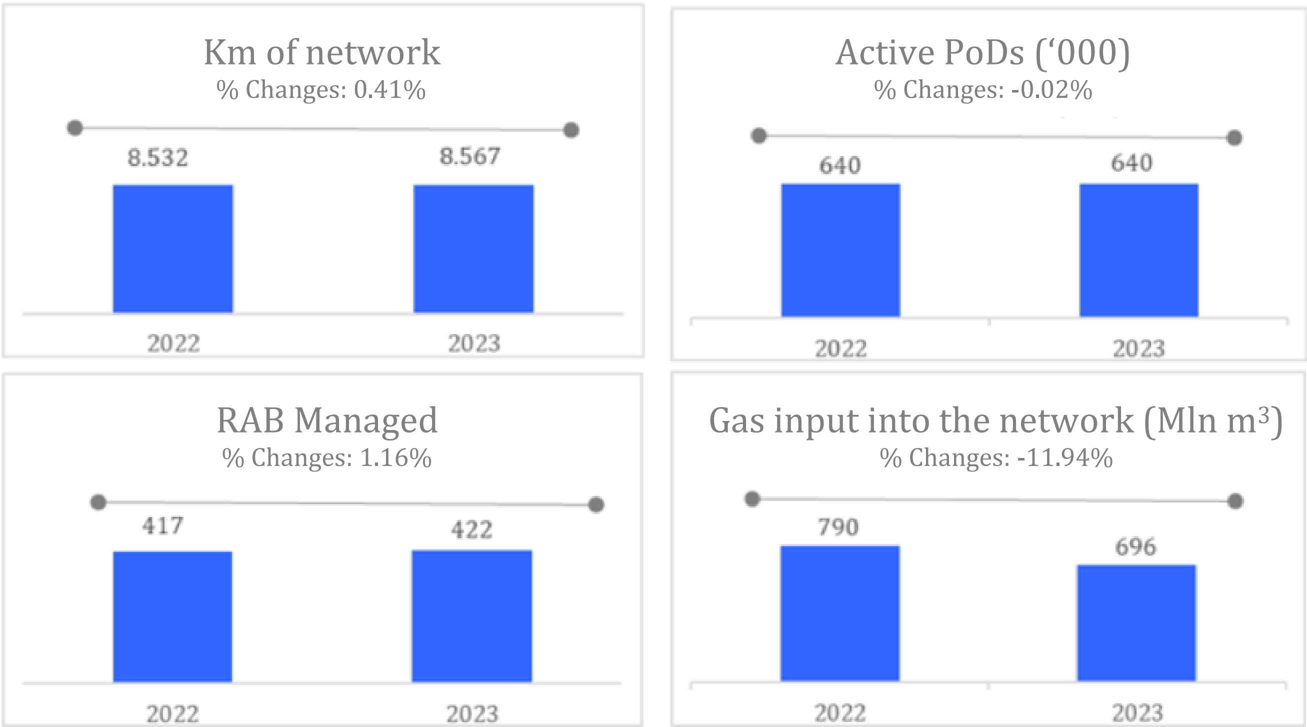
The table below presents the main economic data related to the Estra Group's activity of distribution of natural gas for the financial years ended 31 December 2023 and 2022.

Regulated Market	**Year ended 31 December**		**Change in the period**	
Income statement of the operating segment (amounts in thousands of euro)	**2023**	**2022**	**2023 vs 2022**	**%**
Revenue	**145,339**	**130,350**	**14,988**	**11%**
External costs	-81,289	-68,393	-12,896	19%
Personnel costs	-22,809	-21,866	-944	4%
Gross operating margin (EBITDA)	**41,240**	**40,092**	**1,148**	**3%**
% of Revenues	*28%*	*31%*		
Amortisation/depreciation and write-downs	-23,405	-23,366	-39	0%
Provisions	-131	-32	-99	>100%
Operating Income (EBIT)	**17,704**	**16,694**	**1,010**	**6%**
% of Revenues	*12%*	*13%*		

At 31 December 2023, the Regulated Market SBU recorded revenue for € 145.3 million, up by € 15.0 million compared to 2022 (+11%). The main changes are attributable to the increase in eligible revenues for regulatory purposes (VRT) which rose from € 76.8 to 79.3 million following the investments made, and the higher capitalised costs in networks and meters, € 32.8 million in 2023 compared to 27.4 in 2022. Higher revenues were recorded for trading in energy efficiency certificates (€ 4.8 million) with a corresponding change in purchase costs.

EBITDA amounted to € 41.2 million, slightly up compared to € 40.1 million in 2022. The increase in tariff revenues was partly offset by the increase in corporate costs.
Amortisation/depreciation amounted to € 23.4 million and was in line with the figures from 2022.
EBIT for € 17.7 million accounts for 25% of the consolidated result (47% in 2022).

Investments made on networks, plants, and the replacement of traditional meters with electronic meters allowed for growth in Regulatory Asset Base (RAB). This indicator determines the net invested capital for the purposes of ARERA determining tariffs.
The RAB managed in 2023 was € 422 million (€ 417 million in 2022).
Of note, there are 5,000 LPG customers serviced by around 140 kilometres of channel networks.



8.3 OTHER SERVICES

The "Other Services" sector includes energy efficiency services (energy and renewable services), digital services (telecommunications), and environment.

Operational performance

Management of other services during 2023 was mainly characterised by the considerable increase in energy redevelopment works on buildings eligible to benefit from the tax deductions introduced by the Relaunch Decree of 19 May 2020 and valid until 31/12/2023, so-called Superbonus 110%.
The aforementioned measures were in addition to the deductions envisaged for restorations to real estate, including measures to reduce seismic risk (so-called Sismabonus) and energy redevelopment measures of buildings (so-called Ecobonus).
It is clear how this concession allowed Estra Clima to consolidate its activities and work sites for the period of validity. The overall works involved approximately 2,000 homes with over 85,000 square metres of insulation installed and 50,000 square metres of windows replaced, in addition to the redevelopment of heating systems and replacement of wall-mounted boilers.
During 2023, the Group continued to produce energy from renewable sources with a prevalence of the photovoltaic systems (86% of total production) through numerous plants located in various Italian regions, especially Tuscany, where the largest photovoltaic systems are located, such as Cavriglia and Tegolaia. In 2023, the electricity produced from renewable sources amounted to 34,000 MWh (+5% compared to 2022).
The following was recorded in the Telecommunications segment: i) the continuation of the activities to create FTTH networks for granting the twenty-year Right of Use (IRU) in Residential Areas (over 1400 km of network created as at 31/12/23); ii) product development to offer digital services to customers (4700 customers managed); iii) the awarding of various tenders with the Public Administration relating to Citizen Security and Territory Management and Wi-Fi Networks services.
In the environment segment, the activities managed by the Group companies are related to the selection, treatment and storage of waste, and recorded an increase in activities during 2023. 176,000 tonnes of waste were treated, a 32% increase compared to 2022.

Commentary on the results

The table below presents the main economic data related to the Estra Group's other SBUs for the financial years ended 31 December 2023 and 2022.

Other services	**Year ended 31 December**		**Change in the period**	
Income statement of the operating segment (amounts in thousands of euro)	**2023**	**2022**	**2023 vs 2021**	**%**
Total Revenue	**121,725**	**77,975**	**43,751**	**56%**
External costs	-82,144	-54,122	-28,022	52%
Personnel costs	-7,266	-5,694	-1,572	28%
Gross operating margin (EBITDA)	**32,315**	**18,158**	**14,157**	**78%**
% of Revenues	*27%*	*23%*		
Amortisation/depreciation and write-downs	-11,710	-10,729	-981	9%
Provisions	-2,056	-506	-1,550	306%
Operating Income (EBIT)	**18,549**	**6,923**	**11,626**	**168%**
% of Revenues	*15%*	*9%*		

The Other services sector recorded a significant increase in revenue for +€ 43,8 million (+56% compared to 31 December 2022). The change is mainly attributable to more energy efficiency improvements, especially in condominiums, which rose from € 27.8 million in revenues in 2022 to 65.9 million in 2023. An increase was also seen in the activities of the environment segment with revenues increasing from € 14.4 million in 2022 to 19.7 in 2023 due to an increase in volumes treated.
At 31 December 2023, EBITDA for Other services was at € 32.3 million compared to € 18.2 million in 2022. The change mainly refers to the energy efficiency segment.
Amortisation/depreciation increased from € 10.7 million to € 11.7, and provisions (+€ 1.5 million) also grew, mainly relating to the energy efficiency segment.
The EBIT was € 18.5 million (€ 6.9 million in 2022) and accounts for 27% of the consolidated operating result (20% in 2022).

9. 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.

In this regard, at the same meeting on 18 December 2023, the Estra Board of Directors approved the new "Procedure for related-party transactions established in line with CONSOB Regulation no. 17221 of 12/3/2010 and subsequent amendments" and the "Related-Party Transactions Committee Regulations" in line with those in force at Alia.

The information on financial and economic transactions with related-party shareholders and associate companies are presented in the notes to the statements (note "Related parties").

10. RECONCILIATION BETWEEN THE GROUP PROFIT/(LOSS) FOR THE PERIOD AND SHAREHOLDERS' EQUITY 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 2023		**Financial year 2022**	
(thousands of euro)	**Group profit for the year**	**Total shareholders' equity**	**Group profit for the year**	**Total shareholders' equity**
Shareholders' equity and profit for the year as shown in the holding company's financial statements	**2,688**	**416,211**	**23,129**	**424,961**
Income and elimination of book value of fully consolidated companies	**38,123**	**106,059**	**22,165**	**87,184**
Reversal of write-downs of equity investments	**4,061**	**7,121**	**1,237**	**2,854**
Elimination of effects on intercompany capital gains	**4,099**	**(105,457)**	**4,143**	**(109,556)**
Consolidation Accounts, Equity Method	**23**	**2,017**	**(830)**	**1,942**
Other	**0**	**(212)**	**0**	**(251)**
Depreciation/amortisation of consolidation differences	**(6,749)**	**(44,421)**	**(6,730)**	**(37,673)**
Elimination of effects of intercompany mergers	**2,349**	**14,110**	**2,301**	**12,072**
Elimination of intercompany dividends	**(17,282)**	**(1,765)**	**(30,754)**	**(1,953)**
Group profit for the year and shareholders' equity as shown in the consolidated financial statements	**27,311**	**393,662**	**14,661**	**379,581**
Profit and shareholders' equity attributable to minority interests	916	43,789	(271)	43,669
Profit for the year and shareholders' equity as shown in the consolidated financial statements	**28,227**	**437,451**	**14,391**	**423,249**

11. SIGNIFICANT EVENTS AFTER THE REPORTING DATE

There were no significant events after the reporting date.

12. BUSINESS OUTLOOK

Albeit in a market context that remains characterised by high economic and geopolitical uncertainty, Estra will continue its constant commitment to generating value for its stakeholders in 2024, focusing, in the context of the "Tuscan Multiutility" project, on targets for improvement of its performance and industrial strengthening, including through implementation of the new governance structure and the pursuit of synergy and efficiency achievable with integration into the Alia Group.

In addition to the implementation of its strategies, the Group's results may be affected by further possible changes in the reference context such as, in particular, any new tariff measures issued by the Regulatory Authority, changes in the geopolitical and market context, trends in consumption, supplies, pricing and the policies for the procurement of commodities, as well as developments in the conflict between Russia and Ukraine, the geopolitical crisis involving the Middle East, and the macroeconomic scenario in general.

13. INDUSTRY REGULATIONS

The following is a summary of the highlights of legislative changes in 2023 in relation to the various areas of Estra Group business.

TRANSVERSAL ISSUES

LEGISLATIVE DECREE NO. 201 OF 23 DECEMBER 2022 – REORGANISATION OF LOCAL PUBLIC SERVICES OF ECONOMIC SIGNIFICANCE – The measure, which was also referred to in the financial statements for 2022, is in implementation of the parliamentary delegation set out by art. 8 of Law no. 118 of 5 August 2022 (Annual Law on Market and Competition 2021) and constitutes application of the NRRP. The provisions of the new Legislative Decree 201/22 apply to all services of general economic interest provided at local level and prevail over the industry regulations, integrating them as an expression of general standards, with the exception of specific regulations on protection and prevalence of the industry regulations. The measure does not apply to the natural gas distribution service. It defines local public services of economic significance as "services provided or likely to be provided for a financial consideration on a market, that would not be carried out without a public measure or would be carried out under different conditions in terms of physical and economic accessibility, continuity, non-discrimination, quality and safety, that local entities, within their remit, deem necessary to ensure the needs of local communities are met, so as to guarantee the homogeneity of development and social cohesion" and in reference to this a new framework regulation is established, as well as "services of general economic interest at local level on a network", or "services of general economic interest at local level that are likely to be organised through structural networks or functional connections required between the sites of production or performance of the service, subject to regulation by an independent authority". The measure sets out compliance not only with economic rules (competition, efficiency, affordability) but also those of subsidiarity and proportionality. Among other things, it contains provisions on transparency obligations of local entities, in relation to the acts and data concerning the awarding and management of public services, providing for a single access point through the platform managed by ANAC, in a dedicated section named "Transparency of local public services of economic significance".

LAW NO. 197/2022 ("2023 BUDGET LAW") – Contains economic measures for 2023. It also contains measures for countering energy price hikes, it sets aside resources to address the increase in contracting costs (for materials, fuel and energy products) through the increase in resources of the Fund for relaunching works that cannot be postponed. With reference to the public works sector, the measure is particularly important because it contains several provisions on updating price lists and reviewing works prices. It also contains measures on employment and retirement and on the environment.

LAW NO. 6 OF 13 JANUARY 2023 – URGENT MEASURES TO SUPPORT THE ENERGY SECTOR AND PUBLIC FINANCE (converting the so-called "AID DECREE-QUATER") – The measure follows those already issued during 2022 [Decree Law 50/22, converting Law 91/22 (so-called "Aid"); Decree Law 115/22, converting Law 142/22 (so-called "Aid-Bis"); Decree Law 144/22, converting Law no. 175/22 (so-called "Aid-Ter")] and contains additional urgent measures to address the increase in the costs of energy and natural gas and to support households and businesses, due to the economic effects of the ongoing crisis. It also introduces new changes for public works contracts. A contribution is envisaged in the form of a tax credit, in favour of businesses for the purchase of electricity and natural gas, for December 2022. It also contains provisions for the promotion of companies' transition towards alternative fuels, the promotion of biofuels, extensions of deadlines in the natural gas sector, and amendments to incentives for energy efficiency improvements.

DECREE LAW NO. 13 OF 24 FEBRUARY 2023 – URGENT PROVISIONS FOR IMPLEMENTATION OF THE NATIONAL RECOVERY AND RESILIENCE PLAN (NRRP) AND OF THE NATIONAL PLAN FOR COMPLEMENTARY INVESTMENTS TO THE NRRP (CIP), AS WELL AS IMPLEMENTATION OF COHESION POLICIES. The changes introduced by the Decree range from the review of the NRRP governance system to the strengthening of the administrative capacity of parties called upon to implement the measures envisaged by the Plan. The main aim is to support the acceleration and simplification of implementation of the NRRP measures and related procedures, extending them also to implementation of Cohesion Policies (ESIF 2021-2027), the Common Agricultural Policy (CAP), and youth policy.

LAW NO.14 OF 27 FEBRUARY 2023 CONTAINING URGENT PROVISIONS ON LEGISLATIVE DEADLINES (SO-CALLED "MILLEPROROGHE" – THOUSAND EXTENSIONS). Among the measures that the law contains, we note the extension of remote working for vulnerable workers in the public and private sectors and the extension of the deadline for signing corporate or territorial collective bargaining agreements aimed at the reconfiguration of working hours due to different organisational and production needs of the business, or to promote worker relocation processes, where part of the working hours is used for training courses (New Skills Fund).

DECREE OF 3 MARCH 2023 OF THE MINISTRY OF ENTERPRISES AND MADE IN ITALY – INSTALMENT-BASED PAYMENTS OF BILLS – Simplified methods of access to instalment-based payments of electricity and natural gas bills. The Measure implements the provisions of Decree Law 176/2022, art. 3, which provided for the possibility to request for instalment-based payments of bills from electricity and gas providers for the companies listed in the business register, with users in Italy.

LEGISLATIVE DECREE NO.24 OF 10 MARCH 2023 – NEW WHISTLEBLOWING REGULATIONS – Implementation of Directive (EU) 2019/1937 of the European Parliament and of the Council, of 23 October 2019, on the protection of persons who report breaches of Union law and containing provisions on the protection of persons who report breaches of national legislative provisions. The measure was adopted in implementation of European Delegation Law 2021 and contains within a single text the provisions to protect authors of reports of breaches of national or Union law that harm public interest or the integrity of the public administration or private entity, discovered in a public or private work context. It gives rise to an organic and uniform regulation aimed at greater protection for whistleblowers. In this way, whistleblowers have more incentive to report offences within the limits and with the methods indicated in the decree.

MINISTERIAL DECREE 16 MARCH 2023 - "Methods for the functioning of the National Single Platform of electric vehicle charging stations – PUN". The decree defines the methods for ensuring the operation of the National Single Platform (PUN), where operators of infrastructure dedicated to electric vehicle charging provide users with all the information about charging stations, in order to ensure uniform and homogeneous conditions of access to information about electric charging infrastructure across the entire country.

DECREE LAW NO.34 OF 30 MARCH 2023 (SO-CALLED AID DECREE QUINQUIES) - Urgent measures in support of households and businesses for the purchase of electricity and natural gas, as well as on health and tax obligations. Among other things, it contains measures to reinforce the electricity and gas social bonus, the reduction of VAT and general charges in the gas sector for the second quarter of 2023, the contribution of a fixed amount in case of high gas prices, and a new taxation for electricity produced from agroforestry renewable sources.

LEGISLATIVE DECREE NO.36 OF 31 MARCH 2023 - NEW PUBLIC CONTRACTS CODE - Public Contracts Code in implementation of article 1 of Law no. 78 of 21 June 2022, delegating to the Government matters of public contracts. The adoption of the Code constitutes one of the enabling reforms of the National Recovery and Resilience Plan (NRRP), in which Italy undertakes with the European Union to review – by March 2023 – the current legislation on public contracts, with actions intended to: reduce the fragmentation of contracting authorities; create an e-platform as a basic requirement for taking part in the national assessment of procurement capacity; grant ANAC the power to review the qualification of contracting authorities; simplify and digitise the procedures of procurement centres and define criteria of interoperability and interconnectivity; review the regulations on subcontracting by reducing their restrictions. The code and its annexes entered into force on 1 April 2023, but the related provisions took effect on 1 July 2023.

LAW NO.41 OF 21 APRIL 2023 (SO-CALLED NRRP - ter) Urgent provisions for implementation of the National Recovery and Resilience Plan (NRRP) and of the National Plan for Complementary Investments to the NRRP (CIP), as well as implementation of cohesion policies and the common agricultural policy. In addition to performing a review of the NRRP governance system, the law contains a series of provisions intended to accelerate and streamline the NRRP procedures in various sectors, through a reduction in the approval times for works envisaged by the Plan on the one hand, and, on the other, the extension to all NRRP projects of certain simplification procedures that until now had been exclusively limited to investments for prisons, railways, and courts. The law also contains measures on public contracts, in particular on the review of prices and definitive guarantees. It also provides for measures on energy, in particular provisions on the installation of systems powered by renewable sources.

DECREE LAW NO. 48 OF 4 MAY 2023 ("LABOUR DECREE") - Urgent measures for social inclusion and access to the world of employment. Among other things, the new measures provide for the introduction of an inclusion allowance that will be due to households with at least one disabled person or minor or person over the age of 70 or person with a legal disability, new incentives for recruitment and a review of rules on transparency in employment contracts. The law introduces a change to the regulations on the universal single allowance. It also provides for new reasons for signing fixed-term employment contracts, the increase in the threshold of fringe benefits to € 3,000 for 2023, the reduction of the tax wedge and amendments to the regulations on occasional services in specific sectors. The legislation also introduces changes to Law 81/2008 on occupational health and safety

LAW NO.95 27 JULY 2023 (converting the so-called "REGASIFICATION DECREE") - Urgent measures for territorial entities, as well as to ensure the prompt implementation of the National Recovery and Resilience Plan and for the energy sector. The measures include the reopening of deadlines to request authorisation to construct or operate, including following relocation, floating storage and regasification units from the appointed Special Commissioners of the Government. The measure contains urgent measures to contain the price increase in the electricity and natural gas sectors. The law also contains measures on energy production from plants powered by biogas and biomass and measures to increase the production of biomethane in addition to the use of alternative energy products.

LAW NO. 136 OF 9 OCTOBER 2023 (converting the so-called "ASSETS DECREE") - Urgent provisions to protect users, on economic and financial assets and strategic investments. It contains measures in favour of plants powered by renewable sources and measures to encourage the production of energy from renewable sources in addition to measures on incentives for energy efficiency.

Decree of the Ministry of Enterprises and Made in Italy of 29 September 2023 (MINISTERIAL DECREE ON THE LAUNCH OF THE REGISTER OF BENEFICIAL OWNERS), containing "Certification of the operations of the communication system for data and information on beneficial ownership", which governed the methods of communication, access and consultation of data and information about the beneficial ownership of companies, private legal persons and trusts (in addition to their related institutes), in implementation of the provisions of art. 3, paragraph 6 of Ministerial Decree 55/2022, through the Register of Beneficial Owners envisaged by Legislative Decree 231/2007.

LAW NO. 169 OF 27 November 2023 (converting the so-called "ENERGY DECREE") - Urgent measures on energy, actions to support purchasing power and to protect savings. It contains urgent measures to contain the effects of price hikes in the electricity and natural gas sector, in addition to a reform of the regime of concessions in favour of energy-intensive companies.

LAW NO. 170 OF 28 NOVEMBER 2023 (converting the so-called "EXTENSIONS DECREE") – Urgent provisions on extension of regulatory deadlines and tax payments. It contains urgent measures on an extraordinary contribution, in the form of a tax credit, in favour of companies for the purchase of electricity and natural gas, in addition to extending the deadlines on agile working for vulnerable workers.

DECREE LAW 181/2023 – ENERGY DECREE LAW 9 December 2023 - Provisions for the energy security of Italy, the promotion of recourse to renewable energy sources, support for companies with high energy consumption and on reconstruction in territories affected by exceptional flooding on and after 1 May 2023. Among other things, it contains measures to promote the self-production of renewable energy in energy-intensive sectors at risk of delocalisation, measures to strengthen security of procurement of natural gas and provisions to encourage regions to host renewable energy plants.

LAW 145/2023 (SO-CALLED "FISCAL DECREE") 16 December 2023 - Urgent measures on the economy and tax, in favour of territorial entities, to protect employment and non-delayable requirements. The law contains provisions in favour of citizens affected by the disastrous events of 2 November 2023 relating to tax obligations and payments and extends the deadlines for the return of the gas stored by GSE pursuant to art. 5-bis of Decree Law no.50 of 5 May 2022.

Law 30 December 2023 no. 214 – "ANNUAL LAW ON MARKET AND COMPETITION 2022" - The law contains provisions on energy, with particular reference to the procedure for approving development plans of the gas transport network and the national electricity transmission grid, as well as consumer information campaigns on the potential of second generation smart meters; it contains regulations on transport, waste and communications, as well as on retail trade. Among others, there are provisions relating to the powers of the AGCM. It should be noted that certain measures contained in the law (in particular under articles 1 and 2) contribute to implementation of the NRRP. The protection and promotion of competition are essential factors for promoting efficiency and economic growth, to protect consumer interests and to create greater social justice while increasing the possibilities of accessing the market. Competition is also protected and promoted through the revision of laws and regulations that hinder the proper functioning of the market.

2024 BUDGET LAW (LAW NO. 213 OF 30 DECEMBER 2023)
Superbonus
- Taxation on homes renovated with the superbonus and resold within five years from the end of the works: the capital gain from the resale will be taxed at 26%, a measure intended to prevent property speculation, only applicable if the option for the discount in the invoice or to transfer the credit was used, excluding deduction of declared expenses.

Income and tax support
- Partial exemption of social security contributions by employees
- Tax measures for corporate welfare
- Tax cut on performance bonuses

Households
- Extraordinary contribution for the first quarter of 2024 to holders of the electricity social bonus

Businesses
- Higher deductions between 120% and 130%, for permanent recruitment of young people, women, workers in disadvantaged categories and former recipients of universal basic income;
- 1.8 billion allocated for the tax credit for businesses that invest in capital goods intended for production facilities active in the territories included within the single special economic zone (ZES) in Southern Italy;
- Additional resources envisaged also for development contracts, the new capital goods measure ("Nuova Sabatini") and the sustainable growth fund;
- Entry into force of the plastic and sugar tax postponed until 1st July 2024.

EUROPEAN FRAMEWORK

COMMISSION DELEGATED REGULATION (EU) 2023/2486 OF 27 JUNE 2023, WHICH SUPPLEMENTS THE TAXONOMY REGULATION (EU) 2020/852 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL The regulation establishes the technical screening criteria for determining the conditions under which an activity qualifies as contributing substantially to the implementation of the environmental targets envisaged by aforesaid regulation (EU) 2020/852. The act also amends Commission Delegated Regulation (EU) 2021/2178, which governs the methods of communication to the public of specific information relating to the economic activities included within the taxonomy.

DIRECTIVE (EU) 2023/1791 OF 13 SEPTEMBER 2023 ON ENERGY EFFICIENCY - The measure, part of the Fit for 55 package, provides a common framework of measures to promote energy efficiency in the Union in order to guarantee the achievement of the Union objectives on energy efficiency and allows additional improvements in energy efficiency. The main new changes introduced include:
- Legally binding EU target to reduce the final energy consumption of the EU by 11.7% by 2030
- Member States must ensure that the total final energy consumption of public entities as a whole is reduced by at least 1.9% per year compared to 2021.
- Member States must extend to all levels of public administration the obligation of building renovations by 3% per year.
- Member States require all owners and operators of data centres in their territory, with an installed power requirement of at least 500 kW, to disclose certain information including energy consumption, use of power, temperature settings and the use of waste heat, water, and renewable energy.
- In each national NIECP, countries must present to the Commission a global assessment of the heating and cooling potential, also identifying the plants that produce waste heat or cold

DIRECTIVE (EU) 2023/2413 OF 2 NOVEMBER 2023, RED III (RENEWABLE ENERGY DIRECTIVE III) - Provides for a series of changes for Member States in the renewable energy sector, in particular as regards their promotion and the increase of their quota in the Union energy mix. The main objectives include:
- Bring the share of renewable energy to 42.5% of final energy consumption by 2030.
- Simplify the authorisation procedures for projects linked to renewable sources.
- Target of 49% renewable energy by 2030 for building heating and cooling sectors.
- Target of 5.5% for the share of renewables supplied in transport for advanced biofuels and renewable fuels of non-biological origin, such as green hydrogen and synthetic fuels containing H2. This objective includes a minimum requirement of 1% for renewable fuels of non-biological origin.
- Increase in the use of renewable energy by 1.6% each year for the industrial sector. Member States undertake to ensure that 42% of the hydrogen used in the industry comes from renewable fuels of non-biological origin by 2030, rising to 60% by 2035. Furthermore, Member States can reduce the contribution of such fuels in industrial use by 20% if they meet certain conditions.

Furthermore, Member States will have two options by 2030:
- reduce the intensity of greenhouse gas by 14.5% using renewable energy
- reach at least 29% of renewable energy in the end consumption of energy in the sector.

INDIVIDUAL BUSINESS TOPICS

Natural gas sales

RESOLUTION 14 MARCH 2023 - 100/2023/R/COM - Provisions for the removal of the natural gas protection service, the definition of conditions of supply of natural gas to vulnerable customers and the adjustment of reporting obligations for electricity and gas
This measure defines the missing aspects of application for the launch of the reform of the processes of conferment of capacity to city gates on 1 October 2023.

RESOLUTION 14 MARCH 2023 - 102/2023/R/GAS - Provisions for the identification of vulnerable customers on the market
This measure defines the methods used to identify vulnerable customers in the natural gas sector.

RESOLUTION 30 MARCH 2023 - 137/2023/R/GAS - Update of the QVD component of the economic conditions for the natural gas protection service
This measure defines the values of the QVD component to cover the costs of marketing the natural gas sales service to customers who benefit from the protection service in force from 1 April 2023.

RESOLUTION 30 MARCH 2023-138/2023/R/GAS – Methods for repayment of the advance on amounts relating to the default reintegration mechanisms for the transport default service, the distribution default service and the last resort supply service set out by Authority resolution 639/2022/R/gas
Methods for repayment of the advance on amounts relating to the default reintegration mechanisms for the transport default service, the distribution default service and the last resort supply service set out by Authority resolution 639/2022/R/gas.

RESOLUTION 9 MARCH 2023 - 8/2023 – DMRT - Definition of the transmission methods by protected market operators of information to be provided for the purposes of competitive procedures for the awarding of the incremental protection service for domestic customers in the electricity sector as per Law no. 124/17
This resolution defined the methods of transmission by protected market operators of information to be provided for the purposes of tenders for the awarding of the incremental protection service for domestic customers in the electricity sector, in light of the closure of the higher protection service from 2024.

RESOLUTION 18 APRIL 2023 -169/2023/R/GAS - Determination of the CCR components and the variable unit charge CRVos, from 1 October 2023, and amendments to the TIVG and to Annex A to Authority resolution 100/2023/R/com
The resolution approves the amounts for the CCR components under article 6bis of the TIVG and CRVOS pursuant to article 36.1 of the RTTG with effect from 1 October 2023.

RESOLUTION 25 JULY 2023 - 345/2023/R/EEL - Approval of the Integrated Text on Electricity Dispatching (TIDE)
This measure approves the Integrated Text on Electricity Dispatching (TIDE), which will replace resolution 111/06 from 1 January 2025.

Electricity sales

RESOLUTION 31 JANUARY 2023 - 29/2023/R/EEL - Urgent measures on the switching procedure in event of exit from the electricity safeguarding service
This measure contains urgent measures on the switching procedure in event of exit from the electricity safeguarding service.

RESOLUTION 28 FEBRUARY 2023 - 74/2023/R/EEL - Amendment of the application deadline of the provisions of the TIQV to end customers of the incremental protection services for micro-businesses in the electricity sector.
This measure amends the deadline for the application of the provisions of the TIQV on end customers of the incremental protection services for micro-businesses considering the postponed activation of the service in question envisaged by resolution 586/2022/R/eel.

RESOLUTION 30 MARCH 2023- 135/2023/R/EEL – Update, for the quarter 01 April – 30 June 2023, of the economic conditions of the sale of electricity in higher protection. Determination of the δ parameter and of the *cpstgm* fee to cover equalisation balances related to the incremental protection service for micro-

businesses, the *cpstg* parameter to cover equalisation balances related to the incremental protection services for small businesses, and amendments to the TIV
Update, for quarter 01 April – 30 June 2023, of the economic conditions of the sale of electricity in higher protection. Determination of the δ parameter and of the *cpstgm* fee to cover equalisation balances related to the incremental protection service for micro-businesses, the *cpstg* parameter to cover equalisation balances related to the incremental protection services for small businesses, and amendments to the TIV.

RESOLUTION 30 MARCH 2023 - 136/2023/R/EEL - Update of the RCV and DISPbt components and of the PCV fee related to the marketing of electricity. Amendments to the TIV
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 April 2023.

RESOLUTION 11 APRIL 2023 - 154/2023/R/EEL - Determination of the final tariffs of reference for the services of distribution and metering of electricity, for the year 2022
The measure approves the final tariffs of reference for the electricity distribution and metering services for the year 2022 related to distributor companies with an individual tariff regime.

RESOLUTION 11 APRIL 2023- 153/2023/R/COM - Implementation of Prime Ministerial Decree 15 March 2023, in implementation of article 14-bis of Decree Law no. 4 of 27 January 2022, converted with amendments by Law no. 25 of 28 March 2022 - Fund for support for households of people with a serious illness who use electricity for life-supporting medical equipment. Amendments to Annex D to Authority Resolution 63/2021/R/com
Implementation of Prime Ministerial Decree 15 March 2023, in implementation of article 14-bis of Decree Law no. 4 of 27 January 2022, converted with amendments by Law no. 25 of 28 March 2022 - Fund for support for households of people with a serious illness who use electricity for life-supporting medical equipment. Amendments to Annex D to Authority Resolution 63/2021/R/com.

RESOLUTION 28 JUNE 2023 - 302/2023/R/EEL – Update, for quarter 1 July – 30 September 2023, of the economic conditions of the sale of electricity in higher protection and changes to the TIV
This resolution updates, for the quarter 1st July to 30 September 2023, the economic conditions of the sale of electricity in the context of the higher protection service and makes changes to the TIV.

RESOLUTION 3 AUGUST 2023 - 362/2023/R/EEL – Provisions for the incremental protection services to non-vulnerable domestic customers in the electricity sector, as per Law no. 124 of 4 August 2017 (annual law for the market and competition)
This measure defines the regulation of the incremental protection services for non-vulnerable domestic customers set out by Law 124/17 and the methods for awarding it through competitive procedures.

RESOLUTION 3 AUGUST 2023 - 383/2023/R/EEL - Provisions for the identification of vulnerable customers on the electricity market
The measure is part of the procedure launched by the Authority with resolution 396/2019/R/eel, for the adoption of measures intended to regulate the then safeguarding service for domestic end customers and businesses connected via low voltage with less than fifty employees and an annual turnover no greater than ten million euros, and contains provisions for the identification of vulnerable customers on the electricity market.

RESOLUTION 28 SEPTEMBER 2023 - 427/2023/R/eel – Update, for quarter 1 October – 31 December 2023, of the economic conditions of the sale of electricity in higher protection. Determination of *cpstgm* fee of the incremental protection service for micro-businesses, the *cpstg* fee, and the α parameter of the incremental protection services for small businesses, amendments to the TIV and to Authority resolution 362/2023/R/eel
This measure updates, for the quarter 1st October to 31 December 2023, the economic conditions of the sale of electricity in the context of the higher protection service and makes changes to the TIV.

RESOLUTION 3 OCTOBER 2023 - 437/2023/R/eel - Provisions on the methodology for defining the capacity market exercise price, pursuant to Authority resolution 363/2019/R/eel
This resolution confirmed until 31 December 2023 the amendments and supplements to resolution 363/2019/R/eel, introduced with resolution 83/2022/R/eel, in relation to the methodology for determining the capacity market exercise price.

RESOLUTION 28 NOVEMBER 2023 - 549/2023/R/eel – Completion of the regulation of the incremental protection service for non-vulnerable domestic customers in the electricity sector as per Law no. 124 of 4 August 2017 and amendments to Annexes A and C to Authority resolution 362/2023/R/eel

This measure completes the rules for the awarding of the incremental protection services for non-vulnerable domestic customers by establishing the value of the CSem fee and the maximum ceiling values to be applied to offers formulated during tenders.

RESOLUTION 19 DECEMBER 2023- 600/2023/R/eel – Review of the time frames for activating the incremental protection service for non-vulnerable domestic customers in the electricity sector as per Law no. 124 of 4 August 2017. Amendments to Authority resolution 362/2023/R/eel and related annexes A, B, C, and D

This measure defines the new time frames for activating the incremental protection services for non-vulnerable domestic customers in the electricity sector as per Law no. 124 of 4 August 2017, establishing it as 1 July 2024, and amends resolution 362/2023/R/eel and its annexes.

Natural gas and electricity sales

RESOLUTION 31 JANUARY 2023- 23/2023/R/COM - Implementation of the provisions of article 1, paragraph 18 of Law no. 197 of 29 December 2022 on recognition of the electricity and gas social bonuses due to economic hardship for the year 2023

The resolution establishes the methods for recognition of the social bonuses for the first quarter of 2023 in implementation of the 2023 Budget Law.

RESOLUTION 28 FEBRUARY 2023 - 76/2023/R/COM

Implementation of the provisions set out by article 1, paragraph 6 of Law no. 197 of 29 December 2022

This Resolution in implementation of the provisions of the 2023 Budget Law, in line with Authority resolutions 373/2022, 474/2022 and 669/2022/R/com, defines the minimum content of communication on the tax credit that sellers must send to the applicant customer businesses, in addition to the sanctions in the event of non-compliance.

RESOLUTION 30 MARCH 2023 - 134/2023/R/COM

Update, from 1 April 2023, of the tariff components destined to cover the general expenses and of further components of electrical sector and the gas sector. Provisions on TIVG.

Urgent provisions referring to electricity and gas bonus. Provisions referring to the Energy and Environmental Services Fund. Changes to RTDG.

Update, from 1 April 2023, of the tariff components destined to cover the general expenses and of further components of electrical sector and the gas sector. Provisions on TIVG. Urgent provisions referring to electricity and gas bonus. Provisions referring to the Energy and Environmental Services Fund. Changes to RTDG.

RESOLUTION 09 MAY 2023 - 194/2023/R/COM

Implementation of the provisions of article 1, paragraph 2 of Decree Law no. 34 of 30 March 2023 on raising the ISEE (income) threshold for access to electricity and gas social bonuses for large families and amendment to article 6, paragraph 2 of Annex A to Authority resolution 63/2021/R/com

The measure implements the increase of the ISEE (income) threshold for access by so-called large families to energy bonuses, introduced by Decree Law no. 34/23, and introduces amendments to Annex A to resolution 63/2021/R/com on eligibility checks for the purposes of recognition of the gas bonus to indirect customers.

RESOLUTION 19 MAY 2023 - 216/2023/R/COM RESOLUTION

Urgent provisions on electricity, gas and water services and the integrated management system of municipal waste, in the territories affected by the exceptional weather events in May 2023

The measure contains urgent provisions on electricity, gas and water services and the integrated cycle of municipal waste, in favour of the populations in the territories affected by the exceptional weather events in May 2023.

RESOLUTION 06 JUNE 2023 - 250/2023/R/COM

Provisions on early withdrawal charges for electricity contracts and renewal of the economic conditions in electricity and natural gas contracts and supplements to Authority Resolution 100/2023/R/com

Provisions on early withdrawal charges for electricity contracts and renewal of the economic conditions in electricity and natural gas contracts and supplements to Authority Resolution 100/2023/R/com

RESOLUTION 13 JUNE 2023 - 259/2023/R/COM

Urgent provisions on electricity, gas and water services and the integrated management system of municipal waste, in favour of populations affected by the exceptional weather events on and after 1 May 2023

This Resolution in implementation of the provisions of the Decree Law Aid-quinques, in line with Authority resolutions 373/2022, 474/2022, 669/2022/R/com and 76/2023/R/com, defines the minimum content of communication on the tax credit that sellers must send to the applicant customer businesses, in addition to the sanctions in the event of non-compliance.

RESOLUTION 28 JUNE 2023 - 297/2023/R/COM
Update, from 1 July 2023, of the tariff components destined to cover the general expenses and of further components of electrical sector and the gas sector. Provisions on RTTG components. Provisions referring to the Energy and Environmental Services Fund
This resolution updates, for the third quarter of 2023, the electricity and gas general charges, in addition to the social bonuses for the same quarter.

RESOLUTION 28 JUNE 2023 - 304/2023/R/COM
Amendments and supplements to Authority resolution of 13 June 2023, 267/2023/R/com, containing "urgent provisions on electricity, gas and water services and the integrated management system of municipal waste, in favour of populations affected by the exceptional weather events on and after 1 May 2023"
In consideration of the methods and time frames for tariff collection adopted by certain operators and relations with users and the critical issues that could arise from suspension of the payment deadlines until 31 August 2023, this resolution supplements, with exclusive reference to the sector of municipal waste, the eligibility conditions for requesting advances from the CSEA.

RESOLUTION 03 AUGUST 2023 – 390/2023/R/EEL
Extension of the suspension of the payment terms in favour of populations most affected by the exceptional weather events on and after 1 May 2023
The measure provides for the extension of the suspension of payment deadlines until 31 October 2023 in favour of account holders of utilities and supplies of electricity, gas, including different gases distributed via channel networks, in addition to utilities of integrated water service and the IIS and the integrated municipal waste management service located in the Municipalities or districts of Municipalities set out in Annex 1 to Decree Law 61/23 who have suffered major damage caused by the exceptional weather events on or after 1 May 2023.

RESOLUTION 28 SEPTEMBER 2023– 429/2023/R/com
Update, from 1 October 2023, of the tariff components destined to cover the general expenses and of further components of electrical sector and the gas sector. Provisions on the TIVG and RTTG components. Provisions referring to the Energy and Environmental Services Fund.
With this resolution, the Authority sets out the quarterly update of the general charges for the electricity and gas sector in addition to the social bonuses of the two sectors, for the fourth quarter of 2023.

RESOLUTION 28 DECEMBER 2023– 622/2023/R/com
Review of the methods for updating the social bonuses and amendments to Authority resolution 63/2021/R/com
This resolution amends the methods for updating and quantifying the social bonuses and to protect customers/users reviews certain operating methods of recognition of the social bonuses governed by Annexes A, B, C and D under resolution 63/2021/R/com.

RESOLUTION 28 DECEMBER 2023– 633/2023/R/com
Update, from 1 January 2024, of the tariff components destined to cover the general expenses and of further components of electrical sector and the gas sector. Provisions on the TIVG and RTTG components. Provisions referring to the Energy and Environmental Services Fund
This resolution updates the TIPPI, RTTG and RTDG tariff components for the first quarter of 2024 and the social bonuses for the year 2024. Provisions referring to the Energy and Environmental Services Fund.

RESOLUTION 05 DECEMBER 2023 - 576/2023/R/eel
Provisions on the alignment of functional data for management of the supply of higher protection customers and compensation associated with the management of misalignment following the transition of the service to incremental protection for non-vulnerable domestic customers
This resolution introduced methods for verifying and aligning within the Official Central Register (RCU) of the Integrated Information System (IIS), information related to the contact details of domestic end customers in the electricity sector, in light of the transition to the incremental protection services for non-vulnerable customers. The measure is intended to prevent misalignment in the data transferred to new operators, with a mass verification of data present in the RCU by the higher protection operators and a misalignment management system that provides for indemnities at their expense.

RESOLUTION 12 DECEMBER 2023 -583/2023/R/eel
Provisions on the methodology for defining the capacity market exercise price, pursuant to Authority resolution 399/2021/R/eel
This measure made amendments and supplements to resolution 399/2021/R/eel, in relation to the method for determining the exercise price set out by article 9 of resolution ARG/elt 98/11, for year of delivery 2024.

Decision 22 December 2023 - 94/2023 - DAGR
Definition of the operating methods relating to reimbursement of the contribution for the functioning of the Regulatory Authority for Energy, Networks and the Environment (ARERA) for the year 2023
With this resolution, ARERA requires all operators in the electricity and gas sectors involved in repayment of the overpaid contribution, to send to the Authority specific data related to the contribution for the year 2023 (amount already paid, amount to be returned, IBAN of the bank where the sum should be deposited), using the communication information system of the Authority, in order to then return the amounts subject to reimbursement. The resolution also requires that the entire amount for sums paid up to € 167.00 be reimbursed.

Natural gas distribution

Resolution 29 December 2022 - 737/2022/R/gas – Interim update to the tariff regulation of the gas distribution and metering services, for the 2023-2025 three-year period. Approval of the RTDG for the 2023-2025 three-year period and amendments to the Standard Network Code for the gas distribution service.
The measure approves the new version of the regulation on tariffs for gas distribution and metering services for the regulatory period (RTDG), for the 2022-2025 three-year period, downstream of the changes to definition of the standard costs of electronic metering units, parameter-based recognition of the costs of remote management/reading system and concentrators, recognition of the residual value on initial installation smart meters disposed of early.

SMART METERING - Following the publication of Res. 269/2022/R/gas, which had defined new outputs and performance of the metering service, no additional measures were issued on smart metering; guidelines are being assessed on the transition from the annual treatment (MY) to a monthly one (MM) of small-sized smart meters (G4 and G6) for settlement purposes following approval of resolution 269/2022/R/gas.

Integrated Information System (IIS) - During 2023, in line with 2022, the central role of the IIS was strengthened further and new developments were introduced. The most significant changes included: creation of the concept of inconsistent withdrawals in relation to the metering unit, for all types of treatment, and new freeze mechanism on balancing missing or anomalous withdrawals (pursuant to the provisions of resolution 555/2022/R/gas);
launch of the coefficient k for delivery points equipped with a volume corrector; multiplying factor of the maximum plausible withdrawals based on the operating pressure of the utility.

Resolution 28 December 2023 - 631/2023/R/gas – Update of the tariffs for the gas distribution and metering services, for the year 2024
The measure approves the obligatory tariffs for the natural gas distribution, metering and marketing services, the tariff options for different gases, and the amounts of bi-monthly equalisation in advance related to the natural gas distribution service, for the year 2024.

Supply, transportation and storage of natural gas

Gas Settlement

RESOLUTION 28 FEBRUARY 2023 - 72/2023/R/GAS – Final provisions on the reform of the processes of conferment of capacity at the points of delivery of the transport network.
This measure defines the missing aspects of application for the launch of the reform of the processes of conferment of capacity to city gates on 1 October 2023.

RESOLUTION 19 SEPTEMBER 2023 - 405/2023/R/gas - Provisions referring to the calculation of economic adjustments for the year 2022 and provisions referring to the Energy and Environmental Services Fund (CSEA)
This resolution approved provisions for Snam Rete Gas for settlement by 2023 of the economic settlement items for the year 2022, taking into account the adjustment requests received by 22 September 2023 and providing communication of the related amounts to the Authority by 4 October; related accounting documents and information

should be published by 31 October. Furthermore, for the period January-September 2022, resolution 170/2023/R/gas will not apply, since the related items are included in the aforesaid regulation.

ARERA RESOLUTION 494/2023/R/gas – Amendments and supplements to the provisions on the accountability of distribution companies in the management of the in-out delta
With the resolution, ARERA made amendments and supplements to the provisions on the accountability of distribution companies in the management of the in-out delta.

Transport of natural gas

RESOLUTION 07 MARCH 2023 - 90/2023/R/GAS - Urgent provisions on the transport default service
This measure provides for the extension until 30 September 2023 of the provisions set out by points 1. and 2. of Authority resolution 493/2022/R/gas and of the provisions set out by point 3. of Authority resolution 516/2022/R/gas,

RESOLUTION 4 APRIL 2023 -139/2023/R/GAS
Criteria for tariff regulation for the service of transport and metering of natural gas for the sixth regulatory period (2024-2027)
This measure adopts the tariff regulation criteria for the natural gas transport service for the sixth regulatory period (6PRT, 2024-2027), following the proceeding launched with resolution 617/2021/R/gas of 23 December 2021.

RESOLUTION 18 JULY 2023 - 319/2023/R/GAS
Provisions on conferment of interim capacity at the delivery points of the transport network directly connected to industrial users and to thermoelectric users
With this resolution, the methods and time frames for conferment of the monthly and daily capacity products already in force at the delivery points of the transport network that supply thermoelectric users are also extended to industrial users; furthermore, the quarterly product is made available for both aforesaid users by 1 January 2024.

Natural gas storage

RESOLUTION 9 MARCH 2023 - 93/2023/R/GAS - Urgent measures for conferment of storage capacity
With this measure, following on from the provisions of the latest guideline of the Italian Ministry of the Environment and Energy Security (March 2023), measures are introduced to encourage storage filling in light of thermal year 2023/2024.

RESOLUTION 04 APRIL 2023 150/2023/R/GAS - Provisions for the conferment of storage capacity for thermal year 2023/2024
With this measure, taking into account the provisions of Decree 31 March 2023, the provisions related to the conferment of storage capacities for thermal year 2023/2024 are approved.

RESOLUTION 6 JUNE 2023 - 247/2023/R/EEL - Criteria and conditions for the functioning of the forward provisioning system of electricity storage capacity, pursuant to article 18 of Legislative Decree no. 210 of 8 November 2021
With this resolution, ARERA approved the criteria and conditions for the functioning of the forward provisioning system of electricity storage capacity, pursuant to article 18 of Legislative Decree no. 210 of 8 November 2021. The resolution confirms the general configuration outlined in Consultation Document 393/2022/R/eel, with several amendments and supplements in light of the observations received.

Renewable energy systems

DECREE LAW no. 181 9 December 2023 - Urgent provisions for the energy security of Italy, the promotion of recourse to renewable energy sources, support for companies with high energy consumption and on reconstruction in territories affected by exceptional flooding on and after 1 May 2023.
Chapter I contains various structured measures on energy, intended to guarantee and implement the security of the energy system and support for renewable sources, including with the introduction of additional simplifying measures for the related authorisation procedures.

<u>European context</u>

DIRECTIVE (EU) 2023/2413 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 18 OCTOBER 2023
The directive introduces changes to European legislation on renewable sources, with the aim of reducing greenhouse gas emissions, energy dependence, and promoting the green transition towards an economy based on renewable energy.

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

Resolution 727/2022/R/eel of 27 December 2022 - Definition, pursuant to Legislative Decree 199/21 and Legislative Decree 210/21, of the regulations on widespread self-consumption. Approval of the Integrated Text on Widespread Self-Consumption.
The resolution defines, pursuant to Legislative Decree 199/21 and Legislative Decree 210/21, the regulations on widespread self-consumption, and therefore approved the Integrated Text on Widespread Self-Consumption (TIAD). The ARERA measure defines the regulatory model related to the configurations in which self-consumption can be developed.

DECREE LAW no. 11 of 16 February 2023 - Urgent measures on transfer of credits pursuant to article 121 of Decree Law no. 34 of 19 May 2020, converted with amendments by Law no. 77 of 17 July 2020.
The decrease led to a freeze on the transfer of the credit and the discount in the invoice. From 17 February 2023 it is no longer possible to transfer the credit nor apply the discount to the invoice for works that were previously subsidised (art. 121, para. 2): recovery of heritage property, energy efficiency, anti-seismic measures; recovery or restoration of façades, installation of photovoltaic systems, charging stations.

DECREE OF 8 AUGUST 2023 - NATIONAL ENERGY INCOME FUND
Decree of the Ministry of the Environment and Energy Security which established the National Energy Income Fund: the objective of the measure is to subsidise households in financial difficulty, for the installation of photovoltaic systems set up for self-consumption. GSE is the operator of the activities for the operation of the Fund, and is assigned initial financial resources of € 200 million for years 2024 and 2025.

DECREE LAW no. 212 of 29 December 2023 - Urgent measures related to the tax benefits set out by articles 119, 119-ter and 121 of Decree Law no. 34 of 19 May 2020, converted with amendments by Law no. 77 of 17 July 2020.
Decree Law 212/2023 makes changes to the regulations on the Superbonus with the aim of finding a solution for taxpayers who have works ongoing at 31 December 2023.

<u>European Context</u>

Directive (EU) 2023/1791 on energy efficiency
Directive forming an integral part of the Fit for 55 package and that imposes a binding EU target comprising the 11.7% reduction in final energy consumption of the entire European Union by 2030 compared to 2020 levels. In level terms, the maximum limit of energy consumption in the Union must not exceed 763 million tonnes of oil equivalent (Mtoe) of final energy and 993 million tonnes of oil equivalent (Mtoe) of primary energy.

<u>Telecommunications</u>

RESOLUTION 41/23/CONS OF 22 FEBRUARY 2023. Resolution no. 41/23/CONS once again updates the list of contestable Municipalities on the wholesale local and central access services markets on the basis of the criteria defined in resolution no. 348/19/CONS (which introduced, under article 17, a geographic differentiation of the regulation relating to the obligation of control of prices in a sub-group of Municipalities, identified as most competitive).

RESOLUTION 162/23/CONS OF 27 JUNE 2023. Launch of the procedure and the public consultation concerning the definition of technical standards for fibre optic cables which must be followed by the successful tenderers in the tenders for the creation of network infrastructure.

EUROPEAN FRAMEWORK

- Regulatory Proposal of the European Parliament and of the Council containing measures to reduce the installation costs of Gigabit electronic communication networks and repealing Directive 2014/61/EU (regulation on Gigabit infrastructure).
- Adopted by the Council on 18 July 2022, the Digital Markets Act (DMA) came into force on 2 May 2023, aiming to ensure contestable and fair markets in the digital sector. In particular, it defines clear standards for large platforms, "gatekeepers" that provide so-called "basic platform services", in order to ensure that they do not abuse their position, for example by promoting their own products or preventing users from installing external applications.

Environment

MINISTERIAL DECREE 4/2023 OF 4 APRIL 2023 - Introduction of the new waste traceability system and the National Electronic Register for Waste Traceability (RENTRI) pursuant to article 188-bis of Legislative Decree no. 152 of 3 April 2006.

RESOLUTION 385/2023/R/RIF OF 3 AUGUST 2023 – Definition of the standard service contract for the regulation of relations between awarding bodies and operators of the municipal waste service (provisions on essential minimum content).

RESOLUTION 387/2023/R/RIF OF 3 AUGUST 2023 – Introduction of monitoring and transparency obligations on the efficiency of separate waste collection and on municipal waste treatment plants.

RESOLUTION 389/2023/R/RIF OF 3 AUGUST 2023 – Definition of the rules and procedures for the two-yearly update (2024-2025) of tariff revenues of reference and access tariffs to "minimum" plants to close the cycle, or "intermediate" plants from which flows indicated as entering "minimum" plants to close the cycle originate.

TUSCANY REGION RESOLUTION 68/2023 OF 27 SEPTEMBER 2023 – Adoption of the "Regional plan for waste management and reclamation of polluted sites – Plan for the circular economy" pursuant to article 19 of Regional Law 65/2014.

JUDGEMENT NO. 10550/2023 OF THE COUNCIL OF STATE OF 6 DECEMBER 2023 – Confirmation, on minimum plants, of the request to cancel ARERA resolution 363/2021, to approve the tariff method (MTR-2) for 2022-2025.

14. RISKS AND UNCERTAINTIES

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

- ***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 revenue, 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 redevelopment 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 authorisations and with expired 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.

In particular, with reference to the gas distribution sector, we can note that most of the concessions that the Group holds derive from direct awards by single Municipalities or were awarded through public tender procedures organised by single Municipalities that today have expired.
With reference to expired concessions, the Group's activity continues in a regime of *prorogatio* and therefore the duration of the concession relationship is considered extended up to the moment in which the new tendering procedure is organised. During this period of prorogatio, the existing relationships between granting party and concession holder remain in force and therefore the concession holder of the service (i) remains obliged to continue the management of the service, limited to ordinary administration, up to the date on which the new award comes into effect, (ii) continues to receive the related tariff and (iii) is obliged to pay the fee to the granting entity.
Furthermore, outgoing operators fulfil all the obligations arising from the concession, including the payment of a concession fee payable to the granting entity.
With reference to the methods of renewing concessions, starting from the adoption of Italian Legislative Decree no. 164/2000 (the so-called Letta Decree) and of the related implementing decrees, the new awards for natural gas distribution will be assigned through public tender procedures, organised for Minimum Territorial Areas (Ambiti Territoriali Minimi - "ATEMs") by the lead Municipality identified as contracting authority by the granting entities.
Italian Ministerial Decree 226/2011 defined the methods for performing the tender procedures organised by the ATEMs, also laying down the terms for the publication of the related call for tenders and the terms laid down so that, on the one hand, the Region responsible, after giving notice to subjects in default specifying a peremptory term to comply, will force the launch of the tender procedure, and, on the other, the MED will intervene in order to ensure that the procedure is launched. As of today, for most of the expired natural gas distribution concessions the terms provided for in Italian Ministerial Decree 226/2011 for the issue by the contracting authorities of new calls for tenders have also expired.
In the light of the above, it is not possible to determine the dates of publication by the ATEMs of calls for tenders for the renewal of the concessions nor for the award of any new concessions with respect to those that the Group holds.

It cannot be guaranteed that the Group will be awarded the new contracts, nor that, if awarded, they will be at economic conditions equivalent to the existing ones.
Non-renewal of the concessions held by the Group or not obtaining new concessions could have negative effects on the business and prospects of Estra and the Group and on their economic and financial situation and equity.
In addition, even if the Group manages to win a new concession, the times for taking over the same following the completion of the tender procedure could be very long, owing also to appeals that could be lodged by the other operators that take part in the procedure, with negative effects on the business and prospects of the Group and on its economic and financial situation and equity.

- ***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 related to White Certificates***

Based on applicable legislation, the Group needs to achieve specific annual energy saving targets, as determined in the Ministry of Economic Development Decree for the four-year period from 2021 to 2024. Should the Group not obtain a sufficient number of "White certificates" to achieve the relevant annual target, these need to be acquired on the market. In addition, if the required number of "White certificates" is not submitted to ARERA, it will be subject to sanctions imposed by ARERA, and will have to purchase the missing number of "white certificates". The market price of "white certificates" rose considerably in recent months.
To comply with its energy saving obligations, the Group intends producing "white certificates" directly or acquiring them on the market to achieve its annual target. If the number of "white certificates" produced directly by the Group is less than expected and/or if the price of "white certificates" should continue to increase in the future, the Group will incur higher costs which could negatively impact its business.

- ***Risks relating to quality standards***

The Group is obliged to comply with certain quality standards relating to the sale of natural gas and electricity to end users, as well as certain standards referring to safety, continuity and commercial quality with regard to the distribution of natural gas. Failure to comply with these standards could involve the Group paying claims to end users, sanctions and/or fines. Even though the Group believes that it currently complies with the relative quality and safety standards, any future breach of these standards could negatively impact on the business, financial conditions and operating results of the Group.

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

On the basis of the current tariff system, the Group's revenue 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 revenue.

- ***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 revenue is 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.

- ***Risks related to renewable energies***

The Group's renewable energies business is exposed to the risk that the generation of electricity from renewable sources may be interrupted due to events beyond the Group's control, such as natural disasters, fires, breakdowns or malfunctioning of control equipment or systems, plant manufacturing defects, damage, theft and other exceptional events. Any interruption could result in reduced revenue for the Group and could involve incurring extraordinary costs to resume the production process.
The Group's failure to comply with legislation requiring authorisations and permits or the failure to respect deadlines and the conditions envisaged by the relative authorisations and permits could result in penalties or require the Group to repay incentives and/or not qualify for additional incentives.
Furthermore, due to the intrinsic nature of the sources used in this sector related to the climate conditions at the sites where the wind and photovoltaic facilities are located, the generation of electricity could be subjected to high levels of volatility. Even though the Group has positioned its facilities in different locations throughout Italy in order to take advantage of different climatic conditions, revenue from the generation of electricity could come down, even significantly.

- ***Risks related to seasons and weather conditions***

The Group's activities are influenced by weather conditions like average temperatures that impact on overall consumption requirements. Significant changes in meteorological conditions from year to year could influence the demand for natural gas and electricity, which is typically higher in the colder winters (need for heating) and hot summers (need for air conditioning). Sudden meteorological changes could cause a significant change to normal demand and impact the Group's production from certain renewable sources. This could impact negatively on the Group's business, operating results and financial position. See also the paragraph on "Risks related to climate change".

- ***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 B1.1 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 comply with these parameters could result in the execution of the acceleration clause and an earlier repayment obligation arising for 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 2023, 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) existing service contracts with

Group companies, including companies that are not controlled, and with the shareholders Alia Servizi Ambientali and Coingas; (ii) lease contracts for the company offices in Prato, Arezzo and Siena, from the shareholders Alia Servizi Ambientali, Coingas and Intesa respectively; (iii) financing contracts with Alia Servizi Ambientali and Coingas.
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. Italian 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, 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 occurrence of these events is more likely during times of economic recessions or if prices should increase significantly for the commodities sold, which could impact on the ability of Group customers to pay timeously.

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 related to joint ventures and partnerships***

In recent years, the Group has established various partnerships and may initiate additional joint ventures or partnerships with the same or other parties in the future. The possible benefits or expected returns from these joint ventures and partnerships could be difficult to achieve or could be less positive than what the Group originally estimated. Furthermore, these investments are intrinsically risky, because the Group may not be able to exercise full authority in managing the joint venture or partnership and on the company decisions that are taken. In addition, joint ventures and partnerships run the risk of difficulties arising when integrating human resources, technologies and products.

- ***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 IFRS standards, 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 available 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 revenue 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.

- ***Risks related to climate change***

Climate change is resulting in significant rises in the annual average temperature, due to CO_2 emissions deriving mainly from human activities. The temperature increase in turn generates extreme climate events, such as higher rainfall, rising sea levels, desertification, or even heavy snowfall and low solar irradiance.
For the Estra Group, climate change is mainly an economic risk, given its possible repercussions on the Group's characteristic activities:
- increased operating costs (e.g. insurance costs);
- gradual reduction in demand for gas for domestic heating (NIECP 2019) with consequent reduction in the business margins;
- electrification process of consumption and use of renewable resources in replacement of fossil fuels in the long term (carbon neutrality target by 2050) (NIECP 2019);
- increased frequency in extreme intensity natural events in the places where the Group operates, which could result in infrastructure becoming unavailable for extended time frames, with possible service interruptions.

The main action carried out to manage risks connected to climate change (business diversification in the medium term in the environmental services sector) led, in the 2020-2022 three-year period, to costs for the acquisition of companies operating in the waste cycle, for € 20.2 million. From a commercial perspective, cross-selling strategies were implemented with the aim of reducing dependence on the gas market with an increase in the commercial portfolio in the electricity market.
Furthermore, in the 2024-2028 Business Plan, climate change is identified as a long-term topic around which several activities are based, specifically the development of renewables and sustainable mobility.
Additional information on climate change risk can be found in the Estra Consolidated Non-Financial Statement 2023, in the chapter Governance, paragraph 3.5 Risk Management.

15. USE OF FINANCIAL INSTRUMENTS

The Group holds financial derivative instruments in 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 STATEMENT

2023 is the seventh 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 revenue above the thresholds provided for in Art. 2 section 1, is subject to application of Italian Legislative Decree no. 254 of 30 December 2016.

The non-financial statement 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 statement which constitutes a distinct report with respect to that on operations of the consolidated financial statements.

The 2022 consolidated non-financial statement drawn up according to the GRI "core" reporting standard , approved by the Board of Directors on 27 April 2023, 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* SECTION 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.

The Group has adopted accounting and administrative procedures, inspired by the Internal Control System for Financial Reporting governed by Law 262/05, which is being constantly updated and monitored and is currently being adjusted following the adoption of the new accounting and administrative information system

The system used for the formation of the 2023 financial statements comprises:
- identification of the controls that reside in the management processes overseeing the risks on financial disclosure;
- definition of the information flows that must run between the Estra Group's units and the Administration and Financial Statements area;
- 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 (health, safety and environment).

The Company has achieved a significant level of maturity in the completion of the process to define 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.

The Integrated Control and Risk Management System, integrated into the organisational and governing structures, helps to guarantee business conditions in line with the company objectives, in that it makes it possible to identify, assess, manage and monitor the main risks in relation to their ability to influence the achievement of those objectives.

The architecture of the Integrated Control System is formed of three distinct elements, namely:
- the first line, formed of the risk owners of the operating functions, who are the main parties responsible for the internal control and risk management process, must establish and maintain the structures and appropriate processes for internal control and risk management, ensure compliance with the legislation of references, the regulations and the ethical principles and maintain constant dialogue with the governing body, as well as report the forecast, effective or expected results associated with the Group's objectives;
- the second line, formed of company management, provides specific complementary expertise, support and monitoring activities in the management of risk categories, through the development and continuous implementation of the risk management processes at every company level and through analyses and reports on the adequacy and effectiveness of those processes;
- the third line is formed of the Internal Audit function, directly responsible in relation to the governance body. This function is independent to the responsibilities of the management team, it provides objective and independent assurance as well as support and advice to management and to the governing body on the adequacy and effectiveness of the governance and risk management structure (first and second line), reports violations of the independence and objectiveness of the governing body and proceeds to implement the necessary prevention measures.
The risk management framework is structured through the risk model, which identifies the types of existing and emerging risks to which the Group is potentially exposed and is subject to periodic review, the Group's risk appetite, which defines the level of acceptable risk in line with the risk management strategy, and the risk management activities, which ensure an effective oversight of the universe of risks to which the Group is potentially exposed and their management.

The Board of Directors approves the risk policies and measurement parameters, performs a role of guidance and assessment of the adequacy of the internal control and risk management system. The risk management function and the risk owners support the Board of Directors in proposing possible corrective measures and appropriate management strategies.

18. ORGANISATION OF INFORMATION TECHNOLOGY SYSTEMS

The project to replace the current SAP-based ERP (Enterprise Resource Planning) system with NET@SUITE went live on 1 June 2022.
The new information system, which not only integrates all classic company functions typical of an ERP but also the functions of CRM (Customer Relationship Management) and is integrated by a Business Intelligence programme called Qlik-Sense, is current used for the Group companies Centria S.r.l., Estra Energie S.r.l. and Prometeo S.p.A. On the other hand, the remaining Group companies are still managed by the previous information systems (mainly SAP) with a view to a gradual migration over to the new application map of the multiutility.

NET@SUITE is formed of the following modules:

- **Sales System Modules**: modules for the management of energy (gas and electricity) customers on a standard ORACLE database. The NETA-SIU 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. Commercial information system for the management of the gas and energy sales companies. The system is formed of the following integrated native modules:
    - Net@CRM: Module assigned to the management of relational and operational CRM processes, contact and contract management, available to both the Front Office and Back Office channels;
    - Net@SIU: Module assigned to the management of typical functions of the "metering-to-cash" process, i.e. capable of covering business processes pertaining to invoicing, reading management, collection management, arrears and credit recovery, credit management, tax obligations, accounting;
    - Net@hermes: Module assigned to the management of communication with the distribution companies and with Acquirente Unico (Integrated Information System), according to the regulated layouts and in the various methods of communication envisaged (file exchange, A2A);
    - Net@Web: Module that offers a set of self-care services for end customers (display supplies, invoices, insert readings, bill payment, contract requests, etc.), for the web, app and mobile channels;
    - Net@4Sales: Module assigned to the management of acquisition campaigns or contact with end customers, used by the sales force (Agents, Agencies);
    - Net@UDD: Module that enables the management of resellers by "Dispatching Users" (DU): provides specific functions to manage the business of resellers, in terms of communication management as well as management of invoicing and reporting processes;

    - Net@SI: Module that oversees management of CMOR indemnities (incoming and outgoing) and the interaction with the AU Compensation System, for the gas and electricity sales companies (incoming and outgoing) in case of defaulting customers who switched out or are terminated.

- **Distribution system modules**: modules for the management of the management and control processes of the typical procedures of gas distribution companies. The system is formed of the following integrated native modules:
    - Net@2D: software module assigned to the management of the typical processes of a distribution company (gas segment), such as: User requests for distribution regulated by communication standards; meter activity; invoicing; metering; arrears. Net@2D also includes the integrated component with the IIS (Net@SII and Net@Pdc) assigned to the management of communication with Acquirente Unico, according to the layouts envisaged by the technical specifications issued by AU itself, in the envisaged methods of communication (file exchange, delivery points);
    - Net@MDM: software module of Net@Suite assigned to manage the integration of Net@2D with the SAC, but also to allow for a more complete and efficient management of daily metering data, in terms of archiving, validation and selection for transmission to Net@2D;
    - Net@Portal: software module of Net@SUITE assigned to the management of communication with Distribution Users, according to the layouts regulated by the communication standards introduced by Decree Law 185/08, as amended (csv/xml format);
    - Net@A2A: software module assigned to the management of communication with Distribution Users according to the layouts regulated by the communication standards introduced by Decree Law 185/08, as amended, through the application-to-application channel. Database Management: Points of delivery, end customers, sales companies, metering units, plants, networks;
    - Geocall: Basic Geocall module and mobile Geocall module used to manage field activities (workforce management software).

  The system is interfaced with the SAC of the Terranova platform for the management of remotely read meters interfaced to NETA.

- **Accounting system modules**: modules for accounting and administrative management. The system is formed of the following integrated native modules:
    - Net@SIA: Software module of Net@SUITE assigned to the management of Administrative and Tax processes. The module provides for the management of: Tax Documents or Balance Sheet and Consolidated Financial Statements or Assets or Tax Communications;
    - Net@SIL: Software module of Net@SUITE assigned to the management of the procurement process and management of inventories. The module provides for the management of Tenders or Order Proposals or Supplier Register or Purchase Orders or Inventories;
    - Net@CoAn: Software module of Net@SUITE assigned to the management of the Management Control process. The module provides for the management of Final Balances and Reporting or Budget and Variance Reporting;
    - Net@SIGL: Software module of Net@SUITE assigned to the management of accounting of works under contract, already integrated natively with Net@SIAL for the recording of monthly SAL/upon reaching an amount.

- **Cross modules:**
    - Net@INF: infrastructure platform of Net@SUITE that governs all aspects of management and tracking of accesses and the infrastructure services used by the various application components (e.g. workflow services, reporting, scheduling, etc.).

Besides the NETA application indicated above other specialised software programmes are used. A group of these programmes is connected to the NETA 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 NETA 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 NETA or HR module ADP + Microntel on a dedicated platform for the production of payslips and for managing the personnel.

For waste management, specific software was purchased for this sector such as I-Smart by Computer Solution for the operational management of waste, and Infinity by Datalite for integrated accounting with I-Smart.

19. PERSONNEL AND TRAINING

The average workforce in 2023 was 857 employees. The table below shows the numbers by category and the comparison with 2022:

Position	31/12/2023	31/12/2022
Managers	29	26
Office workers and middle managers	629	647
Manual workers	208	208
Total	865	880

858 units were employed at 31 December 2023.

In financial year 2023, in the Estra Group, 26 employees left and 21 new people were hired. The new hires include personnel from the merger by incorporation of Monte Urano Energia S.r.l. into Prometeo S.p.A. in 2023 for a total of 2 people. Recourse to agency workers was mainly necessary to ensure the replacement of personnel absent due to maternity leave or illness as well as for specific peak working periods, in particular for the extraordinary activities of Estra Energie S.r.l., which was awarded the Micro-businesses Incremental Protection Services in Territorial Area 9 Basilicata, Calabria, Bari and Taranto. To cover positions that cannot be filled internally, 6 external hires were made, with the job opening published on the company website.

In 2023, the Estra Group's commitment to growth of professional skills and human capital continued, as did its dissemination in the companies and workplaces, through the design and delivery of mandatory training courses (privacy – Legislative Decree 231 on occupational health and safety) as well as transversal or technical skills development courses (continuous professional development). Total hours of training delivered in 2023 (annual figure) was 26,527, involving 795 employees.

Hours of training		
		2023
Safety	No.	6,514
Organisation and Management Model	No.	210
On-the-job training	No.	2,212
Continuous professional development	No.	17,591
Total	**No.**	**26,527**

Centria S.r.l., the main gas distribution company of the Group, launched an extracurricular internship lasting six months, for 16 young people chosen from Technical Institute diploma holders and graduates in Engineering and Economics. 244 hours of technical training in the classroom and via webinars were delivered by Centria personnel (36 internal teachers involved), in addition to 673 hours of shadowing.

Estra Energie S.r.l. and Prometeo S.p.A., the two main gas and electricity sales companies of the Group, oversaw Customer Service training through its Estra Training technical academy. The training offer in 2023 saw the delivery of 194 topics (e-learning courses and contributions from experts) and 12 webinars.

For more information, refer to the Consolidated Non-Financial Statement.

20. QUALITY, ENVIRONMENT AND SAFETY

To achieve the objectives set on the subject of quality, safety, environment and data protection, during financial year 2023 Estra S.p.A. and the group companies Estra Energie, Prometeo and Estracom focused their activity, through concrete actions, on optimising their management system, via an Integrated System at company level, regarding the UNI EN ISO 9001:2015, UNI EN ISO 14001:2015, UNI ISO 45001:18 and UNI CEI ISO/IEC 27001:2013, ISO/IEC 20000/1 certifications.

The following activities were carried out in 2023

- Internal audit, performed by ESTRA Integrated Management Systems, with report in the Management Review;
- Sending of quarterly flows to the company's SB;
- Environmental Analysis;
- Waste management and compilation of the Single Environmental Declaration Form;
- Quality assessments on management of the Archive, with reporting in the Management Review;
- Management Review;
- Process of preparing the home-work commuting plan of ESTRA S.p.A. and appointment of the company Mobility Manager;
- Inspection, managed by the certification body (DNV), according to the re-certification and/or maintenance process of the systems mentioned below, with a positive outcome.

The certifications for each company are detailed below:

- **Estra S.p.A. -** adoption of an integrated system for UNI EN ISO 9001:2015, UNI EN ISO 14001:2015; UNI EN ISO 45001:18 and UNI CEI ISO/IEC 27001:2013 standards;
- **Estra Energie -** adoption of an integrated system for UNI EN ISO 9001:2015, UNI EN ISO 14001:2015 and UNI EN ISO 45001:18;
- **Promoteo -** adoption of an integrated system for UNI EN ISO 9001:2015, UNI EN ISO 14001:2015 and UNI EN ISO 45001:18;
- **Estracom -** adoption of an integrated system for UNI EN ISO 9001:2015 (with extension to cloud services), UNI EN ISO 14001:2015; UNI EN ISO 45001:18 and UNI CEI ISO/IEC 27001:2013 with extension to guidelines 27017 and 27018; ISO/IEC 20000/1;
- **Centria -** adoption of an integrated system for UNI EN ISO 9001:2015; UNI EN ISO 14001:2015; EMAS Regulation; UNI EN ISO 45001:18; UNI CEI ISO/IEC 27001:2017; SA 8000:2014; as well as UNI CEI EN ISO 50001:2011; UNI EN ISO 3834-2:2006; UNI 11024:2017; UNI EN ISO 18295, UNI ISO 55001:2015; ISO IEC 17025:2018;
- **Estra Clima -** adoption of an integrated system for UNI EN ISO 9001:2015; UNI EN ISO 14001:2015; UNI EN ISO 45001:18; 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; UNI EN ISO 45001:18;
- **Murgia Reti Gas -** adoption of a management system UNI EN ISO 9001:2015, UNI EN ISO 45001:18;
- **Edma Reti Gas –** adoption of an integrated system for UNI EN ISO 9001:2015; UNI EN ISO 14001:2015; EMAS Regulation; UNI EN ISO 45001:18;
- **Ecolat -** adoption of the standards UNI EN ISO 9001:2015, UNI EN ISO 14001:2015; UNI EN ISO 45001:18;
- **Ecos -** adoption of the standards UNI EN ISO 14001:2015; EMAS Regulation; UNI EN ISO 45001:18;
- **Bisenzio Ambiente -** adoption of the standards UNI EN ISO 9001:2015, UNI EN ISO 14001:2015.

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:

- Damage caused to the environment where the company was found guilty in the final judgement;
- Definitive sanctions or penalties imposed on the company for environmental offences or damage.

PERSONAL DATA PROTECTION REGULATION

In 2023, Estra S.p.A. and its subsidiaries maintained a constant commitment to compliance with current privacy legislation, including Privacy Regulation (EU) 679/2016 and Legislative Decree no. 196/2003, guaranteeing correct and secure processing of personal data.
Group DPO and Privacy Function:
The Estra Group appointed a Group Data Protection Officer, as it considered this to be a more effective model of compliance with GDPR. In line with the above, it established a privacy function at the holding, which, by cooperating and communicating with the DPO, ensures a unified Group strategy for personal data protection.
Personal Data Organisation and Management Model:
The Estra Group consolidated its personal data organisation and management model (MOP), clearly identifying the roles and responsibilities within the organisation. This model, in addition to including the figures required by legislation (such as the Data Controller and the Data Protection Officer), clarifying and describing the activities performed by the monitoring roles at company level to strengthen data protection management.
Security Procedures and Measures:
Specific procedures were also defined to govern the main privacy topics, including the storage of personal data, analysis of the risks related to data processing, privacy impact assessments and management of any data breaches. These procedures were made available to workers via the company intranet, thus ensuring a widespread dissemination of information and good practice.
Training and Awareness:
In line with 2022, the Group focused on training and raising the awareness of personnel authorised to process personal data. Targeted training courses were delivered, not only for those in roles with privacy monitoring functions, but also for employees involved in significant activities from the perspective of data protection. This training approach contributes to reinforcing the culture of privacy within the organisation.
Management of Processing and Risk Assessment:
The constant monitoring and updating of Processing Records, envisaged pursuant to art. 30 of the GDPR, is guaranteed by the dedicated function through: precise mapping of personal data processing, purposes, categories of data subjects and recipients, if present, analysis and description of transfers to third countries. The above is supplemented and completed by the assessment of the privacy risks associated with personal data processing. These actions represents one of the key elements of the Group's privacy strategy. In case of high-impact processing, a detailed assessment is carried out, including the analysis of the security measures adopted.
Response to Data Breaches:
In case of a personal data breach, the Group has established a company procedure for the prompt activation of an internal communication flow, intended to collect essential information and analyse the significance of the breach. This process ensures an effective and timely management of any incidents.
Privacy Notices: The Group companies provide data subjects with detailed information about the processing of their personal data through privacy policies delivered directly and through publication on the company websites.
Management of Data Subject Requests:
Requests and complaints from data subjects are managed following a specific procedure by the dedicated company function, which provides for a careful verification and drafting of feedback, in collaboration with the competent internal structures and, where appropriate, with the Data Protection Officer.
Supplier and Subcontractor Relations:
As for the third parties that process personal data on behalf of the Group companies, dedicated agreements are signed for appointment as data controller. Where applicable, a System Administrator (SA) is also appointed. These agreements include obligations and specific instructions that suppliers undertake to follow, ensuring the Group has the possibility to perform checks on compliance with privacy legislation. The procedures also set out pre-contractual privacy qualification activities in order to assess the suitability of the supplier's appointment.
Supplier Privacy Audit:
In line with the previous year, the dedicated function continued its auditing of third parties appointed as external processors, for the purpose of verifying the authenticity of the statements provided upon signing the contract, and the correct application of the instructions and company procedures.

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 2023 the Group performed various research activities in several business segments, also in partnership with Universities, Research Institutes and specialised software production companies.

For a description of the most important initiatives carried out in 2023 please see the Non-Financial Statement.

22. 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, 27 March 2024

for the Board of Directors
The Chairperson
Francesco Macrì

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

Registered office in Via Ugo Panziera, 16- 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
Subject to management and coordination by Alia Servizi Ambientali S.p.A.

CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2023

OFFICERS

Board of Directors

Chairman Francesco Macrì
Vice Chairman Alessandro Fabbrini
Chief Executive Officer Nicola Ciolini
Director Maria Cristina Rossi
Director Daria Orlandi

Board of Statutory Auditors

Rita Pelagotti *(Chairperson)*
Alessandro Mannelli
Athos Vestrini

Independent Auditors

EY S.p.A.

Consolidated financial statements schedules

Consolidated Income Statement

Consolidated Income Statement		Year ended 31 December			
		2023		2022	
(amounts in thousands of euro)	Notes	Amount	of which referring to Related parties (note 15)	Amount	of which referring to Related parties (note 15)
Revenue from sale of goods and services	8.1.1	1,195,704	8,977	1,766,057	3,918
Other operating revenue	8.1.2	26,512	705	12,235	305
Raw materials, ancillary materials and goods	8.2.1	(795,373)		(1,514,145)	
Costs for services	8.2.2	(209,042)	(501)	(103,187)	1,102
Personnel costs	8.2.3	(48,941)	344	(46,595)	594
Depreciation, amortisation, provisions and write-downs	8.2.4	(78,215)		(69,667)	
Other operating costs	8.2.5	(15,769)	(23)	(8,890)	3
Operating profit/(loss)		**74,876**	**9,502**	**35,808**	**5,922**
Financial income	8.3	10,276	235	2,694	292
Financial expenses	8.4	(37,910)	(212)	(14,329)	(193)
Gains or losses on currency conversions		(4)		(3)	
Portion of income/(expenses) from valuation of financial investments using the equity method	8.5	(2,349)		(577)	
Profit before taxes		**44,889**	**9,525**	**23,593**	**6,021**
Income taxes for the year	8.6	(16,710)		(9,203)	
Net profit/(loss) from continuing operations		**28,179**	**9,525**	**14,390**	**6,021**
Net profit/(loss) from discontinued operations / assets held for sale		-		-	
Net profit		**28,179**	**9,525**	**14,390**	**6,021**
Profit/(loss) of non-controlling interests		916		(271)	
Group profit/(loss)		27,263		14,661	

Earnings per share (Note 11)	Year ended 31 December	
	2023	2022
Basic earnings per share ordinary shares	0.12	0.06
Diluted earnings per share ordinary shares	0.12	0.06

Earnings per share from continuing operations (Note 11)	Year ended 31 December	
	2023	2022
Basic earnings per share ordinary shares	0.12	0.06
Diluted earnings per share ordinary shares	0.12	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 Comprehensive Income

Consolidated Statement of other Comprehensive Income (amounts in thousands of euro)	**Notes**	**31/12/2023**	**31/12/2022**
Net profit		**28,179**	**14,390**
of which:			
Profit/(loss) of non-controlling interests		*916*	*(271)*
Group profit/(loss)		*27,263*	*14,661*
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**	**(1,735)**	**8,571**
- Gains (losses) for the year from measurement		*(2,283)*	*11,278*
- Taxes		*548*	*(2,707)*
Total other comprehensive income components that will subsequently be reclassified under profit/loss for the year (net of taxes)		**(1,735)**	**8,571**
Other comprehensive income components that will not subsequently be reclassified under profit/loss for the year (net of taxes)			
Actuarial gains/(losses)	**9.2**	**(123)**	**1,254**
- Actuarial gains/(losses)		*(162)*	*1,650*
- Taxes		*39*	*(396)*
Total other comprehensive income components that will not subsequently be reclassified under profit/loss for the year (net of taxes):		**(123)**	**1,254**
Total other comprehensive income components net of taxes	**9**	**(1,858)**	**9,825**
of which:			
related to minority interests		*4*	*85*
related to the Group		*(1,862)*	*9,740*
Result of comprehensive income statement		**26,322**	**24,216**
of which:			
Net comprehensive result minority interests		*920*	*(186)*
Net comprehensive result Group		*25,400*	*24,401*

Statement of consolidated financial position

Statement of consolidated financial position	Notes	Year ended 31 December			
		2023		2022	
(amounts in thousands of euro)		Amount	of which referring to Related parties (note 14)	Amount	of which referring to Related parties (note 14)
Property, plant and equipment	**10.1.1**	134,370		141,147	
Goodwill	**10.1.3**	35,496		35,496	
Intangible assets	**10.1.5**	516,932		498,719	
Equity investments	**10.1.6**	20,933	20,933	24,139	24,139
Other non-current financial assets	**10.1.7**	10,289	4,873	12,289	2,184
Other non-current assets	**10.1.8**	2,464	529	3,137	522
Deferred tax assets	**10.1.9**	73,705		69,991	
NON-CURRENT ASSETS		**794,189**	**26,335**	**784,919**	**26,845**
Inventories	**10.2.1**	16,632		41,166	
Trade receivables	**10.2.2**	395,602	8,751	442,369	8,155
Current tax assets	**10.2.3**	9,263		7,235	
Other current assets	**10.2.4**	131,666		228,479	
Other current financial assets	**10.2.5**	3,207		25,442	
Cash and cash equivalents	**10.2.6**	157,915		345,872	
CURRENT ASSETS		**714286**	**8,751**	**1,090,563**	**8,155**
Assets held for sale		**-**		**-**	
TOTAL ASSETS		**1,508,475**	**35,086**	**1,875,482**	**35,000**
Share capital		228,334		228,334	
Reserves		138,329		136,585	
Group profit (loss) for the year		27,263		14,661	
Total Group Shareholders' Equity		**393,926**		**379,581**	
Capital and reserves attributable to non-controlling interests		42,874		43,940	
Profit (loss) attributable to non-controlling interests		916		-271	
Total Shareholders' Equity attributable to non-controlling interests		**43,789**		**43,669**	
TOTAL SHAREHOLDERS' EQUITY	**10.3**	**437,715**		**423,249**	
Provisions for risks and charges	**10.4.1**	16,032		11,053	
Employee severance indemnity	**10.4.2**	7,801		7,634	
Non-current portion of medium/long-term loans	**10.4.3**	407,232	9,476	514,082	13,107
Deferred tax liabilities	**10.4.4**	25,656		27,516	
Other non-current liabilities	**10.4.5**	19,360		17,211	
Contractual liabilities	**10.4.6**	26,743		26,145	
NON-CURRENT LIABILITIES		**502,824**	**9,476**	**603,642**	**13,107**
Current portion of medium/long-term loans	**10.4.3**	192,920	3,463	151,882	3,493
Short-term borrowings	**10.5.1**	7,259		44,681	
Trade payables	**10.5.2**	278,318	1,067	522,953	593
Contractual liabilities	**10.4.6**	1,220		944	
Current tax liabilities	**10.5.3**	17,369		2,411	
Other current liabilities	**10.5.4**	69,823	-	113,088	16,000
Other current financial liabilities	**10.2.5**	1,026		12,632	
CURRENT LIABILITIES		**567,934**	**4,531**	**848,590**	**20,086**
Liabilities directly associated with assets held for sale		**-**		**-**	
TOTAL LIABILITIES and Shareholders' Equity		**1,508,474**	**14,007**	**1,875,482**	**33,193**

Statement of changes to consolidated shareholders’ equity

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 non-controlling interests**	**Total Shareholders’ Equity**
Balances at 31 December 2021	**228,334**	**26,156**	**10,409**	**(6,519)**	**(189)**	**80,374**	**32,725**	**371,290**	**41,735**	**413,025**
Allocation of 2021 profit										
- *Consolidated profit for the previous year*			886			15,839	(16,725)			
- *Dividends*							(16,000)	**(16,000)**	(1,014)	**(17,014)**
Other changes					-	*(111)*		**(111)**	3,133	**3,023**
Result of income statement							14,661	14,661	(271)	14,391
Other comprehensive income				8,571	1,169			9,740	85	9,825
Balances at 31 December 2022	**228,334**	**26,156**	**11,295**	**2,052**	**980**	**96,102**	**14,661**	379,581	**43,669**	423,249
Allocation of 2022 profit										
- *Consolidated profit for the previous year*			1,156			2,499	(3,656)			
- *Dividends*							(11,006)	**(11,006)**	(849)	**(11,855)**
Other changes						*(50)*		**(50)**	50	**0**
Result of income statement							27,263	**27,263**	916	**28,179**
Other comprehensive income				(1,735)	(127)			**(1,862)**	4	**(1,858)**
Balances at 31 December 2023	**228,334**	**26,156**	**12,452**	**317**	**853**	**98,552**	**27,263**	**393,926**	**43,789**	**437,715**

Consolidated cash flow statement

	Consolidated cash flow statement (amounts in thousands of euro)	Notes	Year ended 31 December 2023	2022
	Profit (loss) for the year		28,179	14,390
	Income taxes	**8.8**	16,710	9,203
	Interest expense (income)	**8.5- 8.6**	27,634	11,635
	(Gains) Losses from the sale of assets	**8.2.5 – 8.2.1**	2,333	933
	Profit for the year before taxes, interest, dividends and (gains)/losses		**74,857**	**36,161**
	Depreciation/amortisation of tangible and intangible assets	**8.2.4**	61,264	55,321
	Write-downs of tangible and intangible assets	**8.2.4**	5,021	600
	Portion of contributions to financing for investments	**8.1.2**	(2,444)	(2,544)
	Fair value changes recognised in operating profit/(loss)	**8.3**	2,811	2,224
	Write-downs (revaluations) of investments	**8.4 -8.7**	2,406	577
	Write-down of other financial assets	**8.9**	-	-
	Employee severance indemnity provision	**8.2.3**	568	499
	Allocations/(reversals) to provisions for risks and other allocations	**8.2.4 – 8.2.5**	5,980	1,419
	Cash flows before changes in net working capital and other assets and liabilities		**150,462**	**94,257**
	Changes to trade receivables	**10.2.2**	47,491	(34,853)
	Changes to inventories	**10.2.1**	24,534	(27,326)
	Changes to trade payables	**10.5.2**	(245,124)	141,041
	Changes in other current assets and liabilities	**10.2.4 – 10.5.4**	71,837	(153,645)
	Change in current tax assets and liabilities	**10.2.3 – 10.5.3**	(1,797)	1,042
	Change in employee severance indemnity (net of allocation)	**10.4.2**	(581)	(643)
	Cash flows after changes in net working capital and other changes		**46,823**	**19,873**
	Interest received		10,276	2,694
	Interest paid		(35,268)	(14,114)
	Taxes paid		(7,582)	(19,742)
	Utilisation of provisions		(1,026)	(1,011)
A	**Cash flows from operating activities**		**13,222**	**(12,300)**
	of which with related parties		**9,403**	**534**
	Investments in tangible assets	**10.1.1**	(8,883)	(5,906)
	Investments in intangible assets	**10.1.5**	(66,111).	(47,534)
	Divestment of tangible and intangible assets	**10.1.1 – 10.1.5**	730	(5,237)
	(Investments)/divestments of equity investments	**10.1.6**	-	(6,521)
	Dividends received from equity-accounted companies	**10.1.6**	41	81
	Divestments of assets held for sale/ disposal		-	11
	(Acquisition) or disposal of subsidiaries net of cash and cash equivalents	**7.2**	(853)	(7,271)
	Other changes from investment activities		(6)	-
B	**Cash flows from investment activities**		**(75,081)**	**(72,377)**
	of which with related parties		**-**	**-**
	Increases/(decreases) in non-current financial assets and liabilities	**10.1.7 – 10.4.6**	2,001	1,629
	Increases/(decreases) in current financial assets and liabilities	**10.2.5**	5,536	(1,375)
	Increases/(decreases) in other non-current assets and liabilities	**10.1.8 – 10.4.5**	3,555	1,708
	Increase (decrease) in short-term bank loans	**10.5.1**	(37,548)	587
	Opening of new bank loans	**10.4.3**	132,300	519,700
	Opening of new shareholder loans	**10.4.3**	-	1,000
	Repayment of bank loans	**10.4.3**	(177,323)	(78,673)
	Buy back bond loans	**10.4.3**	(20,000)	(127,200)
	Repayment of shareholder loans	**10.4.3**	(1,602)	(1,435)
	Repayment of other lenders	**10.4.3**	-	(363)
	Repayment of lease liabilities	**10.4.3**	(4,882)	(4,776)
	Opening loan expenses	**10.4.3**	(279)	(6,687)
	Other changes	**10.3**	-	16
	Capital increase payments in subsidiaries of third-party shareholders	**10.3**	-	1,825
	Payment of dividends to Parent Company shareholders	**10.3**	(27,006)	(17,500)
	Payment of dividends to third parties	**10.3**	(849)	(1,014)
C	**Cash flows from financing activities**		**(126,098)**	**287,442**
	of which with related parties		**(28,608)**	**(10,686)**
	Increase (decrease) in liquidity (A+B+C)		**(187,957)**	**202,765**
D	**Cash and cash equivalents at 1 January**		**345,872**	**143,107**
E	**Cash and cash equivalents at 31 December**		**157,915**	**345,872**

Explanatory Notes

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 Note 4 Business Segments, whereas information on the Group structure is found in Note 6 Group information. Information on the Group's interaction with related parties is provided in Note 15 Transactions with related parties.

The consolidated financial statements for the year ended 31 December 2023 were submitted for the approval of the Company's Board of Directors on 27/04/2023.

Direction and coordination

In the second half of the current year, Estra S.p.A. was subject to the Direction and Coordination pursuant to articles 2497 sexies and 2497 septies of the Italian Civil Code by Alia Servizi Ambientali S.p.A., with registered office in Florence, Via Baccio da Montelupo no. 52, parent company pursuant to art. 2359, no. 2) of the Italian Civil Code, as a result of statutory clauses and agreements signed with the shareholder Coingas S.p.A.

With reference to information related to transactions entered into with party that exercises the Direction and Coordination and with the other companies subject to it, please refer to the information given in the dedicated paragraph in the note on related-party transactions.

In accordance with the provisions of art. 2497-bis, paragraph 4 of the Italian Civil Code, see below for the essential figures of the financial statements at 31 December 2022 and 2021 (in thousands of Euro) of the parent company Alia Servizi Ambientali S.p.A.

Description	2022	2021
Non-current assets	546,616	273,049
Current assets	159,099	156,542
Total assets	**705,715**	**429,591**
Shareholders' equity	367,578	166,602
Non-current liabilities	200,876	101,787
Current liabilities	137,262	161,202
Total Liabilities	**705,715**	**429,591**
Revenue	377,676	342,937
Operating profit/(loss)	30,654	12,184
Financial management	-2,326	-22
Profit before income tax	28,329	12,162
Net profit	**20,650**	**8,475**

For an adequate and complete understanding of the equity and financial position of Alia Servizi Ambientali S.p.A. at 31 December 2022, as well as the economic result achieved by the company in the financial year ended at that date, please read the financial statements, which, accompanied by the independent auditors' report, are available in the forms and methods envisaged by law.

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 schedules

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.

The cash flow statement is prepared using the indirect method, as permitted by IAS 7, and is presented grouped by cash flow category. Cash and cash equivalents included in the Cash Flow Statement include the balance sheet figures of such items at the reporting date. Income and costs related to interest, dividends received and income tax are included in the cash flows generated by operations.

The statement of changes to Shareholders' Equity is presented as required by international accounting standards, with separate evidence of the operating result and all revenue, income, expense and expenditure not recorded in the income statement or comprehensive income statement, but recognised directly in Shareholders' Equity on the basis of specific IAS/IFRS accounting standards.

For a better representation, the item "Income/(expenses) from commodity risk management", initially shown separately in the income statement, has been reclassified into the item "Raw materials, ancillary materials and goods" with a separate disclosure in the explanatory notes. As described in the paragraph on the accounting standards applied, the item includes revenues, net of related purchase costs, deriving from trading operations that do not meet the so-called "own use exemption" but which require the physical delivery of the natural gas sold, and the sales and purchase obligations at the reporting date, in respect of which the delivery of the physical gas has not yet occurred and measured at "fair value through profit & loss" in accordance with IFRS 9.

The reclassification was also carried out on the comparative data at 31 December 2023.

2.3 Consolidation criteria

The Consolidated Financial Statements include the financial statements of Estra S.p.A and its subsidiaries at 31 December 2023 and 2022.

Control is achieved when the Group is exposed or is entitled to variable returns, deriving from its relationship with the investee 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 infragroup 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 main accounting criteria

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 IFRS 9 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) Equity investments in associates 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 equity investments in associates or joint ventures have 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 recognised value of the latter in its own financial statements, recognising this difference in the Income Statement under "attributable share of profit/(loss) of associates and joint ventures".

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;
- it 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
- it 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;
- it 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 methods, discretionary assessments and significant accounting estimates: Note 3 Discretionary assessments and significant accounting estimates;
- Quantitative information on the fair value measurement hierarchy: Note 10.5.5 Financial instruments and measurement at fair value;
- Financial Instruments (including those measured at amortised cost): Note 10.5.5 Financial instruments and measurement at fair value;

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 disposal of goods and services

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:

1. Sale of goods

Revenue is recognised when the entity has transferred control of the goods to the buyer, which generally occurs on the date of delivery of the goods.
Revenue from the sale of electricity and gas is recognised and accounted for at the time of providing the supply, recorded according to a predetermined calendar for consumption readings, and at the end of the period, includes the estimate for the supply of gas and electricity provided to final 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.

2. Provision 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.

3. Revenue from trading

Revenue from trading in natural gas is recognised as follows:

- Revenue from trading transactions that meet the so-called "own use exemption" 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 exemption", 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. These revenues are accounted for net of the related purchase costs in the income statement item "Raw materials, ancillary materials and goods" with a separate disclosure in the explanatory notes.
  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 (FVTPL) in accordance with IFRS 9, and recorded in the income statement under "Raw materials, ancillary materials and goods" with a separate disclosure in the explanatory notes. See also note n) on derivative instruments in this regard.

4. 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.

5. 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.

6. Contractual 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.

7. 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, 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 respect of deductible temporary differences associated with investments in subsidiaries, associates and joint ventures, deferred tax assets are recognised only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilized.

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) **Uncertainty on treatments for income tax purposes**

In the definition of uncertainty it is considered whether a given tax treatment will be acceptable to the Tax Authority. If it is considered probable that the tax authority will accept the tax treatment (the term probable is understood as "more probable than not"), the Group recognises and measures its current or deferred tax assets and liabilities applying the rules of IAS 12.
Conversely, if there is uncertainty on treatments for income tax purposes, the Group reflects the effect of this uncertainty making use of the method that best provides for resolution of the uncertain tax treatment. The Group decides whether to take into consideration each uncertain tax treatment separately or jointly with one or more uncertain tax treatments, choosing the approach that best provides for the solution of the uncertainty. In assessing whether and in what way the uncertainty affects the tax treatment, the Group assumes that the Tax Authority will or will not accept an uncertain tax treatment presuming that the same, in the audit stage, will check the amounts that it has the right to examine and that it will be completely cognisant of all the related information. When it concludes that it is not probable that the tax authority will accept an uncertain tax treatment, the Group reflects the effect of this uncertainty in determining the current and deferred taxes, using the method of the expected value or the most probable amount, according to which method better provides for the solution of the uncertainty.
The Group makes significant use of professional judgement in identifying the solution of the uncertainties on treatments for income tax purposes and re-examines the judgements and estimates made in the presence of a change in the facts and circumstances that modify its forecasts on the acceptability of a certain tax treatment or the estimates made on the effects of the uncertainty, or both.
As the uncertain tax positions refer to the definition of income taxes, the Group presents uncertain tax assets/liabilities as current or deferred taxes.

j) 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.

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) Property, plant and equipment

Property, plant and equipment are entered at purchase or production cost inclusive of ancillary expenses, or at the amount based on an expert's appraisal of the company's assets in the case of business acquisitions, and is shown net of depreciation and any impairment. 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 are included in the plant or machinery's carrying amount, 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 amount of intangible assets is subject to a test to assess whether there has been any impairment, in particular when events or changes indicate that the carrying amount 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
Waste selection - Plant	25 years

With regard to the remaining asset categories, the depreciation 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.

n) Leases

At the time of signing a contract, the Group assesses whether or not it contains a lease. In other words, whether the contract confers the right of use of an identified asset over a period of time, in exchange for a fee.

The Group only operates as a lessee, adopting a single model to recognise and measure all leases, excluding short-term leases and the leases for low-value assets. The Group recognises liabilities relating to lease payments and assets for the right of use, which represents the right to utilise the asset underlying the contract.

Right-of-use assets

The Group recognises right-of-use assets from the date the lease starts (i.e. the date when the underlying asset is available for use). Right-of-use assets are measured at cost, net of cumulative amortisations and impairments, and adjusted for any redetermined lease liabilities. The cost of the right-for-use assets includes the amount for the recognised lease liabilities, the initial direct costs incurred and lease payments made at the start date or prior to the start, net of any incentives received. Right-of-use assets are amortised in equal portions from the effective date until the end of the assets' useful life, corresponding to its right of use, or if earlier, at the end of the lease term.

If the lease transfers ownership of the underlying asset to the lessee at the end of the lease term, or if the cost of the asset corresponding to the right of use reflects the fact that the lessee will exercise the option to purchase, the lessee shall amortise the asset consisting of the right-of-use from the effective date until the end of the underlying asset's useful life.
Right-of-use assets are subject to impairment. Reference is made to the section "Impairment of non-financial assets".

Lease related liabilities

At the effective date of the lease, the Group recognises the lease liability, measuring it at the current value of the payments in respect of the lease that are unpaid at that date. The payments include the fixed payments (including basic fixed payments), net of any lease incentives to be received, the variable lease payments that are dependent on an index or rate, and the amounts to be paid by way of a guarantee or residual value. Lease payments also include the exercise price of the purchase option, if the lessee is reasonably certain that this option will be exercised by the Group, and the payment of any penalties to terminate the lease, if the lease term takes into account the Group exercising the option to terminate the lease.
Variable lease payments that are not dependant on an index or rate are recognised as costs over the period (unless there were incurred to produce inventories) when the event or the condition generating the payment occurred.

o) 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.

p) 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.
Gains or losses deriving from the elimination of an intangible asset are measured by the difference between the net revenue from the disposal (at the date when the purchaser gains control) and the carrying amount of the intangible asset, and are recognised in the Income Statement in the period in which the elimination takes place.
Gains or losses deriving from the sale of an intangible asset are determined as the difference between the disposal value and the carrying amount of the asset, and are recognised in the income statement at the moment when the risks and benefits associated with ownership of the asset are transferred to the purchaser.

Patents and licences

These are 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.

a) Financial instruments - Recognition and measurement

A financial instrument is any contract that gives rise to a financial asset for an entity and a to financial liability or an equity instrument for another entity.

b) Financial assets

Initial recognition and measurement

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 not 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.

In order for a financial asset to be classified and measured at amortised cost or at fair value through OCI, it must generate cash 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 is referred to as a SPPI test and is conducted at instrument level. Financial assets with cash flows that do not meet the requisites indicated above (e.g. SPPI) are classified and measured at fair value through profit or loss.
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.
Financial assets classified and measured at amortised cost are held in the context of a business model whose objective is the possession of financial assets for the purpose of collecting contractual cash flows, while financial assets classified and measured at fair value through OCI are held in the context of a business model whose objective is achieved both through collecting contractual cash flows and through sale of the financial assets.
The purchase or sale of a financial asset that requires delivery within a time period generally set according to regulations or market practice (i.e. regular way trade) is recognised at the trade date, i.e. the date on which the Group has undertaken to buy or sell the asset.

Subsequent measurement

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.

Financial assets at amortised cost (debt instruments)
Financial assets at amortised cost are subsequently measured using the effective interest criterion and are subject to impairment. Profit and loss are 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.

Financial assets at fair value through OCI (debt instruments)
For assets from debt instruments measured at fair value through OCI, the interest income, the changes owing to exchange differences and write-downs, together with write-backs, are recognised in the income statement and are calculated in the same way as financial assets measured at amortised cost. The remaining fair value changes are recognised in OCI. At the moment of elimination, the cumulative fair value change recognised in OCI is reclassified in the income statement.
The Group's assets from debt instruments measured at fair value through OCI include investments in listed debt instruments included in other non-current financial assets.

Investments in equity instruments
At the moment of initial recognition, the Group may irrevocably choose to classify its investments in shares as equity instruments recognised at fair value through OCI when they meet the definition of equity instruments under the terms of IAS 32 "Financial Instruments: Presentation" and are not held for trading. The classification is determined for each individual instrument.
Gains and losses made on these financial assets are never booked to the Income Statement. Dividends are recognised as other revenue in the income statement when the right to payment has been resolved, except when the Group benefits from this income as a recovery of part of the cost of the financial asset, in which case these gains are recognised in OCI. Equity instruments recognised at fair value through OCI are not subject to impairment tests.

Financial assets at fair value recognised in the income statement
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.

This category includes derivative instruments and listed equity investments that the Group has not chosen irrevocably to classify at fair value through OCI. Dividends on listed equity investments are recognised as other income in the statement of profit/(loss) for the year when the right to payment has been established.
Embedded derivatives contained in a non-derivative hybrid contract, in a financial liability or a non-financial principal contract, are separated from the principal contract and recognised as separate derivatives, if: their 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 through profit or loss.

Derecognition

A financial asset (or, where applicable, part of a financial asset or part of a group of similar financial assets) is derecognised firstly (i.e. removed from the Group's statement of financial position) when:

- the rights to receive cash flows from the asset are extinguished, or
- the Group has transferred to a third party the right to receive cash flows from the asset or has assumed the contractual obligation to pay them entirely and without delay and (a) has substantially transferred all the risks and benefits of ownership of the financial asset; or (b) has not transferred nor substantially kept all the risks and benefits of the asset, but has transferred control thereof.

If the Group has transferred the rights to receive cash flows from an asset or has signed an agreement on the basis of which it maintains the contractual rights to receive the cash flows of the financial asset, but assumes a contractual obligation to pay the cash flows to one or more beneficiaries (pass-through), it assesses whether and to what extent it has kept the risks and benefits related to possession. If it has not either transferred or substantially kept all the risks and benefits of the asset or has not lost control thereof, the asset continues to be recognised in the Group's financial statements to the extent of its residual involvement in the said asset. In this case, the Group also recognises an associated liability. The asset transferred and the associated liability are measured so as to reflect the rights and obligations that remain pertinent to the Group.
When the residual involvement of the entity is a guarantee on the asset transferred, the involvement is measured on the basis of the lower between the amount of the asset and the maximum amount of the price received that the entity may have to repay.

Impairment

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.

For assets represented by debt instruments measured at fair value through OCI, the Group applies the simplified approach permitted for assets with low credit risk. At each reporting date, the Group assesses whether it believes that the debt instrument has a low credit risk using all the available information that can be obtained without excessive costs or efforts. In carrying out this assessment, the Group monitors the creditworthiness of the debt instrument. In addition, the Group assumes that there has been a significant increase in credit risk when contractual payment are past due for more than 60 days.

A financial asset is eliminated when there is no reasonable expectation of recovering the contract-based financial flows.

c) Financial liabilities

Initial recognition assessment

Financial liabilities are classified, at the moment of initial recognition, among financial liabilities at fair value through profit or loss, among loans and financing, or among derivatives designated as hedging instruments.
All financial liabilities are recognised initially at fair value to which are added, in the case of loans, financing and payables, the transaction costs directly attributable to them.
The Group's financial liabilities include trade payables and other payables, loans and financing, including current account overdrafts and derivative financial instruments.

Subsequent measurement

For the purposes of subsequent measurement financial liabilities are classified into two categories:

- Financial liabilities at fair value through profit or loss
- Financial liabilities at amortised cost (financing and loans)

Financial liabilities at fair value through profit or loss
Financial liabilities at fair value through profit or loss include liabilities held for trading and financial liabilities initially recognised at fair value through profit or loss.
Liabilities held for trading are all those assumed with the intention of extinguishing them or transferring them in the short term. This category includes in addition derivative financial instruments subscribed by the Group that are not designated as hedging instruments in a hedging relationship defined by IFRS 9. Embedded derivatives, separated from the main contract, are classified as financial instruments held for trading, unless they are designated as effective hedging instruments.
Gains or losses on liabilities held for trading are recognised in the statement of profit/(loss) for the year.
Financial liabilities are designated at fair value through profit or loss from the date of first recognition, only if the criteria of IFRS 9 are met.

Financial liabilities at amortised cost (financing and loans)
This is the category most significant for the Group. After initial recognition, loans are measured with the amortised cost criterion using the effective interest rate method. The gains and losses are accounted for in the income statement when the liability is extinguished, as well as through the amortisation process.
The amortised cost is calculated recognising the premium on acquisition and the fees and costs that are an integral part of the effective interest rate. The amortisation at the effective interest rate is included among financial expenses in the statement of profit/(loss).
This category generally includes interest-bearing loans and receivables.

Derecognition

A financial liability is derecognised when the obligation underlying the liability is extinguished, cancelled or fulfilled. When an existing financial liability is replaced by another from the same provider, with substantially different conditions, or the conditions of an existing liability are substantially amended, this exchange or amendment is treated as an accounting derecognition of the original liability, accompanied by the recognition of a new liability, with any differences in the carrying amounts recorded in the statement of profit/(loss) for the year.

Offsetting of financial instruments

A financial asset and a financial liability can be offset and the net balance presented in the statement of financial position, if there is a current legal right to offset the amounts recognised in the accounts and there is the intention to extinguish the net residue, or to realise the asset and at the same time extinguish the liability.

d) Derivative financial instruments and hedge accounting

Initial recognition and subsequent measurement

The Group uses derivative financial instruments including: currency forward contracts, interest rate swaps and forward contracts for the purchase of commodities to hedge, respectively, its exchange rate risks, interest rate risks and commodity price risks. These derivative financial instruments are initially recognised at fair value at the date in which the derivative contract is signed and, subsequently, they are measured at fair value. Derivatives are accounted for as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

For hedge accounting purposes, hedges are of three types:
- fair value hedges in the case of hedging of the exposure against changes in the fair value of the asset or liability recognised or irrevocable commitment not recognised;
- cash flow hedges in the case of hedging of the exposure against changes in the cash flows attributable to a particular risk associated with all the assets or liabilities recognised or with a highly probable planned operation or the foreign currency risk on irrevocable commitment not recognised;
- hedging of a net investment in a foreign operation.

At the beginning of a hedging operation, the Group designates and formally documents the hedging relationship, to which it intends to apply hedge accounting, its risk management objectives and the strategy pursued.
The hedging relationship meets the criteria of admissibility for hedge accounting if it meets all the following hedging effectiveness requirements:
- there is an economic relationship between the hedged item and the hedging instrument;
- the effect of credit risk does not prevail over the changes in value resulting from the said economic relationship;
- the hedging ratio of the economic relationship is the same as that resulting from the quantity of the hedged item that the Group effectively hedges and from the quantity of the hedging instrument that the Group uses effectively to hedge this quantity of hedged item.

The operations that meet all the qualifying criteria for hedge accounting are accounted for as follows:

Fair value hedges
The change in fair value of hedging derivatives is recognised in the statement of profit/(loss) for the year among other costs. The change in fair value of the hedged item attributable to the risk hedged is recognised as part of the carrying amount of the hedged item and is also recognised in the statement of profit/(loss) for the year among other costs.
As regards fair value hedges referred to items accounted for according to the criterion of amortised cost, each adjustment of the carrying amount is amortised in the statement of profit/(loss) for the year along the residual period of the hedging using the effective interest rate (EIR) method. The amortisation thus determined can begin as soon as there is an adjustment but cannot extend beyond the date in which the hedged item ceases to be adjusted as a result of the changes in fair value attributable to the risk hedged.
If the hedged item is derecognised, the unamortised fair value is recognised immediately in the statement of profit/(loss) for the year.
When an unrecognised irrevocable commitment is designated as a hedged item, the subsequent cumulative changes in its fair value attributable to the risk hedged are accounted for as assets or liabilities and the corresponding gains or losses recognised in the statement of profit/(loss) for the year.

Cash flow hedges
The portion of gain or loss on the hedged instrument, related to the part of effective hedging, is recognised in the statement of other comprehensive income in the “cash flow hedge” reserve, while the ineffective part is recognised

directly in the statement of profit/(loss) for the year. The cash flow hedge reserve is adjusted to the lower between the cumulative gain or loss on the hedging instrument and the cumulative change in the fair value of the hedged item.
The Group uses forward currency contracts to hedge its exposure to exchange rate risk related both to planned transactions and to commitments already established; in the same way, it uses forward commodity contracts to hedge against the volatility of commodity prices. The ineffective part of forward currency contracts is recognised in other costs and the ineffective part of forward commodity contracts is recognised among other operating costs or income.
The Group designates only the spot component of forward contracts as a hedging instrument. The forward component is cumulatively recognised in OCI in a separate item.
The amounts accumulated among other comprehensive income are accounted for, according to the nature of the underlying hedged transaction. If the hedged operation subsequently entails the recognition of a non-financial component, the amount accumulated in shareholders' equity is removed from the separate component of shareholders' equity and included in the cost value or other carrying amount of the hedged asset or liability. This is not considered a reclassification of the items recognised in OCI for the period. This is valid also in the case of a hedged planned operation of a non-financial asset or a non-financial liability that subsequently becomes an irrevocable commitment to which the accounting of fair value hedging operations applies.
For any other cash flow hedging, the amount accumulated in OCI is reclassified to the income statement as an adjustment from reclassification in the same period or in the periods during which the hedged cash flows impact the income statement.
If the cash flow hedge accounting is interrupted, the amount accumulated in OCI must remain such if it is expected that the hedged future cash flows will occur. Otherwise, the amount must immediately be reclassified in profit/(loss) for the year as a reclassification adjustment. After the suspension, once the hedged cash flow occurs, any remaining amount accumulated in OCI must be accounted for according to the nature of the underlying transaction as described above.

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 entered into for the purpose of hedging 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. Derivative changes in fair value that meet the IFRS 9 requirements to qualify as hedging instruments are recognised in a specific shareholders' equity reserve, called the "Cash flow hedge reserve". Changes to the fair value that do not meet the conditions, including formal ones, required by IFRS 9 to qualify as hedging instruments are recognised in the Income Statement.
- Commodity forward 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 IFRS 9 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 "Raw materials, ancillary materials and goods" with a separate disclosure in the explanatory notes;
  - Forward contracts used in the marketing of gas, not falling within the scope of application of IFRS 9, 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.

Further information is contained in the paragraph of the notes to the statements "Objectives and criteria for financial risk management - Risks associated with commodity prices".

e) 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.

f) Environmental securities: White certificates

The Group only holds Energy Efficiency Certificates (EECs) for own-use, i.e. in relation to its own requirements (Industrial Portfolio), whereas it holds no units/certificates for trading purposes (Trading Portfolio).
EECs 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 EECs that have not yet been acquired (to meet the year obligation) for the difference between the contribution value and market value of the EECs. The provision is recorded under "Other operating costs".

Accounting treatment according to the IFRS is the "Net liabilities approach", based on which the EEC purchase costs are recognised under "Other operating costs" at the time of purchase, whereas the contribution (ARERA/GSE) relating to cancelled EECs is recorded under "Other revenue and income" at the time of effective collection. The EECs 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].

g) 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.

h) 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.

i) 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.

j) Post-employment benefits

The employee severance indemnity (TFR) and pension funds are determined applying an actuarial methodology; 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

The Group has applied the standards or changes for the first that had come into effect from 1 January 2023. The Group has not adopted in advance any new standards, interpretations or amendments issued but not yet in force.

Standards or amendments in force from 1 January 2023

IFRS 17 – Insurance contracts
In May 2017, the IASB issued IFRS 17 Insurance Contracts, a new accounting standard for insurance contracts that covers recognition and measurement, presentation and disclosure. IFRS 17 replaces IFRS 4 Insurance Contracts issued in 2005. IFRS 17 applies to all insurance contracts (e.g. life, non-life, direct insurance, and re-insurance), irrespective of the type of entity that issues them, as well as some guarantees and financial instruments with discretionary participation features; certain exceptions to the scope of application are applicable. The general objective of IFRS 17 is to provide an accounting model for insurance contracts that is more useful and consistent for insurers. In contrast with the requirements of IFRS 4, which are largely based on maintaining the previous local accounting standards, IFRS 17 provides a complete model for insurance contracts that covers all significant accounting aspects. IFRS 17 is based on a general model, supplemented by:
- A specific adaptation for contracts with direct participation features (the variable fee approach);
- A simplified approach (the premium allocation approach) mainly for short-term contracts.

These amendments did not have any impact on the Group's consolidated financial statements.

Definition of Accounting Estimates – Amendments to IAS 8
Amendments to IAS 8 clarify the distinction between changes in accounting estimates, changes in accounting standards and correction of errors. They also clarify how entities use the measurement methods and inputs to develop the accounting estimates.
These amendments did not have any impact on the Group's consolidated financial statements.

Disclosure of Accounting Policies – Amendments to IAS 1 and IFRS Practice Statement 2
The amendments to IAS 1 and IFRS Practice Statement 2 Making Materiality Judgements provide indications and examples to help entities apply materiality judgements to the disclosure on accounting standards. The amendments aim to help entities provide more useful information about accounting standards by replacing the obligation for entities to disclose their "significant" accounting standards with the obligation to disclose their "material" accounting standards and by adding a guide on how entities should apply the concept of materiality when making decisions about the disclosure on accounting standards.
These amendments did not have any impact on the Group's consolidated financial statements.

Deferred Tax related to Assets and Liabilities arising from a Single Transaction – Amendments to IAS 12
The amendments to IAS 12 Income Taxes restrict the scope of application of the exemption to initial reporting, so that it no longer applies to the transactions that give rise to temporary taxable differences and deductible in equal measure such as leases and liabilities for disposals.
These amendments did not have any impact on the Group's consolidated financial statements.

International Tax Reform – Pillar Two Model Rules – Amendments to IAS 12
The amendments to IAS 12 were introduced to respond to the BEPS Pillar Two Rules of the OECD and include:
- A temporary mandatory exemption on the disclosure and reporting requirements for deferred taxes that derive from implementation in the jurisdictions of the Pillar Two Rules; and
- Reporting requirements for entities involved to help financial statements users to better understand the impacts on income tax deriving from this legislation, in particular before the effective date of entry into force.

The temporary mandatory exemption – use of which must be disclosed – is immediately applicable. The remaining reporting requirements apply for financial years beginning on or after 1 January 2023, but not for the interim periods before 31 December 2023.

The amendment has no impact on the consolidated financial statements of the Group since the Group is not involved in the Pillar Two Rules because it only operates in Italy.

Standards or amendments issued and not yet in force at the reporting date of 31 December 2023

On 29 September, the "**Amendments to the IFRS for SMEs Accounting Standard**" were published, to align the requirements of the standard with the similar amendments to IAS 12 "Income Taxes" mentioned above. On 25 May 2023, the International Accounting Standards Board (IASB) published "**Supplier Finance Arrangements (Amendments to IAS 7 and IFRS 7)**", an amendment to be applied in the presence of agreements that provide for loans to suppliers, for the purpose of requesting from the financing party further qualitative and quantitative information to be provided in relation to existing obligations. This information relates to the characteristics of the agreements, the book values, the impacts on the cash flows of the entity, etc. Furthermore, the IASB decided that, in the majority of cases, the aggregate information on the supplier finance agreements of an entity meet the reporting requirements for users of financial statements. The amendments to IAS 7 and, consequently, to IFRS 7, apply from the financial years starting on or after 1 January 2024 (with earlier application permitted).

On 15 August 2023, the International Accounting Standards Board (IASB) published "**Lack of Exchangeability (Amendments to IAS 21**)", an amendment that contains criteria for determining when a currency can be exchanged into another and how to determine the exchange rate when it is not. This amendment specifies that a currency is an exchangeable currency when an entity is able to exchange such currency with another through markets or exchange mechanisms that create applicable rights and obligations without undue delay at the date of valuation and for a specific purpose; a currency cannot be exchanged with another if an entity can only obtain a negligible amount of the other currency. It also defines how the exchange rate to be applied when a currency is not exchangeable is determined, in this case at the valuation date, the spot rate of exchange is estimated as the rate that would have been applied to a transaction between market operators on the valuation date and that would accurately reflect the current economic conditions. Furthermore, additional information is required when a currency is not exchangeable: in particular, in this case it is necessary to provide information that allows readers of the financial statements to assess how the impossibility of exchanging a currency influences, or is expected to influence, on the economic result, the financial position, and the cash flows.

The amendments will enter into force from 1 January 2025 and earlier application is permitted.

The adoption of these amendments is not expected to have any effect on the Group's consolidated financial statements.

3. Discretionary assessments and significant accounting estimates

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 assessments 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 Discretionary assessments

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) Control of an entity in which the Group holds less than the majority of shares

On 30 July 2021, the shareholders meeting of Viva Servizi S.p.A., a shareholder of Estra S.p.A., approved the partial spin-off aimed at transferring the following shares into a newly formed company Viva Energia S.p.A.:

- shares held by Viva Servizi in Estra S.p.A., corresponding to 10% of its share capital;
- shares held by Viva Servizi in Edma Reti Gas S.r.l., the company operating in the distribution of natural gas in 15 municipalities located in the province of Ancona (in Le Marche), of which Estra S.p.A., through Centria S.r.l., holds 45%, for this transaction please refer to the description in section "Acquisitions of additional interests in companies already controlled". The shares involved in the spin-off represent 55% of Edma Reti Gas share capital.

In this context, Estra S.p.A. and Viva Servizi S.p.A. agreed on certain amendments to the Edma Reti Gas by-laws, which were approved by the Shareholders' Meeting on 28 October 2021, drawing up a new shareholders' agreement that assigned Estra the majority of the Board of Directors of Edma Reti Gas and based on the set voting quorum, the option to exercise decision-making powers on the investee's financial, management and strategic policies, thus conferring de facto control of Edma Reti Gas to Estra S.p.A. Consequently, the company was fully consolidated from 31 December 2021.

(ii) Identification of Cash Generating Units (CGU)

In applying the provisions of 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 Regulated Market CGU
* Gergas Regulated Market CGU
* Murgia Regulated Market CGU
* Edma Reti Gas Regulated Market CGU

In addition, other CGUs were identified that overlap with individual companies falling in the scope of IFRS 8 as "Other SBUs", as specified in Note 4 "Business Segments".

The Group has achieved a significant level of maturity in the completion of the process to define the integrated risk management model, which is based on internationally recognised standards in Enterprise Risk Management (ERM), which involves, within each respective area of remit, the company organisation and the governance bodies. The company's process of risk assessment and identification also includes aspects linked to sustainability topics. The Group monitors the continuous evolution of the national and international regulatory framework, and the possible introduction of additional legislation linked to the reduction of the environmental impacts of the business, overseeing the risks linked to climate change in order to reduce the repercussions on its activities.

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 (RIV) of assets under concession.
The calculation for the use value is based on the discounted cash flow model. The cash flows deriving from the forecast plans that are based on accurate estimates and do not include restructuring activities to which the Group has not yet committed or significant future investments that will 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 property, plant and equipment (10.1.2 Impairment test pursuant to IAS 36 on the value of property, plant and equipment).
Possible changes in the underlying assumptions on which these calculations are based could produce different recoverable values. The analysis of each of the groups of non-financial assets is unique and requires the company management to use estimates and hypotheses considered prudent and reasonable in relation to the specific circumstances. In line with its business model, the Group also assessed whether the topics linked to climate change have impacted on the reasonable and sustainable hypotheses used to estimate the projections of the financial flows.

(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) Amortisation/ depreciation

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 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 write-downs

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 analyses by customer cluster, supplemented by specific analytical assessments, using a matrix for measuring the expected losses (provision matrix). The impairment percentages are determined on the basis of historical analyses conducted referring to losses on amounts payable by customers, in relation to the age of the receivable, the creditworthiness of the counterparty where available, average collection times and the status of the receivable (active, discontinued) and the historic trend of the uniform individual class taking into consideration and current information that could affect the expectations and estimates of loss on receivables. Receivable positions of the most significant amounts are analysed and, if appropriate, specifically written down.

(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, determined by taking as a reference the volumes allocated by the national distributor and the internal customer consumption forecasts; 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 revisions in subsequent years as provided for in the relevant regulations. The amount of gas and electricity volumes released into the network and not yet invoiced, obtained in this way, is measured according to the type of customer, based on the proportion of the respective volumes already invoiced during the period and on the related average tariff in force during the period.
The provision for revenue from invoices to be issued for the sale of gas and electricity to final customers is therefore the outcome of a complex estimate based both on distributed and allocated volumes, subject to adjustments, as well as internal consumption forecasts, and is influenced by the professional judgement of Company Management. Please see note 10.2.2 Trade receivables for further information.

(viii) Estimates on Lease agreements as lessee

Starting from 1 January 2019, following application of IFRS16, the following significant accounting estimates were made, as a Group in its capacity as lessee:

- Lease term: the identification of the term of the rental contract is a very significant issue which entails the use of assumptions in particular for the assessment of the effects of renewal options at the end of the non-cancellable period. For the definition of the term of the lease the Group, in fact, considered the presence of renewal and cancellation options held respectively by the lessee, the lessor or both. In the presence of renewal options exercisable by both contractual parties it considered the existence or non-existence of significant economic disincentives in rejecting the renewal request as required by paragraph B34 of IFRS 16. In the presence of options exercisable by only one of the two parties it considered paragraph B35 of IFRS 16.

With reference to the company offices, the application of the above, taking into account the specific facts and circumstances and the estimate on the exercise of the option being reasonably certain, entailed that a term up to the third renewal provided for in the contract was considered. This was based on the fact of not being able to consider reasonably certain the renewal beyond the third period or, at least, at the same conditions.

- After the starting date of the contract, the Group reviews the term of the same if there occurs a significant event or a significant change in the circumstances which, depending on the Group's intentions, has an effect on the lessee's reasonable certainty of exercising an option not previously included in its determination of the term of the lease or of not exercising an option previously included in its determination of the term of the lease. In June 2019, the IFRS Interpretation Committee began to discuss the topic of the lease term (project: Lease Term and Useful Life of Leasehold Improvements). In November 2019, a decision was published which clarifies how the concepts of non-cancellable period, lease term (considered for the purposes of recognition of the liability) and enforceable period (useful for identifying the moment in which the contract no longer generates enforceable rights and obligations) should be read and correlated together for the purposes of applying IFRS 16. The decision clarified that for the purposes of identifying the enforceable period a lessee must consider the contractual moment in which both parties involved can exercise their right to terminate the contract without incurring more than an insignificant penalty. The concept of penalty must not have a merely contractual meaning but should be seen considering all the economic aspects of the contract. Once the enforceable period has been identified, the lessor assesses in the presence of renewal or cancellability options for what period it is reasonably certain to control the right of use of the asset and therefore determines the lease term. At the date of preparation of these consolidated financial statements, the Group considered these discussions and conclusions and will continue to monitor the evolution over time.

- Definition of the discount rate: as in most rental contracts entered into by the Group, there is no implicit interest rate, the Group calculated an Incremental Borrowing Rate (IBR) that is the interest rate that the Company will have to pay to obtain a loan, with a similar term and guarantees, necessary to obtain an asset of a value similar to the asset consisting of the right of use in a similar economic context.

  The discount rate used to measure the value of the liabilities related to leasing contracts was calculated taking into consideration the country risk, the currency, the lease term, and the Group's credit risk.

Macroeconomic and geopolitical uncertainty

The Estra Group is closely monitoring the current macroeconomic scenario and the recent events of international politics, paying particular attention to the evolution of the geopolitical scenarios and the legislation of reference. The international geopolitical tensions caused by Russia's invasion of Ukraine, as well as the varying sanctions imposed against Russia and Russian citizens, increase systemic risks. The risks of continuation of the conflict, the risk of expansion of military operations and the geopolitical crisis, in addition to the impacts of the economic sanctions imposed by the international community on Russia could impact on global production, the supply chain, and the confidence of consumers, businesses and investors with consequent delays or interruptions in spending and investment decisions. The onset of such events could trigger a slowdown in the macroeconomic cycle, a stagnation or, in the worst case, a global recession.

Despite the presence of a highly volatile macroeconomic scenario and slowed economic growth, characterised by very high inflation at global level, restrictive monetary policies by the Central Banks and high benchmark rates, in addition to a critical geopolitical situation following the ongoing conflict, the Group continues to focus on realising its industrial strategies and, to date, has not noticed significant impacts on its performance or on the assumptions and estimates for measuring assets and liabilities, nor elements requiring an in-depth analysis of the validity of the assumption of going concern.

We also note that E.s.tr.a. S.p.A. and its subsidiaries do not have offices or relevant activities located in the regions affected by the conflict.

Climate change

Awareness of climate change and its effects determines an increased need for information in the management report. Though there is no international accounting standard that governs how the impacts of climate change should be considered when preparing the financial statements, the IASB has issued several documents to support IFRS adopters in satisfying this request for information from interested parties. Equally, the ESMA, in its European Common Enforcement Priorities of 28 October 2022, highlighted that issuers, when preparing financial statements drafted according to international accounting standards, should consider climate risks to the extent they are relevant, regardless of whether or not said risks are explicitly envisaged by the accounting standards of reference.

The company has achieved a significant level of maturity in the completion of the process to define the integrated risk management model, which is based on internationally recognised standards in Enterprise Risk Management (ERM), which involves, within each respective area of remit, the company organisation and the governance bodies. The company's process of risk assessment and identification also includes aspects linked to sustainability topics. The Group monitors the continuous evolution of the national and international regulatory framework, and the possible introduction of additional legislation linked to the reduction of the environmental impacts of the business, overseeing the risks linked to climate change in order to reduce the repercussions on its activities.

For the Estra Group, climate change is mainly an economic risk, given its possible repercussions on the Group's characteristic activities:

- increased operating costs (e.g. insurance costs);
- gradual reduction in demand for gas for domestic heating (NIECP 2019) with consequent reduction in the business margins;
- electrification process of consumption and use of renewable resources in replacement of fossil fuels in the long term (carbon neutrality target by 2050) (NIECP 2019);
- increased frequency in extreme intensity natural events in the places where the Group operates, which could result in infrastructure becoming unavailable for extended time frames, with possible service interruptions.

It is noted that the Estra Group mainly describes its considerations of actions attributable to mitigating the effects of climate change in the paragraph "Risks related to climate change" in the Management Report.

4. Business segments

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

(i) 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, dispatching, storage and logistics activities.
The segment also includes trading activity, carried out both for the purpose of improving the purchase and procurement conditions through optimisation of the Group's assets (natural gas storage and transport capacity and flexibility of the long-term supply contract) ("Industrial portfolio"), and for the purpose, within predefined risk limits, of seizing opportunities for short-term additional profit.

(ii) Regulated Market

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

(iii) Other services

The “Other Services” 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 activity of waste selection, treatment and storage.

(iv) Corporate

The “Corporate” SBU includes the coordination and centralised management of company functions carried out by the holding in favour of other Group companies.

The other services have different economic characteristics, organisational criteria and performance, but do not exceed the quantitative thresholds such as to make separate disclosure necessary.

The Group operates entirely in Italy.

Directors separately assess the results achieved by business segments 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 result in the consolidated financial statements.
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 business segments 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 business segment is provided below for the 2023 and 2022 financial periods:

Economic values per segment

Business segments	**Gas and electricity sales**		**Regulated Market**		**Other services**		**Corporate**		**Adjustments and eliminations**		**Total**	
	Year ended 31 December		**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)	**2023**	**2022**	**2023**	**2022**	**2023**	**2022**	**2023**	**2022**	**2023**	**2022**	**2023**	**2022**
Revenue	1,011,576	1,630,105	135,490	122,482	118,358	74,999	38,244	33,632	(81,451)	(82,926)	1,222,216	1,778,291
Revenues from Corporate service	*24,577*	*21,352*	*10,299*	*9,304*	*3,368*	*2,976*	*(38,244)*	*(33,632)*	-	-	-	-
Total Revenue	**1,036,153**	**1,651,457**	**145,790**	**131,786**	**121,725**	**77,975**	**-**	**-**	**(81,451)**	**(82,926)**	**1,222,216**	**1,778,291**
External costs	(922,891)	(1,574,534)	(74,887)	(63,749)	(80,051)	(52,499)	(23,772)	(18,349)	81,416	82,908	(1,020,184)	(1,626,221)
Personnel costs	(8,225)	(10,744)	(18,335)	(18,245)	(5,803)	(4,536)	(16,613)	(13,089)	35	18	(48,941)	(46,595)
Operating costs from Corporate service	*(25,952)*	*(19,960)*	*(10,876)*	*(8,697)*	*(3,556)*	*(2,782)*	*40,385*	*31,438*	-	-	-	-
Gross operating margin (EBITDA)	**79,085**	**46,220**	**41,691**	**41,096**	**32,315**	**18,158**	**-**	**-**	**-**	**-**	**153,091**	**105,475**
Depreciation, amortisation and provisions	(32,160)	(30,454)	(24,140)	(22,264)	(15,971)	(10,681)	(5,945)	(6,268)	-	-	(78,215)	(69,667)
Depreciation, amortisation and provisions from corporate activities	*(3,820)*	*(3,979)*	*(1,601)*	*(1,734)*	*(523)*	*(555)*	*5,945*	*6,268*	-	-	-	-
Operating Income (EBIT)	**43,105**	**11,787**	**15,950**	**17,098**	**15,821**	**6,923**	**-**	**-**	**-**	**-**	**74,876**	**35,807**

Asset values per segment

Business segments	Gas and electricity sales		Regulated Market		Other services		Corporate		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		Year ended 31 December	
(amounts in thousands of euro)	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022
Non-current assets	173,161	162,442	461,984	445,190	134,073	140,023	26,936	39,906	(1,965)	(2,642)	794,189	784,919
Current assets	360,323	833,670	77,464	80,600	139,004	85,714	185,327	162,940	(47,833)	(72,360)	714,285	1,090,564
Total assets	**533,484**	**996,112**	**539,448**	**525,790**	**273,077**	**225,737**	**212,264**	**202,846**	**(49,799)**	**(75,002)**	**1,508,474**	**1,875,483**

Investments and business combinations per segment

Investments per operating sector	Regulated Market		Gas and electricity sales		Corporate		Other services		Total	
(amounts in thousands of euro)	Year ended 31 December		Year ended 31 December		Year ended 31 December		Year ended 31 December		Year ended 31 December	
	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022
Investments in intangible assets	39,339	31,892	25,744	10,682	690	4,807	338	153	66,111	47,534
Investments in intangible assets deriving from business combinations			2,213		0		0	145	2,213	145
Total investments (including business combinations) in intangible assets	**39,339**	**31,892**	**27,957**	**10,682**	**690**	**4,807**	**338**	**298**	**68,324**	**47,679**
Investments in tangible assets	1,489	296	1,389	1,087	690	1,151	6,663	11,340	12,128	13,874
Investments in tangible assets deriving from business combinations			471		0		0	29,015	471	29,015
Total investments (including business combinations) in property, plant and equipment	**1,489**	**296**	**1,860**	**1,087**	**2,587**	**1,151**	**6,663**	**40,355**	**12,599**	**42,889**
Total	**40,827**	**32,188**	**29,817**	**11,769**	**3,277**	**5,958**	**7,001**	**40,653**	**80,923**	**90,568**

Reconciliation of result

	Period ended	
(amounts in thousands of euro)	31/12/2023	31/12/2022
Result for sectors (net of adjustments and eliminations)	**78,476**	**35,808**
Financial income	10,276	2,694
Financial expenses	(37,910)	(14,329)
Gains or losses on currency conversions	(4)	(3)
Portion of income/(expenses) from valuation of financial investments using the equity method	(2,349)	(577)
FINANCIAL MANAGEMENT	**(29,986)**	**(12,215)**
PROFIT BEFORE TAXES	**48,489**	**23,593**
Income taxes for the year	(16,710)	(9,203)
NET PROFIT/(LOSS) FOR THE YEAR	**28,179**	**14,390**

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.

	(amounts in thousands of euro)	Period ended 31 December 2023	Year ended 31 December 2022
	Cash and cash equivalents[1]	(157,915)	(345,872)
	Current financial receivables [2]	(3,207)	(25,442)
	Current financial debt [3]	201,205	209,195
	Net current financial debt	**40,082**	**-162,119**
	Non-current financial debt [4]	407,232	514,082
D	**Net financial debt**	**447,314**	**351,963**
E	**Shareholders' equity**	**437,715**	**423,249**
D/E	***Leverage***	**1.02**	**0.83**

(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 2023, there were no violations of covenants associated with funding and loans during the current period.

Please see paragraph Liquidity Risk for additional information.

6. Information on the Group

Consolidation scope

The table below shows the consolidation scope at 31 December 2023 compared with the consolidation scope at 31 December 2022:

			31/12/2023				31/12/2022			
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	**79.33%**	79.33%			**79.33%**	79.33%		
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%		
Gergas S.p.A.	Grosseto (GR)	Gas distribution	**85.28%**		85.49%	(3)	**85.28%**		85.49%	(3)
Centria S.r.l.	Arezzo (AR)	Gas distribution	**99.75%**	99.75%			**99.75%**	99.75%		
Prometeo S.p.A.	Osimo (AN)	Gas and electricity sales	**63.72%**		63.72%	(1)	**63.72%**		63.72%	(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%		
Gas Marca S.r.l.	Civitanova Marche (MC)	Gas sales	**100.00%**		100.00%	(1)	**100.00%**		100.00%	(1)
Idrogenera S.r.l.	Prato (PO)	Renewable energies	**51.00%**	51.00%			**51.00%**	51.00%		
Ecolat S.r.l.	Grosseto (GR)	Waste management	**100.00%**	100.00%			**100.00%**	100.00%		
Murgia Reti Gas S.r.l.	Arezzo (AR)	Gas distribution	**99.75%**		100.00%	(3)	**99.75%**		100.00%	(3)
Ecos S.r.l.	Barberino Tavarnelle (FI)	Waste management	**100.00%**	100.00%			**100.00%**	100.00%		
EDMA Reti Gas S.r.l.	Ancona (AN)	Gas distribution	**44.89%**		45.00%	(3)	**44.89%**		45.00%	(3)
Bisenzio Ambiente S.r.l.	Campi Bisenzio(FI)	Waste management	**75.00%**	75.00%			**75.00%**	75.00%		
Ecocentro Toscana S.r.l.	Lallio (BG)	Waste management	**100.00%**	100.00%			**100.00%**	100.00%		
Equity consolidated joint ventures										
Nuova Sirio S.r.l.	Siena (SI)	Renewable energies	**50.00%**	50.00%			**50.00%**	50.00%		
Companies held for sale/disposal										
Sin.It. S.r.l.	Milan (MI)	Gas sales					**11.63%**	11.05%		
Equity-consolidated associates										
Blugas Infrastrutture S.r.l.	Cremona	Gas storage	**31.17%**	31.17%			**31.17%**	31.17%		
SIG S.p.A.	Ancona (AN)	Gas distribution	**39.60%**	39.60%			**39.60%**	39.60%		
A.E.S. Fano Distribuzione Gas S.r.l.	Fano (PU)	Gas distribution	**49.00%**	49.00%			**49.00%**	49.00%		
Monte Urano S.r.l.	Rome (RM)	Gas sales					**27.70%**		49.00%	(2)
Sei Toscana S.r.l.	Siena (SI)	Waste management	**20.62%**		20.62%	(5)	**20.62%**		20.62%	(5)
Notes										
(1) through Estra Energie Srl										
(2) through Prometeo S.r.l.										
(3) through Centria										
(4) through Estra Clima S.r.l.										
(5) through Ecolat S.r.l.										

The following changes occurred during the period in the consolidation scope:

Companies held for sale/disposal

- Exit from the Group of the investee Sinit in liquidation, discontinued in September 2023, following completion of the voluntary liquidation procedure.

Equity-consolidated associates

- Exit from the scope of the associates measured at equity of Monte Urano S.r.l., following acquisition of the entire equity investment in the share capital by Prometeo S.p.A., previously the holder of 49% at 31 December 2022, and subsequent merger by incorporation;

  Reference is made to the Note on equity investments.

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

7.1 Acquisition of control in Monte Urano S.r.l. (merged by incorporation into Prometeo S.p.A.)

On 13 January 2023, through the subsidiary Prometeo S.p.A., the Group completed the acquisition of 100% of the stakes in the company Monte Urano Energie S.r.l., taking up the 51% stake in the share capital held by the Municipality of Monte Urano for € 840,000. The company was merged by incorporation into Prometeo S.p.A. during the final quarter of the year.

At the date of acquisition, the company had around 3,000 natural gas customers and 800 electricity customers.

For consolidation purposes, the available accounting situation closest to the acquisition date, 01/01/2023, was taken as a reference.
The subsidiary was measured at equity until 01/01/2023. The accounting of the business combination operation generated an upward adjustment for € 48,000, referring to the restatement of the 49% shareholding at fair value, which was already held prior to the acquisition, recognised in the item "impairment of financial assets".

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

Balance Sheet	Fair value
NON-CURRENT ASSETS	
Property, plant and equipment	332
Customer list	2,213
Other non-current assets	135
Deferred tax assets	32
	2,711
CURRENT ASSETS	
Trade receivables	724
Other current assets	5
Cash and cash equivalents	76
	805
TOTAL ASSETS	**3,516**
NON-CURRENT LIABILITIES	
Provisions for risks and charges	25
Employee severance indemnity	17
Deferred tax liabilities	638
	680
CURRENT LIABILITIES	
Current portion of medium/long-term loans	42
Short-term borrowings	171
Trade payables	489
Tax liabilities	11
Other current liabilities	436
	1,149
TOTAL LIABILITIES	**1,828**
TOTAL NET IDENTIFIABLE ASSETS	**1,687**
Price of the acquisition	**1,687**

From the allocation of the price paid of € 1,687,000, including the fair value of the minority stake already held, an intangible asset was recorded referring to the customer lists of € 2,213,000 gross of deferred tax liabilities for € 638,000. The customer list is amortised over a 20-year amortisation period, corresponding to its expected useful life, based on the historical customer losses recorded (so-called "Churn Rate").

The fair value measurement of the customer lists was based on the discounting of the provisional expected cash flows of the activities, taking into consideration the historical customer churn rate.

7.2 Acquisitions of additional interests in companies already controlled

During the year, no changes were made to the percentages owned by the Group in existing subsidiaries.

7.3 Subsidiaries with significant non-controlling interests

Details are provided below of the subsidiaries with significant non-controlling interests.
The economic-financial data is based on balances prior to intercompany eliminations.

Portion of shareholding interest held by non-controlling shareholders:

Company name (Fully consolidated subsidiaries)	Registered office	Currency	Primary activity	% of Non-Controlling Interests 2023	% of Non-Controlling Interests 2022
Prometeo S.p.A.	Osimo (AN)	Euro	Gas and electricity sales	36.28%	36.28%
Edma Reti Gas S.r.l.	Ancona (AN)	Euro	Distribution of natural gas	55.11%	55.11%

As described above, although third parties hold 55.11% of the minority stakes in Edma Reti Gas S.r.l., they do not control the company by virtue of the amendments agreed by Estra S.p.A. and Viva Servizi S.p.A. to the Edma Reti Gas by-laws, and approved by the Shareholders' Meeting on 28 October 2021, in addition to the drawing up of a shareholders' agreement that assigned Estra the majority of the Board of Directors of Edma Reti Gas and based on the set voting quorum, the option to exercise decision-making powers on the investee's financial, management and strategic policies, thus conferring de facto control of Edma Reti Gas to Estra S.p.A. Consequently, the company was fully consolidated from 31 December 2021.

Prometeo S.p.A.

Income statement (thousands of Euro)	2023	2022
Operating revenue		
Revenue from contracts with customers	130,931	228,143
Other operating revenue	1,130	3,258
	132,061	**231,402**
Operating costs		
Raw materials, ancillary materials and goods	(102,981)	(204,849)
Costs for services	(19,674)	(14,862)
Personnel costs	(1,412)	(1,710)
Depreciation, amortisation, provisions and write-downs	(3,604)	(5,760)
Other operating costs	(226)	(3,013)
	(127,897)	**(230,195)**
OPERATING PROFIT/(LOSS)	**4,165**	**1,206**
Financial income	317	192
Financial expenses	(1,425)	(682)
FINANCIAL MANAGEMENT	**(1,108)**	**(490)**
PROFIT BEFORE TAXES	**3,057**	**716**
Income taxes for the year	(1,057)	386
NET PROFIT/(LOSS) FOR THE YEAR	**1,999**	**330**

Balance Sheet (thousands of Euro)	2023	2022
NON-CURRENT ASSETS		
Property, plant and equipment	1,011	453
Goodwill	5,525	4,484
Intangible assets	1,613	2,269
Equity investments		1,071
Other non-current assets	2,137	2,684
Deferred tax assets	4,326	4,004
	14,612	**14,966**
CURRENT ASSETS		
Trade receivables	36,848	65,504
Current tax assets	13	3,535
Other current assets	9,413	2,596
Current financial assets	27	
Cash and cash equivalents	4,504	10,083
	50,805	**81,718**
TOTAL ASSETS	**65,417**	**96,684**
TOTAL SHAREHOLDERS' EQUITY	**17,064**	**15,373**
NON-CURRENT LIABILITIES		
Provisions for risks and charges	306	306
Employee severance indemnity	476	413
Non-current portion of medium/long-term loans	6,164	6,720
	6,946	**7,439**
CURRENT LIABILITIES		
Current portion of medium/long-term loans	938	129
Short-term borrowings	1	8
Trade payables	35,028	65,931
Current tax liabilities	444	499
Other current liabilities	4,998	7,304
	41,407	**73,872**
TOTAL LIABILITIES and SE	**65,417**	**96,684**

Edma Reti Gas S.r.l.

Income statement (thousands of Euro)	2023	2022
Operating revenue		
Revenue from contracts with customers	17,210	16,953
Other operating revenue	2,053	1,118
	19,263	**18,071**
Operating costs		
Raw materials, ancillary materials and goods	(1,150)	(1,691)
Costs for services	(7,991)	(8,057)
Personnel costs	(2,868)	(3,064)
Depreciation, amortisation, provisions and write-downs	(3,024)	(2,514)
Other operating costs	(2,043)	(1,086)
	(17,077)	**(16,412)**
OPERATING PROFIT/(LOSS)	**2,186**	**1,659**
Financial income	5	2
Financial expenses	(223)	(107)
FINANCIAL MANAGEMENT	**(218)**	**(106)**
PROFIT BEFORE TAXES	**1,968**	**1,554**
Income taxes for the year	(493)	(389)
NET PROFIT/(LOSS) FOR THE YEAR	**1,475**	**1,165**

Balance Sheet (thousands of Euro)	2023	2022
NON-CURRENT ASSETS		
Property, plant and equipment	628	801
Intangible assets	46,899	45,065
Deferred tax assets	1,730	1,470
	49,257	**47,336**
CURRENT ASSETS		
Inventories	1,499	1,367
Trade receivables	3,396	91
Current tax assets	-	784
Other current assets	9,112	7,761
Current financial assets	-	9,979
Cash and cash equivalents	388	242
	14,394	**20,225**
TOTAL ASSETS	**63,651**	**67,561**
TOTAL SHAREHOLDERS' EQUITY	**36,407**	**36,027**
NON-CURRENT LIABILITIES		
Provisions for risks and charges	1,363	1,324
Employee severance indemnity	469	455
Non-current portion of medium/long-term loans	1,976	2,896
Non-current contractual liabilities	2,499	2,257
	6,307	**6,932**
CURRENT LIABILITIES		
Current portion of medium/long-term loans	924	916
Short-term borrowings	7	11
Trade payables	16,973	16,632
Current tax liabilities	254	129
Other current liabilities	2,714	6,850
Current contractual liabilities	64	64
	20,937	**24,602**
TOTAL LIABILITIES and SE	**63,651**	**67,561**

8. Notes on the main income statement items

8.1 Revenue

In the financial periods ended 31 December 2023 and 31 December 2022, revenue amounted to € 1,222,216,000 and € 1,778,292,000 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)	**2023**	**2022**
Revenue from sale of goods and services	1,195,704	1,766,057
Other operating revenue	26,512	12,235
Total revenue	**1,222,216**	**1,778,292**

8.1.1 Revenue from sale of goods and services

The table below shows the breakdown of the revenue flows from the sale of Group goods and services for the year ended 31 December 2023 compared to the year ended 31 December 2022:

	Year ended 31 December	
(amounts in thousands of euro)	**2023**	**2022**
Revenue from methane gas distribution	58,713	59,087
Equalisation methane gas distribution	(3,215)	(7,855)
Revenue from sales and distribution of LPG	2,726	2,862
Revenue from sales of methane gas	703,698	1,279,883
Revenue from sales of electricity	288,067	333,400
Revenue from telecommunication services	6,660	6,337
Revenue from selection and conferment of waste	18,677	13,675
Revenue from buildings' energy efficiency	65,822	27,774
Revenue from other Group operations	17,025	19,488
Increases in non-current assets	32,760	27,438
Current portion of contributions received	2,554	2,759
Revenue from post meter services and ancillary services	2,217	1,209
Revenue from sale of goods and services	**1,195,704**	**1,766,057**

The main changes refer to items:

- "Revenue from sales of methane gas" and "Revenue from sales of electricity", which recorded a decrease of € 576,185,000 and € 45,333,000 respectively, for the combined effect of *i)* reduction of the prices of gas and electricity raw materials; *ii)* lower volumes sold in the gas segment, partially offset by higher sales in the electricity segment; *iii)* reduction of sales to PSV, GME and for balancing operations; *iv)* increase in the pass-through components of gas distribution and electricity transport and dispatching which were previously impacted by legislation changes intended to reduce the sales tariffs for end customers;

- "Revenue from selection and conferment of waste" recorded an increase of € 5,002,000 mainly as a result of higher volumes treated;

- "Revenue from buildings' energy efficiency" refers to the revenue of the subsidiary Estra Clima S.r.l. for specific works on energy efficiency, higher in 2023 due to the execution of more incentivised "110 bonus" works for contractors by the Relaunch Decree of 19 May 2020.

The item "Revenue from other Group operations" mainly referred to:
- Parent Company revenue for existing service contracts with Shareholders, associates and companies subject to joint control (€ 777,000);
- revenue from the subsidiary Estra Clima S.r.l. core activity of heat management and maintenance (€ 7,531,000);
- revenue for electricity production from the photovoltaic systems located in Cavriglia (AR) for € 6,047,000;

The item "increases from in-house production": refers primarily to the in-house costs for the work on the networks under concession.

Revenue from the sale of methane gas and electricity at 31 December 2023 and 2022 both includes the provision for the estimate on the electricity and gas supplies provided to final 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, determined by taking as a reference the volumes allocated by the national distributor and the internal customer consumption forecasts; the estimate is recorded in specific provisions for invoices to be issued.

A list is provided below of the Group's revenue from contracts with customers for the year ended 31 December 2023, according to operating sector:

Year ended 31 December 2023		Business segments			
(amounts in thousands of euro)	Total	Regulated Market	Gas and electricity sales	Corporate	Other services
Revenue from methane gas distribution	58,713	58,713			
Equalisation methane gas distribution	(3,215)	(3,215)			
Revenue from sales and distribution of LPG	2,726	2,726			
Revenue from sales of methane gas	703,698		703,698		
Revenue from sales of electricity	288,067		286,687	10	1,369
Revenue from telecommunication services	6,660				6,660
Revenue from selection and conferment of waste	18,677				18,677
Revenue from buildings' energy efficiency	65,822				65,822
Revenue from other Group operations	17,025			777	16,248
Increases in non-current assets from in-house production	32,760	32,760			
Current portion of contributions received	2,554	1,013		86	1,456
Revenue from post meter services and ancillary services	2,217		2,217		
Revenue from sale of goods and services	**1,195,704**	**91,996**	**992,602**	**873**	**110,233**
Adjustments and eliminations	(67,936)	(27,795)	(6,488)	(29,308)	(4,345)
Total revenue gross of adjustments and eliminations between business segments	**1,137,487**	**64,201**	**986,114**	**-28,435**	**105,888**

The Group operates only in Italy.

As indicated in the main accounting standards applied, the Group mainly recognises 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 for the year ended 31 December 2023, compared with the year ended 31 December 2022:

	Year ended 31 December	
(amounts in thousands of euro)	2023	2022
Energy Efficiency Certificates	7,115	2,323
Release of risk provisions	543	144
Other revenue	18,713	9,765
Gains extra-feature management	141	3
Other operating revenue	**26,512**	**12,235**

The item "Energy Efficiency Certificates" (EECs) contains the value of the said certificates relative to the year 2023 as a tariff contribution pursuant to ARERA provisions.
With Resolution 340/2023/R/EFR of 25 July 2023, ARERA published the value of the tariff contribution of € 250.00/TEE, and the additional fee of € 0.68/TEE, payable to distributors in the scope of the energy efficiency certificates for the obligation year 2022. Therefore, the contribution for the certificates purchased between 1 January and 31 May 2023 (closing date of obligation year 2022) was € 250/EEC (2,317 EECs), in addition to the additional fee of € 0.68/EEC of the 5,379 EECs purchased through the entire obligation year 2022 (between 1 June 2022 and 31 May 2023). The additional fee was fully recognised in 2023 (also regarding the EEC acquired

previously) because this contribution had not been certain before and its amount had not been known. For certificates purchased after 1 June 2023, however, an estimate was made of the contribution: € 248/EEC, considering the trend of market prices.
Compared to 2022, there is a significant increase in revenues from the EEC, due to the higher number of EEC acquired (approximately 14,000 EEC).

The release of provisions for risks mainly refers to the surplus allocations in financial year 2022 in relation to the risk of penalties borne by the distribution companies on the basis of Resolution 269/2022 and indemnities on property maintenance works, found to be in excess as a result of estimate differences.

Without prejudice to the information below on extraordinary items, the item "Other operating revenue" refers mainly to i) recharging of costs incurred by the Parent Company on behalf of associates and joint ventures and ii) ancillary revenue related to gas distribution as indemnities to the sales company, revenue for document checks, refund of default expenses, work debited to third parties, ancillary services invoiced with the transmission and security incentives.
With regard to the security incentives for € 2,704,000 in 2023 and € 2,471,000 in 2022, it is noted that revenue was recorded in the year when the incentive interventions were incurred, even though they are definitively recognised by the Authority in an appropriate resolution after the close of the period.
The item includes the following extraordinary items:

- Indemnities for € 9,719,000 received following the positive resolution of several disputes involving Estra Energie S.r.l. as an active part in the request for economic damages from several providers. At the closing date of the financial statements, the amounts recognised as compensation for damages were fully collected.
- Revenue, for € 451,000 in 2023 and € 1,436,000 in 2022, relating to fees on the residual amount for foregone amortisations on initial installation electronic meters disposed of early paid to Group companies operating in the distribution of natural gas as a recovery on previous years' tariffs, pursuant to ARERA Resolution 737/2022/R/gas of 29 December 2022.

8.2 Operating costs

In the financial years ended 31 December 2023 and 31 December 2022, operating costs amounted to € 1,147,340,000 and € 1,744,923,000 respectively. The following table shows the breakdown of operating costs.

	Year ended 31 December	
(amounts in thousands of euro)	**2023**	**2022**
Raw materials, consumables and goods for resale	795,373	1,519,023
Costs for services	209,042	103,187
Personnel costs	48,941	46,595
Depreciation, amortisation, provisions, write-downs	78,215	69,667
Other operating costs	15,769	8,890
Operating costs	**1,147,340**	**1,747,362**

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 amounted to € 795,373,000 for the year ended 31 December 2023 and to € 1,519,023,000 for the year ended 31 December 2022.

	Year ended 31 December	
(amounts in thousands of euro)	**2023**	**2022**
Purchase of raw and ancillary materials, consumables and goods	775,801	1,537,963
Changes in inventories	18,350	(21,142)
Income/expenses from commodity risk management	1,317	2,439
	795,467	**1,519,260**
minus:		
- increases from in-house production	(94)	(237)
Purchase of raw and ancillary materials, consumables and goods	**795,373**	**1,519,023**

The costs for the purchase of raw and ancillary materials, consumables and goods for the provision of natural gas and electricity to final customers in 2023 decreased compared to 2022, in relation to revenue trends.

The most significant component in this item refers to the gas purchase, transport and storage costs for € 601,298,000 (€ 1,235,388,000 in 2022) and the costs to purchase electricity for € 153,071,000 (€ 282,438,000 in 2022), a significant decrease due to the strong reduction in prices recorded on the energy markets compared to the previous year.

Changes to net inventories are mainly due to lower volumes of stored gas and the reduction in the prices of the raw material.

The item “Income/expenses from commodity risk management” refers, as well as to the result of the natural gas trading activity, also to the change in fair value of financial derivatives (commodity swaps) used for the purpose of optimising the industrial portfolio and not accounted for as cash flow hedges. With reference to the latter please see what is explained in the paragraph IFRS 9 Financial Instruments – Implementation of Hedge Accounting above.

The table shows a breakdown of the item:

	Year ended 31 December	
(amounts in thousands of euro)	**2023**	**2022**
Margin of gas trading activity	567	2,522
Change in fair value of commodity swaps used in the marketing of electricity	-	995
Change in fair value of commodity swaps used in the marketing of gas	750	(1,078)
Total expenses from commodity risk management	**1,317**	**2,439**

Additional information is available in the Note “Financial Instruments and measurements at fair value”.

8.2.2 Costs for services

The table below shows the breakdown of the Group’s costs for services for the year ended 31 December 2023, compared with the year ended 31 December 2022:

	Year ended 31 December	
(amounts in thousands of euro)	**2023**	**2022**
Costs for gas distribution to users	(26,577)	(35,321)
Costs for electricity transport and dispatching	97,582	40,395
Cost for the renovation of third party plants and for tenders and maintenance	50,958	28,552
Expenses for gas concessions	13,322	13,695
Professional fees	13,836	9,786
Costs for waste transport and disposal	9,670	8,644
Insurance	2,703	2,142
Technical, fiscal, administrative and notary fees and consulting services	10,809	9,108
Costs related to customer management and for the printing and delivery of bills	5,472	4,309
Telecommunications services	4,030	3,092
Costs for advertising and sponsoring the Group’s products	2,571	2,513
Various rentals and leases	1,947	1,795
Other costs for services	24,912	17,054
minus:		
- increases from in-house production	(2,193)	(2,579)
Costs for services	**209,042**	**103,187**

The main change in costs for services is related to the items “Costs for gas distribution to users” and “Costs for electricity transport and dispatching”, which recorded a total increase of € 65,931,000.
This change was mainly due to higher volumes of electricity sold in 2023 and to the effects on 2022, and on 2023 to a lesser extent, of:

- the legislative provisions that, to combat rising energy bills caused by sudden increases in the prices of energy commodities, introduced the cancellation of the general system expenses for specific users and significantly reduced the components of distribution;
- higher gas and electricity social bonuses credited to certain categories of end customers. In particular, the legislation provided for the expansion to the pool of users eligible for discounts, the increase of the unit value of the applicable social bonuses and the introduction of an additional negative rate of the Ug2c component, from April 2022, as envisaged by Arera resolution 148/2022/R/gas.

The increase in items “Cost for the renovation of third party plants and for tenders and maintenance” and “Professional fees” mainly related to costs incurred for the performance of practices related to energy efficiency measures by the subsidiary Estra Clima S.r.l. correlating to revenue performance.

Expenses for gas concessions refer to the fees paid by the Group to Municipalities that awarded the natural gas distribution and metering service.

The item various rentals and leases is mainly related to costs for the rental of short-term assets or where the underlying asset is of modest value and for which the Group availed itself of the exemptions granted by IFRS 16 and therefore did not recognise the financial liability and the related right of use. The leasing instalments are therefore recognised in the income statement on a straight-line basis for the duration of the respective contracts.

8.2.3 Personnel costs

The table below shows the breakdown of the Group’s personnel costs for the year ended 31 December 2023, compared with the year ended 31 December 2022:

	Year ended 31 December	
(amounts in thousands of euro)	**2023**	**2022**
Wages and salaries	34,538	33,681
Social security contributions	11,544	11,030
Employee severance indemnity	1,821	2,085
Other costs	850	133
Seconded personnel from third parties	356	165
minus:		
- increases from in-house production	(167)	(499)
Personnel costs	**48,941**	**46,595**

The increase is mainly due to the renewal of the national collective labour agreement (CCNL).

8.2.4 Depreciation, amortisation, provisions and write-downs

The table below shows the breakdown of the Group's depreciation, amortisation, provisions and write-downs for the year ended t 31 December 2023, compared with the year ended 31 December 2022:

	Year ended 31 December	
(amounts in thousands of euro)	**2023**	**2022**
Amortisation of intangible assets	44,667	39,776
Depreciation of tangible assets	16,597	15,546
Write-down of intangible assets	2,206	600
Write-down of tangible assets	2,815	
Write-down of trade receivables	11,112	13,642
Other provisions	819	103
Depreciation, amortisation, provisions and write-downs	**78,215**	**69,667**

For details of items relating to depreciation, amortisation and write-downs of non-current assets and the write-down of trade receivables, refer to the tables describing tangible assets, intangible assets and provisions for write-downs shown in the notes to the balance sheet.
With regard to impairment of property, plant and equipment and intangible assets please see the notes "Impairment tests pursuant to IAS 36" and "Intangible Assets".

8.2.5 Other operating costs

The table below shows the breakdown of the Group's operating costs for the year ended 31 December 2023, compared with the year ended 31 December 2022:

	Year ended 31 December	
(amounts in thousands of euro)	**2023**	**2022**
Other operating expenses	3,298	3,459
Various indirect taxes	1,836	1,598
Purchase of Energy Efficiency Certificates	7,115	2,312
Membership fees	1,187	585
Losses on disposals	2,333	936
Other operating costs	**15,769**	**8,890**

The item "Purchase of Energy Efficiency Certificates" refers to the costs incurred to obtain energy saving certificates to fulfil the obligation imposed for 2023. With reference to the increase in the item, please see the comments on revenue from energy efficiency certificates.

The capital losses on disposals originated mainly from *i)* the activity of replacing traditional meters according to the obligations imposed by ARERA and *ii)* the activity of replacing electronic meters that were not working.

With reference to the disposals pursuant to point *i)* for € 185,000, we note that the QA component in the VRT refunding the distribution companies will continue to be recognised in the transmission tariffs for certain calibres. With reference to the disposals pursuant to point *ii)*, for € 2,009,000 net of the use of the provision for risks allocated at 31 December 2022, we note that with Resolution 737/2022/R/gas of 29 December 2022, ARERA paid a fee to refund the distribution companies related to the IRMA (residual value of the smart meters from the initial installation disposed of early). The effect, to restore the capital losses realised in the current year, for € 1,075,000, was recognised in "other revenue". Part of the capital losses, equal to € 783,000, was also offset with revenues reported against settlement agreements with suppliers which provided for compensation to cover the economic damage incurred. This compensation is accounted for in the income statement item "Other revenues" and is reported in correlation with the moment of the disposal of malfunctioning meters.

8.3 Financial income

In the financial periods ended 31 December 2023 and 31 December 2022, financial income amounted to € 10,276,000 and € 2,694,000 respectively. The breakdown is as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2023**	**2022**
Income from associates	234	257
Various income from others	10,042	2,437
Financial income	**10,276**	**2,694**

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 the effects of the financial discounting of the tax credits purchased following the application of the discount in the invoice for energy efficiency measures carried out by the subsidiary Estra Clima S.r.l. for € 2,328,000 (€ 921,000 as at 31 December 2022); to the interest income from delayed payments charged to customers for € 2,166,000 (€ 1,319,000 as at 31 December 2022) and to interest income accrued on bank and postal current accounts for € 5,497,000 (€ 105,000 as at 31 December 2022).

8.4 Financial charges

In the financial periods ended 31 December 2023 and 31 December 2022, financial expenses amounted to € 37,910,000 and € 14,329,000 respectively. The breakdown is as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2023**	**2022**
Interest payable on current bank accounts	126	785
Interest payable on loans and financial transactions	24,229	5,463
Interest payable on bonds	6,671	6,260
Other interest payable	5,510	779
Interest on arrears	197	4
Interest on employee severance costs	272	155
Interest payable on Shareholder loans	212	193
Interest payable on leases IFRS 16	695	690
Financial expenses	**37,910**	**14,329**

The increase in the item compared to the previous year is linked to the higher level of gross average debt in the year, as well as higher interest rates.

Interest on loans and bond loans comprises expenses related to the measurement at amortised cost.

The item "Other interest payable" includes, in particular:
- allocation to the provision for risks of € 1,909,000 for interest payable that the Group may have to pay for delayed payment of payable items subject to dispute, in the event of losing the dispute;
- guarantee fees on SACE loans for € 694,000;

- financial expenses from transfer of Superbonus tax credits for € 1,344,000;
- financial expenses for the discounting of the Ecobonus and Superbonus tax credits for € 1,101,000.

8.5 Portion of income/expenses from measurement of financial equity investments using the equity method

The item refers to the measurement of associates and companies subject to joint control of a financial nature. Reference in this regard is made to the corresponding asset item in the Balance Sheet.

In the years ended 31 December 2023 and 31 December 2022, the measurement of financial equity investments using the equity method resulted in expenses of € 2,349,000 in 2023 and expenses of € 577,000 in 2022. The amount at 31 December 2023 includes the extraordinary write-down of the investment in Blugas Infrastrutture for € 2,195,000, as described in the comment on the related item of the Balance Sheet.

8.6 Income taxes for the year

In the financial periods ended 31 December 2023 and 31 December 2022, income taxes for the year amounted to € 16,710,000 and € 9,203,000 respectively:

	Year ended 31 December	
(amounts in thousands of euro)	**2023**	**2022**
Current taxes	22,345	12,110
Taxation of previous years	(47)	565
Current taxes	**22,298**	**12,675**
Deferred tax assets	(3,609)	(1,703)
Deferred taxes	(1,978)	(1,769)
Taxes for the year	**16,710**	**9,203**

With regard to current taxes, it is noted that 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., Estracom S.p.A. and Ecos S.r.l.

8.7 Significant, non-recurring, atypical and/or unusual transactions

Both the Income Statements for 2023 and 2022 were impacted by extraordinary components, detailed in the comment on the Group's economic performance in the Report on Operations.

9. Notes on the main comprehensive income statement items

9.1 Change in cash flow hedge reserve

In the financial periods ended 31 December 2023 and 31 December 2022, the change in the cash flow hedge reserve was negative for € 1,735,000 and positive for € 8,571,000 respectively.
The item represents the component of comprehensive income incorporating the change to the "Cash flow hedge reserve" recorded for the effective portion of derivatives on the commodity and hedging IRS derivatives.

9.2 Actuarial gains/(losses)

In the year ended 31 December 2023, actuarial losses amounted to € 123,000, compared to the actuarial profits of € 1,254,000 recognised for the financial year ended 31 December 2022.
The item represents the component of comprehensive income 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.

10. Notes on the main balance sheet items

10.1 NON-CURRENT ASSETS

10.1.1 Property, plant and equipment

In the financial periods ended 31 December 2023 and 31 December 2022, property, plant and equipment amounted to € 134,370,000 and € 141,147,000respectively.

	Year ended 31 December	
(amounts in thousands of euro)	**2023**	**2022**
Land and buildings	30,920	32,038
of which for rights of use	*17,189*	*19,691*
Plants and machinery	92,361	96,854
of which for rights of use	*761*	*469*
Industrial and commercial equipment	1,266	1,402
of which for rights of use	*0*	*82*
Other assets	6,466	6,545
of which for rights of use	*3,017*	*2,491*
Payments on accounts and assets under construction	3,357	4,308
Property, plant and equipment	**134,370**	**141,147**

Property, plant and equipment is primarily represented by the following proprietary assets:

- a wood biomass co-generation plant and the related district heating network in the Municipality of Calenzano for € 1,840,000;
- plants and machinery relating to the implementation of telematic and telecommunications structures arising from activities undertaken by Estracom S.p.A. for € 28,227,000;
- a trigeneration plant located in Sesto Fiorentino owned by the subsidiary Estra Clima S.r.l. for € 1,135,000;
- photovoltaic systems for € 31,684,000;
- a municipal waste selection plant, with annexed premises, acquired during financial year 2019 with the consolidation of Ecolat S.r.l. for € 7,191,000;
- a chemical, physical and biological treatment plant for liquid hazardous and non-hazardous special waste, acquired in 2022 with the consolidation of Bisenzio Ambiente S.r.l. for € 13,538,000;
- a recovery and treatment plant for non-hazardous waste mainly from road sweeping acquired in 2022 with the consolidation of Ecocentro Toscana S.r.l. for € 5,803,000;
- a property complex used as offices and warehouse located in the Municipality of Pettoranello del Molise in the province of Isernia for € 1,615,000 owned by the Parent Company;
- a property purchased during financial year 2023 in Ancona, under renovation, for use as offices, for a net book value at 31 December 2023 of € 1,407,000 owned by the Parent Company.

With reference to photovoltaic systems, we note that the Group manages two photovoltaic systems located in Cavriglia (AR) on the basis of a concession relationship entered into with the Municipality of Cavriglia, accounted for as a sale and leaseback transaction for € 20,536,000. Under the terms of the concession, after construction of the plant and the transfer of ownership to the Municipality, the Group did not lose control over it. It is therefore recognised as a tangible asset at the construction cost plus the dismantling costs and depreciation along 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 entry was made for a financial liability.

In addition to leased or rented goods recognised according to IFRS 16, property, plant and equipment includes in particular:

- under the item "Land and buildings", the properties occupied by the Group and rented from shareholders for the company offices in Prato, Siena and Arezzo. The contracts with the Shareholders Intesa and Alia Servizi Ambientali have a term of three years starting from 01 January 2019, tacitly renewable for a further three. The contract with the Shareholder Coingas has a term of 6 years starting from 01 January 2020. The fees paid to shareholders in 2023 amounted to € 2,114,000. The fees are subject to annual review based on 75% of the change in the Italian National Institute of Statistics [ISTAT] cost of living index for the previous year. For the purposes of accounting for the first time under the terms of IFRS 16 the contractual term after the first renewal, that is 31 December 2024 was taken as a reference, considering it not reasonably certain that the Group will continue with the rental of the properties beyond this date at the current contractual conditions;

- in the item "Land and buildings", the properties occupied by the subsidiaries Ecos S.r.l. and Bisenzio Ambiente S.r.l. as a result of lease agreements, for an annual rent of € 300,000 until 31/01/2028 and an annual rent of € 400,000 until 31/12/2032 respectively.
- the item "Other assets", mainly refers to vehicles and IT equipment required in the Group's operations.

The following changes were recorded in this item for the year ended 31 December 2023:

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 2023	**42,956**	**160,594**	**5,179**	**27,933**	**4,308**	**240,970**
Increases	3,159	3,878	254	2,810	2,027	12,128
of which for rights of use	*1,142*	*516*		*1,882*		*3,540*
Sales/eliminations	(536)	(309)	(336)	(2,143)	(9)	(3,333)
of which for rights of use	*(536)*			*(1,669)*		*(2,205)*
Reclassifications	414	2,968	-	(0)	(2,968)	414
Corporate acquisitions	416	6	0	48		471
Write-downs	(891)	(1,924)				(2,815)
At 31 December 2023	**45,519**	**165,213**	**5,097**	**28,649**	**3,358**	**247,835**
Amortisation/ depreciation						
At 1 January 2023	**(10,918)**	**(63,740)**	**(3,777)**	**(21,388)**	**-**	**(99,823)**
Amortisation for the year	(4,102)	(9,451)	(352)	(2,692)		(16,597)
of which for rights of use	*(3,629)*	*(186)*	*(82)*	*(1,316)*		*(5,213)*
Sales/eliminations	522	309	331	1,937		3,099
of which for rights of use	*522*			*1,630*		*2,151*
Reclassifications	(5)	33	(34)	1		(5)
Corporate acquisitions	(95)	(3)	(0)	(41)		(139)
At 31 December 2023	**(14,599)**	**(72,852)**	**(3,831)**	**(22,184)**	**-**	**(113,466)**
Carrying amount						
At 31 December 2022	32,038	96,854	1,402	6,545	4,308	141,147
At 31 December 2023	30,920	92,361	1,266	6,466	3,357	134,370

We specifically note the following for 2023:

- investments during the year for € 12,128,000 are mainly attributable (i) to the category "Land and buildings", for a total of € 3,159,000 among which we note in particular the contract renewals for store rentals for € 698,000; (ii) to the category "Plants and machinery", for a total of € 3,878,000 referring mainly to the municipal waste selection plant of the company Ecolat S.r.l. and to plants and machinery related to the creation of telematic and telecommunications structures; (iii) to the category "Other assets", for a total of € 2,810,000 referring primarily to hardware and office machines acquired on an ownership or right-of-use basis; (iv) to the category "Investments in progress and payments on account", for a total of € 2,027,000 related mainly to the creation of infrastructural cabling of the industrial areas in FTTH;
- net increases for corporate acquisitions for € 332,000, related to acquisition of 100% of the stakes in the company Monte Urano Energie S.r.l., as described in the paragraph of the notes on business combinations;
- reclassifications from intangible assets for € 414,000;
- depreciation for the period for € 16,597,000;
- write-downs of € 2,815,000, for which please refer to the paragraph "Impairment tests pursuant to IAS 36 on the value of property, plant and equipment" below.

The following changes were recorded in this item for the year ended 31 December 2022:

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 2022	**35,816**	**128,736**	**4,693**	**26,252**	**2,814**	**198,311**
Increases	1,991	6,961	275	2,107	2,540	13,874
of which for rights of use	*1,514*	*399*	*245*	*819*		*2,977*
Sales/eliminations	(1,033)		(2)	(836)	(79)	(1,949)
of which for rights of use	*(1,033)*		*(2)*	*(805)*		*(1,840)*
Reclassifications		967			(967)	-
Corporate acquisitions	6,181	23,930	213	410		30,734
At 31 December 2022	**42,956**	**160,594**	**5,179**	**27,933**	**4,308**	**240,970**
Amortisation/ depreciation						
At 1 January 2022	**(12,715)**	**(54,365)**	**(3,414)**	**(19,293)**		**(89,787)**
Amortisation for the year	(4,009)	(8,411)	(352)	(2,774)		(15,546)
of which for rights of use	*(3,661)*	*(146)*	*(82)*	*(1,239)*		*(5,128)*
Sales/eliminations	899			796		1,695
of which for rights of use	*899*			*791*		*1,690*
Other changes	5,544					5,544
Corporate acquisitions	(627)	(964)	(11)	(117)		(1,719)
At 31 December 2022	**(10,918)**	**(63,740)**	**(3,777)**	**(21,388)**		**(99,823)**
Carrying amount						
At 31 December 2021	23,101	74,371	1,279	6,959	2,814	108,524
At 31 December 2022	32,038	96,854	1,402	6,545	4,308	141,147

We specifically note the following for 2022:

- investments during the year for € 13,874,000 are mainly attributable (i) to the category "Land and buildings", for a total of € 1,991,000 among which we note in particular the contract renewals for store rentals for € 889,000; (ii) to the category "Plants and machinery", for a total of € 6,961,000 referring mainly to the revamping of the municipal waste selection plant of the company Ecolat S.r.l. and to plants and machinery related to the creation of telematic and telecommunications structures; (iii) to the category "Other assets", for a total of € 2,107,000 referring primarily to hardware and office machines acquired on an ownership or right-of-use basis; (iv) to the category "Investments in progress and payments on account", for a total of € 2,540,000 related mainly to the creation of infrastructural cabling of the industrial areas in FTTH;
- net increases for corporate acquisitions for € 29,015,000, related to the full consolidation of Bisenzio Ambiente S.r.l. and Ecocentro Toscana S.r.l., as described in the paragraph of the notes on business combinations;
- other changes in the item "Land and buildings" for € 5,544,000, related to the remeasurement of the assets and associated financial liabilities of the contract concerning the lease of the properties occupied by the Group and owned by the Shareholders for the company offices in Prato, Siena and Arezzo, providing for an additional renewal period of three years, i.e. until 2027;
- depreciation for the period for € 15,546,000.

10.1.2 Impairment tests pursuant to IAS 36 on the value of property, plant and equipment

Financial year 2023

The directors, having analysed the current internal and external conditions, observed indicators of impairment at the closing date of the consolidated financial statements at 31 December 2023 with reference to:

i) A hazardous and non-hazardous liquid waste treatment plant owned by the subsidiary Bisenzio Ambiente S.r.l. The plant, recognised at a carrying amount as at 31 December 2023 of € 16,677,000, gross of deferred tax liabilities for € 2,011,000, was subject to an impairment test following lower operating results than the budget provisions resulting from lower volumes of assets due to the longer start-up phase than initially envisaged. This plant refers to the "Waste management" included under "Other operating sectors".

The impairment test compared the carrying amount recognised 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 estimated future cash flows was considered, which supposes that they will derive from the asset's continued use. 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 flows arose from explicit projections until 2031 and the Terminal Value extrapolated using a growth rate of 0.
The cash flow provisions represent the best estimates that the Estra management could make based on the main assumptions underlying the plant's operations (volumes of waste treated and related mix, maintenance costs and investments in the plant, sales tariffs), as per the latest business plan approved. The approved plan assumes the achievement of an extension of the current expiry of the integrated environmental authorisation (2034).
The discount rate used to reflect the current market valuations with reference to the present value of money and specific risks associated with the asset, was estimated consistently with the considered cash flows, using the weighted average cost of capital (WACC) after tax of 7.91%. On completion of these analyses, the directors did not record impairment in the current year, against a carrying amount, after depreciation for the period, higher than its value in use, despite the underlying assumptions of the operations of the plant suffering intrinsic uncertainties in the start-up and commercial development of a recently constructed plant, reflected in reduced operating cash flows in the first years of the plan.

The calculation of the value in use is especially sensitive to the following assumptions:
- gross margin;
- discount rate.

The gross margin was based on the previous year's figures, assuming gradual increases in volumes treated with a significant increase in the plant's production capacity within the limits of the authorisation granted; an improvement in the mix of waste treated in favour of more profitable types, marginal efficiency improvements in the disposal costs with the increase of volumes treated. Management expects the market share of the plant 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 and that the increase in disposal costs or the failure to achieve the efficiency targets could lead to a reduction in the margins against those envisaged in the Plan.

The sensitivity analysis was developed by focusing on plant 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 0.5%. The amounts obtained on this basis were also higher than the carrying amounts of the plant, further confirming the recorded value.

ii) A wood biomass co-generation plant and the related district heating network in the Municipality of Calenzano and a trigeneration plant located in the Municipality of Sesto Fiorentino owned by the subsidiary Estra Clima S.r.l. and falling within the operating segment "Heat management" included in "Other operating sectors".

Directors noted impairment indicators with reference to the biomass cogeneration plant located in Calenzano Municipality, recorded at a book value of Euro 4,344 thousand at 31 December 2023, following operating results lower than plan estimates mainly due to the higher maintenance costs necessary for proper operation of the plant.
In addition to a review of the tariff conditions for all customers expiring on 30/09/2024, the new plan envisages the construction of the new CHP cogeneration plant, powered exclusively by methane gas.

The Directors noted impairment indicators referring to the district heating plant in Sesto Fiorentino, recorded for a carrying value of € 1,359 thousand at 31 December 2023, 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. The new plan envisages a tariff review of the contracts expiring on 30/06/2025 and assumes a stable energy scenario for the upcoming years in the absence of significant urban development.

The impairment test compared the carrying amount recognised 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.
Cash Flow Estimates reflect Estra's best estimates of the main assumptions underlying the Plants Operations for the period 2024-2033 (incentives, production and disposal of electricity, materials prices, maintenance costs). The terminal cash flow was extrapolated using a growth rate of 0.

The discount rate used to reflect the current market valuations with reference to the present value of money and specific risks associated with the asset, was estimated consistently with the considered cash flows, using the weighted average cost of capital (WACC) after tax of 8.04%.
On completion of these analyses, the directors observed in the current year an impairment of € 2,504,000 for the wood biomass co-generation plant and € 224,000 for the district heating plant in Sesto Fiorentino.

The calculation of the value in use is especially sensitive to the following assumptions:
- gross margin;
- discount rate.

A 0.5% increase in the post-tax discount rate or a 5% reduction in the expected gross margin would determine an additional reduction in value of the plant within a range of € 60-140,000 for the Calenzano plant and € 10-50,000 for the Sesto Fiorentino plant.

The item "Write-down of tangible assets" also includes the write-down of a photovoltaic system in order to align its net book value at the end of financial year 2023 with the price of the sale concluded in January 2024, for € 88,000.

10.1.3 Goodwill

Goodwill recorded in the consolidated financial statements at 31 December 2023 refers to:

i) the following business combination operations prior to the FTA date, and in which case, the Group opted not to retrospectively apply IFRS 3:
   - goodwill recorded following the acquisition of Gergas S.p.A. relating to the "Gergas Regulated Market CGU" (€ 1,369,000);
   - goodwill recorded from the contributions of the gas customer management business units by Consiag S.p.A. (now Alia Servizi Ambientali 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 (€ 10,687,000).

ii) the following business combination operations after the date of FTA which amounted to € 23,440,000 and can be broken down as follows:
   - goodwill resulting from the Purchase Price Allocation from the acquisition of Metania S.r.l. in 2018 (€ 10,836,000);
   - goodwill resulting from the Purchase Price Allocation from the acquisition of Gas Marca S.r.l. in 2018 (€ 6,544 ,000);
   - goodwill resulting from the Purchase Price Allocation from the acquisition of Ecolat S.r.l. in 2019 (€ 1,820,000);
   - goodwill resulting from the Purchase Price Allocation from the acquisition of Ecos S.r.l. in 2021 (€ 4,240,000);

The Group conducted impairment testing at 31 December 2023 and 31 December 2022, which as stated above, did not show any losses in value.

10.1.4 Impairment tests 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", "Gergas Regulated Market", "Other Ecolat waste management" and "Other Ecos waste management" cash generating units:

Carrying value of goodwill allocated to each cash generating unit:

	Gas and electricity sales		Regulated Market		Other (Ecos)		Other (Ecos)		Total	
	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022
Goodwill	28,067	28,067	1,369	1,369	4,240	4,240	1,820	1,820	35,496	35,496

The group monitors the recoverability of the assets on the basis of approved plans that take into consideration the synergies and 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 Group conducted its own impairment test at 31 December 2023 and 2022. The impairment test at 31 December 2023 was prepared on the basis of the latest business plan approved for the period 2024-2028. The discount rate applied to the cash flow projections, net of tax, is 7.39%. Cash flows were extrapolated using a growth rate of 0. On completion of these analyses, the directors did not detect any impairment to be attributed to the net assets of the Gas and electricity sales unit, including goodwill of € 28,067,000.

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 previous year's figures, 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. The margins could also be impacted by failure to achieve the envisaged customer base following the increase in the churn rate.

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 business segments, 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 that was developed focused on the margins of the CGU, assuming a 5% decrease, resulting in a reduction in cash flows developed in the next and subsequent years, and an increase of 0.5% WACC.

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.

Regulated Market - Gergas

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 Regulated Market 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 Regulated Market unit, including goodwill for € 1,369,000.

Other - Ecolat waste management

Goodwill originates from the acquisition of Ecolat S.r.l., the company operating primarily in the mechanical selection of mixed-material packaging coming from the separate collections of the Optimal Areas Tuscany South, Centre and Coast and the recognition, on a residual basis in relation to the fair value of the identifiable assets, of the company's ability to produce future income from the business related to the selection plant and those not related such as intermediation, treatment of packaging and other waste from private entities.

The CGU recoverable value was determined on the basis of the value in use calculation, using cash flow projections of the relevant business sectors, based on the most recent business plan available at the measurement date (2023-2033) and approved by Company Management in April 2023. The approved plan assumes the achievement of a decade-long extension of the current expiry of the environmental authorisation (2031). The discount rate applied to the cash flow projections, net of tax is 7.91 %.

On completion of these analyses, the Directors did not find any impairment that would need to be attributed to goodwill.

The calculation of the value in use is particularly sensitive to the following factors:
- volumes of waste treated and the relative margins;
- discount rates.

The Group conducted a sensitivity analysis of the aforementioned relevant assumptions used to determine the recoverable value (variances +/- 0.5% of WACC and 5% reduction of future cash flows on the assumption of lower business volumes or reduced margins), the results of which show, albeit with reasonable variances in the key assumptions, there is not a surplus carrying amount on the recoverable value.

Other - Ecos waste management

The goodwill refers to the acquisition of Ecos S.r.l., the company owning a waste storage site, operating on the domestic market in the management of special, hazardous and non-hazardous waste, on a residual basis in relation to the fair value of identifiable assets, the company's ability to produce future income from its business and relates mainly to expected growth and cost synergies.

The CGU recoverable value was determined on the basis of the value in use calculation, using cash flow projections from the last available business plan approved by Company Management (2023-2033), which envisage a progressive growth in volumes treated and consequent margins compared to the current year. The approved plan assumes the achievement of a decade-long extension of the current expiry of the environmental authorisation (2031). The discount rate applied to the cash flow projections, net of tax is 7.91 %.

On completion of these analyses, the Directors did not find any impairment that would need to be attributed to goodwill.

The calculation of the value in use is particularly sensitive to the following factors:
- growth rate in the volumes of waste treated and the relative margins;
- discount rates.

The Group then conducted a sensitivity analysis of the aforementioned relevant assumptions used to determine the recoverable value (variances +/- 0.5% of WACC and 5% reduction of future cash flows on the assumption of lower business volumes or reduced margins), the results of which would show a surplus carrying amount on the recoverable value between € 500,000 and € 600,000.

10.1.5 Intangible assets

In the financial periods ended 31 December 2023 and 31 December 2022, intangible assets amounted to € 516,932,000 and € 498,719,000 respectively.

	Year ended 31 December	
(amounts in thousands of euro)	**2023**	**2022**
Industrial patent rights, licences and trademarks	9,942	11,034
Assets under concession	393,093	380,544
Customer listings	83,858	88,973
Other intangible assets	28,085	16,440
Intangible assets under construction	1,953	1,728
Intangible assets	**516,932**	**498,719**

Industrial patent rights, licences and trademarks refer mainly to third-party software user licences, amortised according to the envisaged duration of use over 3 or 5 years.
Assets under concession relate to networks, plants, connections and other assets pertinent to natural gas distribution recognised according to the “intangible assets method” provided for in 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 - ATEMs). Municipalities, cannot therefore independently assign the service on the basis of individual tenders.

However, before the adoption of Italian Legislative Decree no. 164/2000 (the 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 service 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.

On the basis of the analyses carried out on the recoverability of the value of the assets under concession related to natural gas distribution and recognised according to the “intangible asset method” provided for in IFRIC 12, indicators of permanent impairment emerged in relation to the class of electronic meters required for the natural gas distribution and metering service. In particular, the analysis looked at the electronic meters that, at the closing date of the financial year, were malfunctioning or deemed at greater risk of defects (anomalies in the transmission of the remote reading, in the quality of the remote reading transmitted, shutdown of the display). The analysis considered:

- the net book value of the meters;
- the year of manufacture;
- the year of installation;
- the possibility to carry out effective maintenance (such as change of modem battery, SIM change, reconfiguration of the meter communication parameters);
- the year of expected replacement, prior to the end of their useful life;
- the possibility to recognise foregone amortisation in the tariff in case of disposal on the basis of the current Tariff Regulation (Resolution 29 December 2022 737/2022/R/GAS of ARERA and Decision 11 October 2023 1/2023 – DINE).

On completion of this analysis, the net book value of the meters was aligned with their recoverable value through a write-down of € 2,205,000.

Customer listings mainly refer to determining the purchase price allocation (PPA) of the customer portfolios of the companies operating in the Gas and electricity sales CGU acquired in the business combinations conducted by the Group starting 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 of customers (so-called “Churn Rate”). In the financial periods ended 31 December 2023 and 31 December 2022, the customer listings were amortised over a 20-year time frame.

The item 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. Amortisations for this item were also restated at least at the end of each period in relation to the Churn Rate.

The Group checks annually whether there are any impairment indicators; specifically, for the customer listings 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 2023 with regard to intangible assets with a defined useful life.

The following changes were recorded in this item for the year ended 31 December 2023:

thousands of Euro	Industrial patent rights, licences and trademarks	Assets under concession	Customer listings	Other intangible assets	Intangible assets under construction	Total
Cost or valuation						
At 1 January 2023	**61,983**	**662,597**	**138,167**	**63,896**	**1,727**	**928,370**
Increases	3,735	37,530		24,620	226	66,111
Sales/eliminations	(32)	(5,835)		-		(5,867)
Reclassifications	-	(415)		-	-	(415)
Corporate acquisitions	-	-	2,213	-		2,213
Write-downs		(2,206)				(2,206)
At 31 December 2023	**65,686**	**691,671**	**140,380**	**88,516**	**1,953**	**988,207**
Amortisation/ depreciation						
At 1 January 2023	**(50,949)**	**(282,052)**	**(49,194)**	**(47,456)**		**(429,651)**
Amortisation for the year	(4,796)	(19,568)	(7,328)	(12,975)		(44,667)
Sales/eliminations		3037				3,037
Corporate acquisitions	-	-		-		-
Reclassifications		6		-		6
At 31 December 2023	**(55,745)**	**(298,578)**	**(56,522)**	**(60,431)**	**-**	**(471,275)**
Carrying amount						
At 31 December 2022	11,034	380,545	88,973	16,440	1,727	498,719
At 31 December 2023	9,942	393,093	83,858	28,085	1,953	516,932

We specifically note the following for 2023:

- investments for the period of € 66,111,000, referring primarily to:
    (i) the category “Assets under concession” for a total of € 37,530,000 for investments made regarding the gas distribution networks;
    (ii) the category “Industrial patent rights, licences and trademarks” for a total of € 3,735,000, relating mainly to the costs to replace the current ERP (Enterprise Resource Planning) based on SAP with NET@SUITE, the new platform that went live in the second half of 2022 and is in use at the Group’s main companies;
    (iii) the category “Other Intangible Assets” for a total of € 24,620,000, relating mainly to the costs to acquire customers incurred by the Group’s gas and electricity sales companies;
- net increases due to corporate acquisitions for € 2,213,000 referring to the consolidation of Monte Urano S.r.l.;
- sales/eliminations for € 2,830,000 mainly related to gas meters;
- reclassifications to tangible assets for € 415,000;
- write-downs for € 2,206,000 as previously described.
- depreciation for the period for € 44,667,000;

The following changes were recorded in this item for the year ended 31 December 2022:

thousands of Euro	Industrial patent rights, licences and trademarks	Assets under concession	Customer listings	Other intangible assets	Intangible assets under construction	Total
Cost or valuation						
At 1 January 2022	**50,723**	**636,316**	**138,167**	**53,075**	**6,442**	**884,723**
Increases	5,599	30,341		10,792	802	47,534
Sales/eliminations		(3,460)				(3,460)
Reclassifications	5,517				(5,517)	-
Corporate acquisitions	144			29		173
Write-downs		(600)				(600)
At 31 December 2022	**61,983**	**662,597**	**138,167**	**63,896**	**1,727**	**928,370**
Amortisation/ depreciation						
At 1 January 2022	**(47,084)**	**(264,645)**	**(41,977)**	**(38,625)**		**(392,331)**
Amortisation for the year	(3,849)	(19,891)	(7,217)	(8,819)		(39,776)
Sales/eliminations		2484				2,484
Corporate acquisitions	(16)			(12)		(28)
At 31 December 2022	**(50,949)**	**(282,052)**	**(49,194)**	**(47,456)**		**(429,651)**
Carrying amount						
At 31 December 2021	3,639	371,671	96,190	14,450	6,442	492,392
At 31 December 2022	11,034	380,545	88,973	16,440	1,727	498,719

We specifically note the following for 2022:

- investments for the period of € 47,534,000, referring primarily to:
  (i) the category "Assets under concession" for a total of € 30,341,000 for investments made regarding the gas distribution networks;
  (ii) the category "Industrial patent rights, licences and trademarks" for a total of € 5,599,000, relating mainly to the costs to replace the current ERP (Enterprise Resource Planning) based on SAP with NET@SUITE, the new platform that will manage all areas of the ESTRA Group and going live on 1 June 2022. The go live led to the reclassification of the costs incurred in previous years and recognised in the item "Fixed assets under construction" for € 5,517,000;
  (iii) the category "Other Intangible Assets" for a total of € 10,792,000, relating mainly to the costs to acquire customers incurred by the Group's gas and electricity sales companies;
- net increases for corporate acquisitions for € 145,000 mainly related to the consolidation of the companies Bisenzio Ambiente S.r.l. and Ecocentro Toscana S.r.l.;
- sales/eliminations for € 976,000 mainly related to gas meters;
- amortisations for the period of € 39,776,000;
- write-downs for the period for € 600,000 as mentioned previously.

10.1.6 Equity investments

In the financial periods ended 31 December 2023 and 31 December 2022, equity investments amounted to € 20,933,000 and € 24,139,000 respectively.

Equity investments (amounts in thousands of euro)	**Balance at 31 December 2022**	**Increases/ (Decreases)**	**Revaluation/ (write-down)**	**Other changes**	**Balance at 31 December 2023**
Nuova Sirio S.r.l.	81				81
Equity investments in companies subject to joint control	**81**	**-**	**-**	**-**	**81**
Blugas Infrastrutture S.r.l.	7,145		(2,195)		4,950
AES Fano	879		(45)		834
Monte Urano S.r.l.	759	928	48	(1,735)	-
SIG S.r.l	3,154		7		3,161
Sei Toscana S.r.l.	11,931		(192)		11,739
Equity investments in associates	**23,868**	**928**	**(2,377)**	**(1,735)**	**20,684**
AISA S.p.A.	11				11
Casole Energia S.r.l.	151		(22)		129
Other companies	28		1		29
Equity investments in other companies	**190**		**(21)**		**169**
Total equity investments	**24,139**	**928**	**(2,398)**	**(1,735)**	**20,934**

The changes in the year refer to:

- the increase in the percentage of the Group's stake in Monte Urano from 49% to 100% at the price of € 928,000, the value adjustment of € 48,000 deriving from the remeasurement at fair value of the minority stake already held for € 69,000 and the elimination of the equity investment for € 1,735,000 as a result of its line-by-line consolidation;

- The write-down of the 31.70% stake held by the Parent Company in Blugas Infrastrutture S.r.l., as described below;

- Other revaluation/(write-down) resulting from the application of the net equity method for an overall negative effect of € 251,000.

No indicators of permanent impairment were identified for any equity investments, and consequently no specific impairment tests were conducted, with the exception of the stake in Blugas Infrastrutture S.r.l.

The investee operates in the natural gas storage sector and, in particular, is holder of:

1. a 10% co-interest in 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 Italian Ministerial Decree of 24/04/2009.
   The relation with Edison is governed by a JV agreement, prepared according to industry standards.
   Blugas is required to make a pro-rata contribution to the operating, maintenance and capex costs, and has the right to be granted pro-rata revenues.

2. an ownership interest of 70 million cubic metres of natural gas to be extracted from the Abbadesse field, deriving from original research agreements between Blugas and a Canadian research partner. Through various company matters, the current contractual counterparty is Aleanna Italia S.r.l., which holds 33% of the concession (350 million cubic metres). The operator of the concession is an investee GasPlus which holds the remaining 66%. The drilling activities for the commercial development of the field began in late 2021 and are in the completion phase, the launch of production is expected in 2025 following testing.

With regard to the San Potito and Cotignola Storage project, 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.
With this 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 from 100% to 71.6% (calculated according to the investment realised/ space performance achieved ratio), which will be applied each year up until the site regulation is completed, at the same time, requiring a partial adjustment for the lower revenue received, in relation to the space performance that the fully operational concession will guarantee.
The co-holder Edison Stoccaggio strongly objected to the Authority's argument, undertaking the relevant legal action, which resulted in the reasons for the objection being accepted by the Council of State in June 2021. In accordance with the Council of State judgment, ARERA issued Resolution 513/2021, reassessing the calculation methods for the curtailment of revenue factor applied, and reformulated the value, with an increase from 71.6% to 73.6%. The co-holder Edison Stoccaggio has proposed a new appeal against Resolution 513/2021, because it believes that the latter does not adequately execute the Council of State decision. The new proceedings had not yet been initiated at the reporting date of these financial statements.
The company believes the arguments underlying the appeal are valid.

In relation to the Abbadesse extracting right, a dispute was raised by the current contractual counterparty (Aleanna S.r.l.) which invoked the invalidity and/or excessive cost of the agreement. The company, supported by its lawyers, believes the allegations of the counterparty to be unfounded. Given the current situation, the recognition and the exercise of the right could require a dispute to be initiated through an arbitration procedure.

The Estra Board of Directors, having assessed the poor consistency of the investment with the current strategic guidelines, expressed a favourable opinion of the start of discussions and preparatory activities for a possible earlier disposal of the assets or the company's shares, granting a specific mandate, jointly with the other shareholders, to a financial advisor and a legal advisor.

In the current consolidated financial statements, on the basis of the information available to date, the value of the investment was written down by € 2,195,000, assuming as a best estimate of the fair value less cost to sell a value approximate to the share of net equity at 31 December 2023.

10.1.7 Other non-current financial assets

In the financial periods ended 31 December 2023 and 31 December 2022, other non-current financial assets amounted to € 10,289,000 and € 12,289,000 respectively.

	Year ended 31 December	
(amounts in thousands of euro)	**2023**	**2022**
Loans to companies subject to joint control	230	230
Loans to associates	4,643	4,643
Receivables from others	5,416	7,416
Other non-current financial assets	**10,289**	**12,289**

The tables below show the composition of loans to subsidiaries and their changes at 31 December 2023 compared to the previous financial period:

(amounts in thousands of euro)	Balance at 31 December 2022	Increases	Decreases	Other changes	Balance at 31 December 2023
Nuova Sirio S.r.l.	230				230
Loans to companies subject to joint control	**230**				**230**

(amounts in thousands of euro)	Balance at 31 December 2022	Increases	Decreases	Other changes	Balance at 31 December 2023
Blugas Infrastrutture S.p.A.	4,153				4,153
A.E.S. Fano Distribuzione Gas S.r.l.	490				490
Loans to associates	**4,643**				**4,643**

The item "Receivables from others" mainly refers to the amount paid at the time of being awarded the gas distribution contract for the Municipality of Rieti, and which will be repaid, on the basis of the conditions envisaged by the concession contract, once the assignment ends, and all plants, networks and other distribution service installations are delivered to the replacement operator (€ 5,000,000), also present at 31 December 2022.

10.1.8 Other non-current assets

In the financial periods ended 31 December 2023 and 31 December 2022, other non-current financial assets amounted to € 2,464,000 and € 3,137,000 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 2023 and 31 December 2022, deferred tax assets amounted to € 73,705,000 and € 69,991,000 respectively.

The table below shows the composition of deferred tax assets and their changes at 31 December 2023 compared to the previous financial period:

(amounts in thousands of euro)	Balance at 31 December 2022	Corporate acquisitions	Reversals/Uses	Allocations	Other changes	Balance at 31 December 2023
Amortisation/ depreciation	12,088		(251)	1,787		13,624
Risk provisions	1,307		(430)	1,632		2,508
Provision for write-downs	14,701	32	(41)	2,168	35	16,895
Contributions received on connections	3,125		(117)			3,008
Write-down of fixed assets	906		(425)	1,368		1,849
Lease accounting	360		(6)	141		494
Reversal intangible assets	216		(11)	0		204
Fair value derivatives	2				(2)	0
Other	3,443		(1,643)	1,090	40	2,931
Higher tax value goodwill	3,526		(30)	21		3,518
Higher tax value assets under concession	30,315		(1,644)			28,671
Total	**69,991**	**32**	**(4,598)**	**8,207**	**74**	**73,705**

There are no problems expected regarding recoverability given the amount of the expected taxable income.

The table below shows the composition of deferred tax assets and their changes at 31 December 2022 compared to the previous financial period:

(amounts in thousands of euro)	Balance at 31 December 2021	Corporate acquisitions	Reversals/Uses	Allocations	Other changes	Balance at 31 December 2022
Amortisation/ depreciation	10,512		(185)	1,761		12,088
Risk provisions	1,067		(55)	296		1,307
Provision for write-downs	13,099		(971)	2,580	(6)	14701
Contributions received on connections	3,233		(108)			3,125
Write-down of fixed assets	916		(154)	144		906
Lease accounting	264	32	(3)	67		360
Reversal intangible assets	225	2	(12)	1		216
Fair value derivatives	2,231				(756)	1,475
Other	3,614	71	(1,170)	1,160	(1,705)	1,970
Higher tax value goodwill	3,535		(30)	21		3,526
Higher tax value assets under concession	31,953		(1,638)			30,315
Total	**70,649**	**105**	**(4,326)**	**6,030**	**(2,467)**	**69,991**

10.2 CURRENT ASSETS

10.2.1 Inventories

In the financial periods ended 31 December 2023 and 31 December 2022, inventories amounted to € 16,632,000 and € 41,166,000 respectively.
The item can be broken down as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2023**	**2022**
Materials inventories	5,669	6,697
Natural gas storage inventories	10,908	34,294
LPG inventories	338	458
Provision for stock devaluations	(284)	(284)
Inventories	**16,632**	**41,166**

Inventories primarily comprise:

- spare parts for the maintenance and operation of gas distribution plants for € 5,385,000 at 31 December 2023 (€ 6,413,000 at 31 December 2022), recorded at cost of acquisition or manufacture, including ancillary costs, which was lower than the market value;
- stored gas intended for supplies to final customers, measured at the lower value between the purchase cost including ancillary charges, and the estimated realisable value from the market trend for € 10,908,000 (€ 34,294,000 at 31 December 2022).

The change in the item is mainly attributable to the decrease in natural gas storage inventories valued at the lower between the average weighted cost of purchase the market value, lower than the previous financial year.

10.2.2 Trade receivables

In the financial periods ended 31 December 2023 and 31 December 2022,trade receivables amounted to € 395,602,000 and € 442,369,000 respectively.

The item can be broken down as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2023**	**2022**
Receivables from users and customers	386,852	434,215
Receivables from joint ventures	17	10
Receivables from associates	4,544	6,741
Receivable from holding companies	2,232	1,403
Receivables to companies subject to holding company's control	1,958	0
Trade receivables	**395,602**	**442,369**

The decrease in the balance at the end of financial year 2023 compared to the end of 2022 is due mainly to the decline in market prices of gas and electricity commodities.

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 2022	Change in the scope of consolidation	Uses during the year	Allocations for the year	Balance at 31 December 2023
Provision for write-downs	**66,700**	106	(2,396)	11,112	**75,522**

(amounts in thousands of euro)	Balance at 31 December 2021	Change in the scope of consolidation	Uses during the year	Allocations for the year	Balance at 31 December 2022
Provision for write-downs	**59,430**	-	(6,372)	13,642	**66,700**

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, accruing to the current year and to previous ones, for the estimate of the gas and electricity supplied to final 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 historic basis and subdivided according to credit ageing time brackets and customer clusters. Receivable positions of the most significant amounts are analysed and, if appropriate, specifically written down. For additional information on the calculation of the Provisions for Impairment of Receivables and the provision for invoices still to be issued for the gas and electricity supplied, please see the note "Significant accounting estimates".

For information on the receivables from Shareholders, companies subject to joint control and associates, please see the table referring to related parties transactions in the note "Transactions with Related parties".

The payment terms generally applied to customers are governed 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 Current tax assets

In the financial periods ended 31 December 2023 and 31 December 2022, current tax assets amounted to € 9,263,000 and € 7,235,000 respectively.

The item can be broken down as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2023**	**2022**
IRES/IRAP credits	9,263	7,235
Current tax assets	**9,263**	**7,235**

10.2.4 Other current assets

In the financial periods ended 31 December 2023 and 31 December 2022, other current assets amounted to € 131,666 and € 228,533 respectively.

The item can be broken down as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2023**	**2022**
Receivables from the Energy Authority and GSE	34,997	59,409
Advances	2,087	1,880
Other receivables	35,699	105,727
Prepaid expenses	2,659	3,914
VAT credit	7,435	8,835
UTIF	36,224	38,690
Other tax receivables	12,564	10,077
Other current assets	**131,666**	**228,533**

The item “Receivables from the Energy Authority” regards the amounts due in application of the equalisation mechanism to the restriction of total distribution revenue for subsidiaries operating in the sector, and for contributions relative to reaching the energy saving targets. The balance for the comparative year is influenced significantly by the measures introduced by the Government from autumn 2021 and in the first half of 2023, in order to contain energy tariffs. These measures involved bringing the majority of system charges to zero and the expansion of the gas and electricity social bonuses, with a resulting tariff reduction, not affecting market operators, which led to the onset of a relevant receivable from the Energy and Environmental Services Fund.

The item “Other receivables” mainly includes credit positions in relation to SNAM and natural gas shipper companies for € 31,818,000 at 31 December 2023 (€ 76,106,000 at 31 December 2022) in relation to the mechanism for allocating gas volumes for points of delivery not equipped with a meter that allows for remote readings. The settlement activities, governed at regulatory level by ARERA resolution 148/2019/R/gas – TISG – require that, based on daily and monthly balancing sessions, determined on the basis of provisional data, annual and multi-annual adjustment sessions be carried out involving adjustment procedures for the economic measurement of the difference between physical gas items attributed in the balancing sessions and those determined on the basis of measurement data available at the time when such session is carried out. In particular, there are points – mainly domestic ones – for which the annual consumption, based on effective data from the previous year, has seen much higher values than those that reflect current consumption, following policies on lower thermal use and user behaviours leaning more towards savings.
This situation led to a much larger purchase of gas than the effective quantities used, with related financial advance payment, which will be regulated during the annual and multi-annual adjustment sessions.
In this regard, with resolution 688/2022/R/gas, the Authority intervened in gas settlements for the balancing service. This resolution was aimed at remedying the issues reported by operators as a result of the ministerial measures on containment of consumption or due to different behaviours of end customers also prompted by the costs that should have been incurred due to the level reached of the prices of the commodity, with reference to gas allocations at the interconnections with the distribution networks, between October 2022 and March 2023, months during which an economic offsetting was envisaged in the final budget aimed at considering the changes in drawdowns, connected to lower consumption, against those envisaged on the basis of the criteria set out by art. 16 of the TISG, measuring the difference – if positive – between the total estimated consumption and the measurement of the related citygate, to be attributed to the sales companies pro rata.
With resolution of 18 April 2023 – 170/2023/R/GAS – ARERA, due to these same reasons, also considering the time needed to settle any adjustments resulting from the adjustment sessions, considered it appropriate to extend

the provisions of resolution 688/2022/R/gas to the period between January and September 2022 and, as regarding the year 2023, from April to September in light of the ongoing analyses of the possible improvement implementations to be made to the drawdown prediction mechanism subject to profiling during settlement.

The decrease in the item "Other receivables" at 31 December 2023 is also linked to the presence in the comparative balance at 31 December 2022 of credit positions in relation to natural gas distribution companies for € 20,001,000. These receivables were generated by the effect of the credit notes received from the sales companies, from the natural gas distribution companies, following the social bonuses envisaged by the measures introduced by the Government in autumn 2021 as well as the discounts recognised with the Ug2c component introduced from 1 April 2022. Both the social bonuses and the discounts recognised were then re-credited to the end customers by the sales companies, and therefore the value of these components is higher than the distribution units charged, leading to an inversion in the typical trade balance.

The item "Other tax receivables" refers mainly to the credits resulting from tax receivables pursuant to Art. 14, sections 2-*ter* and 2-*sexies* of Italian Decree Law 63/2013, relating to energy efficiency measures and building renovations.

Receivables recognised under current assets are all payable within twelve months.

All receivables are from entities operating in Italy, with the exception of insignificant amounts from EEC and Non-EEC entities for gas sales.

We also note that:

- certain receivables and payables with the same counterparties are recognised separately between 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 2023 and 31 December 2022, other current financial assets amounted to € 3,207,000 and € 25,442,000 respectively, while other current financial liabilities amounted to € 1,026,000and € 12,632,000.

Current financial assets can be broken down as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2023**	**2022**
Receivables from banks	1,231	7,346
Derivative instruments	1,976	18,096
Other current financial assets	**3,207**	**25,442**

Derivative instruments included in other current financial assets are made up as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2023**	**2022**
Forward commodity contracts	1,976	14,317
Cash Flow Hedge Commodity Swaps	-	3029
Commodity Swaps with change in fair value through profit or loss	-	750
Derivative instruments	**1,976**	**18,096**

Current financial liabilities are broken down as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2023**	**2022**
Payable derivative financial instruments	1,026	12,632
Other current financial liabilities	**1,026**	**12,632**

Derivative instruments included in other current financial liabilities are made up as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2023**	**2022**
Forward commodity contracts	1,026	11,306
Cash Flow Hedge Commodity Swaps	-	1316
Cash flow hedge Interest Rate Swaps	-	10
Derivative instruments	**1,026**	**12,632**

Receivables from banks refer to the interest on cash and cash equivalents and commodity swap spreads accrued at the reporting date and credited by the bank on a subsequent date.

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 "Raw materials, ancillary materials and goods" with a separate disclosure in the explanatory notes.
Forward contracts used for gas sales and entered into to optimise the company's own procurement and sales portfolio do not fall within the scope of application of IFRS 9 (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 entered into 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 entered into in the context of trading activity and derivatives in the context of gas sales that do not meet the conditions required by IFRS 9 (including formal conditions), to qualify as hedges.

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 2023 and 31 December 2022:

	Year ended 31 December 2023		Year ended 31 December 2022	
(amounts in thousands of euro)	**Positive/(negative) Fair Value**	**Notional**	**Positive/(negative) Fair Value**	**Notional**
IRS Fixed Rate/Variable Rate maturing 28/06/2024 (Intesa)	-	375	(10)	1,099
IRS Fixed Rate/Variable Rate maturing 03/06/2026 (Intesa)	15	379	30	527
IRS	**15**	**755**	**20**	**1,626**

Please see the paragraph "Interest rate Risk" for additional information.

10.2.6 Cash and cash equivalents

In the financial periods ended 31 December 2023 and 31 December 2022, cash and cash equivalents amounted to € 157,915,000 and € 345,872,000 respectively.

The item can be broken down as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2023**	**2022**
Bank and postal deposits	157,904	345,857
Cash and cash equivalents	12	15
Cash and cash equivalents	**157,915**	**345,872**

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.

10.3 SHAREHOLDERS' EQUITY

In the financial periods ended 31 December 2023 and 31 December 2022,shareholders' equity amounted to € 437,715,000 and € 423,249,000 respectively.

The change in the Group's equity at 31 December 2023 compared to 31 December 2022 is mainly due to:
- distribution of dividends to Shareholders (profit for the year 2023) by the Parent Company (- € 11,006,000);
- result of the Group's comprehensive income statement (+€ 25,400,000).

The change in the Group's equity at 31 December 2022 compared to 31 December 2021 is mainly due to:
- distribution of dividends to Shareholders (profit for the year 2021) by the Parent Company (- € 16,000,000);
- other changes due to the effects arising from the Centria capital increase (-€ 117,000) as described in the paragraph "Business combinations and disposals of assets, and acquisition and disposal of non-controlling interests";
- result of the Group's comprehensive income statement (+ € 24,401,000);

The change in shareholders' equity attributable to Non-Controlling Interests at 31 December 2023 compared to 31 December 2022 is mainly due to:
- distribution of dividends to third party shareholders (- € 849,000).
- result of the Group's comprehensive income statement related to Non-Controlling Interests (€ 920,000).

The change in shareholders' equity attributable to Non-Controlling Interests at 31 December 2022 compared to 31 December 2021 is mainly due to:
- other changes due to the effects arising from the Centria capital increase (+€ 117,000) as described in the paragraph "Business combinations and disposals of assets, and acquisition and disposal of non-controlling interests";
- other changes arising from the Bisenzio Ambiente S.r.l. share capital increase subscribed by third parties (+€ 1,825,000);
- distribution of dividends to third party shareholders (- € 1,104,000).
- result of the Group's comprehensive income statement related to Non-Controlling Interests (- € 186,000).

10.4 NON-CURRENT LIABILITIES

10.4.1 Provisions for risks and charges

In the financial periods ended 31 December 2023 and 31 December 2022, the provisions for risks and charges amounted to € 16,032,000 and € 11,053,000 respectively.

The table below shows the composition of the item and the change that occurred in 2023:

(amounts in thousands of euro)	31/12/2022	Change in the scope of consolidation	Allocations	Uses	Reversal	31/12/2023
Agency indemnities	314		1,038		(453)	899
Disputes and legal defence expenses	2,203		2,174	(28)		4,349
Energy Efficiency Certificates	1,440		9	(489)		959
Other risks	5,809	25	3,821	(508)	(566)	8,581
Plant dismantling provision	1,287		113		(156)	1,244
Provisions for risks and charges	**11,053**	25	**7,155**	**(1,026)**	**(1,175)**	**16,032**

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 item.
The provision for the year is mainly linked to the allocation to the provision for the risk of interest payable that the Group may have to pay for delayed payment of payable items subject to dispute, in the event of losing the dispute (€ 1,909,000).

Energy Efficiency Certificates refers to the risks associated with market trends in energy efficiency certificates, considering the remainder of the mandatory certificates 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 and technological equipment for telecommunications and to penalties related to the gas distribution business.
The provision for the year also includes the allocation to hedge the risk of two different proceedings pertaining to the sale of natural gas, both in the extrajudicial stage, for which the Group is aiming for a deflationary resolution of the potential claims, for a total of € 900,000.

The item agency indemnities refers to the severance indemnity for sales agents of the Group's vendor companies.

The Plant dismantling provision is related to the concession relationship between the subsidiaries Cavriglia and Tegolaia and the granting Municipality. recognised in accordance with IAS 17.50 as a sale and leaseback transaction (IAS 17.59), as described in the paragraph on property, plant and equipment, to which you are referred.

10.4.1.1 Main pending disputes

Dispute referring to the determination of the compensation due to the outgoing operator for the natural gas distribution service Municipality of Prato Toscana Energie

Following the award of the tender for the assignment of gas distribution services in the Municipality of Prato to Toscana Energia, on 31 August 2015, Centria, Toscana Energia and the Municipality of Prato signed the network delivery report (with the related installations and assets making up the gas distribution system), with the concurrent payment by Toscana Energia to Centria of compensation for the network of € 85,538,000 plus VAT.

During the year 2016, Estra and Centria filed a lawsuit with the Court of Prato against the Municipality of Prato and Toscana Energia, in order to obtain the condemnation of Toscana Energia. Moreover, subordinate to the Municipality of Prato, they pretend the payment of € 9,613,000, to supplement the lesser amount provided in the call for the tender and recognized to the outgoing Centria operator for the networks delivery, in application of a contested indexation and revaluation mechanism, on the basis of the time passed between the call and the delivery of the networks.

Based on the alternative application in respect of the Municipality of Prato, there was, *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 € 7,700,000 to the Municipality of Prato (of which, € 1,700,000 paid on 17 November 2011).

In the proceedings pending before the Court of Prato, Toscana Energia and the Municipality of Prato, argued for the unsubstantiated nature of the proposed application and presented a series of counter demands, and specifically:

- the Municipality of Prato submitted a counter-claim to obtain the payment of € 6,000,000 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 € 1,742,000 based on an alleged different composition of the network from what had been represented by the outgoing operator.

With judgment no. 387/2020 published on 14/08/2020, the ordinary Court of Prato ordered Estra S.p.A. to pay the Municipality of Prato, the amount of € 6,000,000, plus interest, based on the provisions of the aforementioned 2021 settlement agreement.

Instead the Court held that the Administrative Judge had jurisdiction in responding to the lawsuit filed in 2016 by Estra and Centria against the Municipality of Prato and Toscana Energia for the payment of € 9,613,000 and the counter demand of Toscana Energia for recognition of the payment of € 1,742,000.

The settlement agreement dated 02 December 2020 provided, *inter alia*, for Estra and Centra's withdrawal of the challenge to the judgment, limited to the part ordering the payment to the Municipality of Prato. The Parties agreed on instalment-based payments for a total amount of € 6,050,000, including interest, in three annual instalments falling due on 31 January 2021, 31 January 2022 and 31 January 2023.

Estra and Centria appealed against the judgement on 26 February 2021 and Toscana Energia separately submitted an application to the Appeal Court of Prato. Estra and Centria were summoned to the autonomous rehearing proposed by Toscana Energia, requesting the rejection of the counterparty's demands. The two appeals were merged. The first hearing for the merged proceedings was deferred to 7 May 2024.

It should be noted that in 2015 Estra and Centria had also brought proceedings before the Tuscan Regional Administrative Court to declare Directive no. 1058 of 14.05.2015 of the Municipality Prato invalid and/or cancelled in the part where the amount for the reimbursement payable to Centria S.r.l. had been changed to € 80,903,284.00 at 31.12.2014, as the outgoing operator of the natural gas distribution service in the territory of the Municipality of Prato, with the obligation unchanged for the new concession holder to repay the outgoing operator the amount of € 4,634,110.00 for the extensions to the network undertaken in the medio tempore, instead of € 90,500,000.00, indicated in the letter of invitation.
The RAC had legally declared the lack of jurisdiction of the administrative judge in the matter in question.
The companies had therefore decided to resume the proceedings before the Court of Prato.
The counterparties had presented a request to suspend such proceedings, to which Centria opposed. Instead the judge ruled to suspend the trial until the definition of the appeal proceedings of the Court of Prato judgement no. 387/2020 pending, between the same parties, before the Court of Appeal of Florence. Centria and Estra decided to appeal this act before the Court of Cassation.
The Court of Cassation, in the context of said judgement on the ground of jurisdiction, ruled on 20/12/2023 that the proceeding continue before the RAC.
Therefore, a request to set the hearing for the continuation of the proceeding was presented on 30 January 2024.
The Court of Prato, with ruling of 1 February 2024, set the hearing for 16/04/2024.
It should be noted that the two aforesaid disputes in the Court of Appeal, merged, should be suspended pending conclusion of the trial between the same parties which will resume in the RAC.

With regard to the reservations expressed by Toscana Energia on signing 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 € 1,752,000 recognised in previous financial years.

Notice of liquidation of registry, mortgage and land registry taxes

On 20 December 2019, the Parent Company and the subsidiary Centria received notices of liquidation of registry, mortgage and land registry taxes, as well as sanctions for a total of € 435,000 with reference to the corporate operations with which the companies Solgenera S.r.l. (now incorporated into Estra S.p.A.) and Centria S.r.l. contributed on 29/09/2016 to the company Estra Clima S.r.l. business units of theirs obtaining in exchange equity investments, of 44.69% and 39.43% respectively in the share capital of the conferee. These equity investments were subsequently (on 13/12/2016) transferred to the company Es.tr.a. S.p.A.at that time already a shareholder of the said Estra Clima S.r.l. with a 15.88% stake in the share capital.

Based on the external opinions also received, on 7 February 2020, the Group companies presented an appeal, considering the notices received unlawful and no provision has therefore been set aside in these consolidated financial statements. Subsequently to the submission of the appeal, the Regional Tax Commission of Arezzo, with judgment no. 210/2021 of 26 April 2021, filed on 24/05/2021, accepted the appeal by Centria and cancelled the challenged settlement notice. On 15 December 2021, the Revenue Agency submitted an appeal to the Regional Tax Commission of Tuscany.

Also in relation to Estra, the Regional Tax Commission of Arezzo, with judgements no. 420/2021, 421/2021 and 422/2021 of 26/04/2021, filed on 13/12/2021, accepted the appeal and cancelled the challenged settlement notices. The Revenue Agency submitted an appeal against the first instance decisions before the Court of Justice of second instance, which, as regards Centria and Estra (on one of the two settlement notices), ruled to reject the appeal of the Tax Revenue Office, whereas for the other settlement notice (Solgenera matter), the hearing was held on 12 February 2024 and the company awaits the outcome.

Disputes with a number of granting Municipalities in the *ope legis* management stage of the natural gas distribution service

The subsidiary Centria S.r.l. launched legal disputes with the Municipality of Seravezza and the Arno Valley Municipalities (Montevarchi, Cavriglia and Figline Valdarno) on the definition of the amount of the fees due to these Municipalities for the period, after the contractual expiry, in which Centria continued and is continuing to perform the activity of natural gas distribution in a regime of *prorogatio ope legis.*
In particular, the Company, supported by its lawyers, believes that it has the right to be granted a reduction of the fees established in the concession contracts, which expired during 2016 for Serravezza or during 2014 for the Arno Valley Municipalities.

In relation to the Municipality of Serravezza, the annual concession fee of which amounts contractually to approximately € 500,000, on 30/09/2019 a judgement was issued with which the Court of Lucca accepted Centria's arguments, ascertaining that the Municipality was and is obliged to renegotiate the fee after the expiry of the concession in observance of the general clauses of good faith and correctness, to preserve the economic and legal balance between the parties.
Following this decision, Centria S.r.l. and the Municipality of Serravezza signed a settlement agreement in May 2020 to quantify the fee payable to the Municipality for the 2016 and 2017 financial years, setting this at a total of € 861,000 per year.
For the years 2018 to 2021, the fee has provisionally been calculated at € 150,000, pending legislative/judicial clarification or notification from the sector Authority on the issue of fees post-maturity. Pending this clarification, the company has prudentially posted the contract-based fees in the financial statements.
Despite the settlement agreement, which should have ended the dispute, in December 2021 the Municipality of Seravezza requested the supplementary payment of the fees envisaged by contract reg. no. 128/2005 with reference to the period post-maturity and, notably, with reference to the years 2018, 2019, 2020 and 2021, in addition to the sums already paid by the Company.
This request was entirely contested by Centria. In response, the Municipality notified an injunction on 26 June 2022 for € 2,324,000, with related decree of the Court of Lucca, also requesting the granting of provisional

enforcement. On 7 September 2022 Centria filed a notice of objection to the injunction notified by the Municipality of Serravezza.
In January 2024, the Judge of Lucca, believing that the company has another tool to request the recalculation of the fee in case of imbalance (revision request pursuant to art. 165, paragraph 6, Legislative Decree no. 50/2016), rejected the objection and ordered Centria to pay the sum subject to the injunction (plus interest), minus € 150,000 as the fee paid for 2022, with full compensation of expenses.
The company resolved to challenge the judgement of the Court of Lucca and to submit a request for recalculation of the fee administratively pursuant to art. 165, paragraph 6, Legislative Decree no. 50/2016.
Taking account of the aforementioned developments, the company has continued to record the cost for the entire fee in the financial statements.

In relation to the Arno Valley Municipalities, the annual concession fees of which amount contractually to approximately € 2,200,000, a dispute launched by Centria in relation to the said Municipalities is still ongoing, having concluded the arbitration procedure, with partial rulings, issued in September 2019 and January 2020, which did not resolve the dispute and subject to appeals, and with a final ruling issued in May 2022.
With the final ruling of May 2022, the Board accepted the demands of the Municipalities and what had been requested in their counter demand, namely € 3,300,000 to be divided between the three Municipalities according to an undefined criterion.
Centria then appealed against the final ruling of May 2022 before the Court of Appeal of Rome.
The first hearing was held on 14/06/2023, also concerning the discussion of the request for suspension.
In the meantime, Centria initiated administrative proceedings to revise the economic conditions for economic/financial rebalancing requirements of the relationship (art. 165, Legislative Decree no. 50/2016).
Pending the hearing for appeal of the judgement, on 27/10/2023, with a single pre-legal collection notice, the said Municipalities ordered Centria S.r.l. to pay the total sum of € 4,161,000.
Centria then filed a summons before the Court of Florence in opposition to the collection notice, with request to suspend the enforceability of the ruling. The Court temporarily suspended the enforceability of the ruling (and of the collection notice) and reserved its decision on the confirmation of such suspension requested by Centria.
The hearing for the appeal against the final ruling has been postponed several times, pending the outcome of the review of the request for recalculation, as well as the outcome of the interlocutory stage of the objection to the collection notice (conditional) and postponed until 14/02/2024.
At the hearing on 14/02/2024, the measures with which the Municipalities rejected the request to review the fee administratively were lodged.
Assisted by its lawyers, though the company believes that it has the right to a recalculation of the fees for the years following the contractual expiry, in light of the recent developments described above, it decided, in line with previous financial years, to continue recording the cost of the fee for the entire amount as envisaged by contract.

It is noted further that on 28/12/2020, Centria S.r.l. received a summons to appear before the Court of Arezzo from the Municipality of Arezzo, with the demand for arrears on the concession fees for 2014 to 2019, for a total of € 3,131,000, plus interest and monetary revaluation.
The demand is based on the assumption, contested by Centria S.r.l., of an existing agreement (formulated on the basis of an exchange of correspondence) whereby the company was obliged to pay an annual fee determined on a fixed amount of € 984,000 as from 2011 and up until the European tenders pursuant to Art. 14 of Italian Legislative Decree 164/2000 are awarded.
It is noted that the distribution of natural gas in the Municipality of Arezzo, relating to the original public management of the service in an association format, has lapsed with the application of the sector transition regime and is managed by Centria S.r.l. *ope legis* post expiry in the absence of a contract.
The Board of Directors believed that the Municipality’s claim could be legitimately opposed, and has therefore made no provision to any risk provisions regarding this dispute.
On 27 September 2023, the Court of Arezzo legally rejected all requests filed by the Municipality of Arezzo against Centria S.r.l. and ordered the Municipality to reimburse the costs of the proceedings.

On 5 February 2021, the Municipality of Valenzano served notice of the start of summary proceedings pursuant to Art. 702*bis* of the Italian Code of Civil Procedure, aimed at obtaining judgment against Murgia S.r.l. to pay the fees past their due date for the period 2019-2020 for approximately € 326,000, plus approximately€ 108,000 in penalties.
This refers to an expired concession contract arising from a tender conducted pursuant to Art. 14 of Italian Legislative Decree no. 164/2000, which contemplates a fee equalling 53% of the location revenue tariff (at the time, VRD).

In the absence of the Entity's availability to reformulate the fee, the Company paid amounts commensurate to the criteria applicable to new tenders, in accordance with tariff regulations, estimating a breakdown between the Municipality and Operator (remuneration of invested capital for the municipality owned portion).
On 13/04/2023, the Judge noted the need for a technical report (CTU) and, at the same time, invited the parties to attempt an amicable settlement.
In light of the Municipality's refusal of the settlement proposal formulated by the company for disputes involving ownership of the infrastructure, at the hearing on 14/02/2024 the parties jointly requested the technical report (CTU) and established a discussion table with the executive/competent official of the Municipality and with the advisor, to analyse the matter of the allotment of the ownership and the residual value of the investments of Murgia.
Albeit believing that it has the right to a recalculation of the fee, given the legislative uncertainty, the company has continued to record the entire amount of the contractual fee in the financial statements.

In the context of disputes with Municipalities linked to the payment of the concession fee for the natural gas distribution service, in relation to the dispute between the Municipality of Mosciano Sant'Angelo and Edma Reti Gas S.r.l., arising in relation to payment of the fees due to the Municipality by virtue of the "Public service contract for distribution of methane gas in the municipal territory", signed on 23/06/2014 between the Municipality of Mosciano Sant'Angelo and Coingas S.p.A., the title for which Edma Reti Gas S.r.l. subsequently took over and continued to manage the service under *ope legis* mandatory management, limited to ordinary administration, it should be noted that an arbitration procedure was carried out, resulting in the issue of the arbitration award on 20/09/2019, which endorsed the principle of the right held by Edma, for which the fee must be reconsidered in the post-expiry transition phase of the concession.
the Municipality of Mosciano Sant'Angelo, nevertheless awaiting attempts at reconciliation regarding the exact residual amount to be paid following the results of the ruling, with summons notified on 16/12/2019, brought appeal proceedings of the arbitration ruling before the Court of Appeal of Aquila (gen. reg. no. 1375/2019).
Edma Reti Gas consequently entered an appearance.
In the meantime, despite the fact that the Municipality continues to request fees for an amount higher than what was established in the contested ruling, Edma is instead paying what is envisaged in the ruling, since this is effective despite the appeal of the Municipality.
On 15/12/2023, the filing of the ruling of 30/11/2023 was communicated, which upheld the appeal of the Municipality and rejected the cross-appeal of Edma.
In brief, the Court considered the fee envisaged by the expired contract as due. It did not rule out the possibility of a review of the fee, but only in the future and through the remedy set out by art. 165 of Legislative Decree no. 50/2016 (indicated by the Constitutional Court in the dispute between Centria and the Arno Valley Municipalities, with ruling issued only during the proceedings), in the sole circumstance of "proven contractual imbalance".
Despite Edma having also submitted a request to recalculate the fee, referring to all relevant provisions (including art. 165), the Court held that the specific tool had not been activated; furthermore, the Arbitrators, according to the Court, had wrongly indicated as due for the transitional phase a different fee than the one envisaged in the expired contract, without acquiring concrete proof of actual imbalance.
The order is for a sum equal to the difference between what was paid and the amount of the contractual fees (October 2016 – December 2017), in addition to default interest (pursuant to Legislative Decree no. 231/2002) and the legal expenses, as per the operative part of the judgement.
The company submitted an appeal before the Court of Cassation against the judgement of the Court of Appeal, and is also considering filing a request for recalculation of the fee administratively. Given the uncertainty concerning the outcome of the objection and, in light of the aforementioned developments, the company continued to recognise the full fee in the financial statements.

The Municipality of Ancona, with executive notice sent to Edma Reti Gas on 8 February 2023, also determined, unilaterally and authoritatively, in the absence of reconciliation between the parties, which had been debating the topic of the extent of the fee for some time, especially after ARERA resolution 570/2019/gas, the concession fee for the natural gas distribution service in the municipal territory for the years 2021, 2022, 2023, in the context of the *ope legis* management period of the service following expiry of the concession.
With subsequent notice, Edma then requested the withdrawal of the determinations made by the Authority with the notice dated 8 February, and, constructively, the reopening of discussions, by the end of March 2023, giving advance notice of a judicial process on the contrary, which then became necessary following the silence maintained by the Municipal Administration and sending of the contested notice.
The appeal filed before the Ancona RAC and notified in April 2023 requested the invalidity or voidability of the notices of the Municipality, both the one in February 2023 and previous ones from 2022, in order to ascertain the absence, in relation to the contestant company, of the obligation to pay the Municipality of Ancona the fee for the

natural gas distribution service in the amount unilaterally and authoritatively determined by said Municipality in the notice of February 2023 for the years 2021, 2022, and 2023, equal to 42.5% of the VRD.
An appeal was filed based on additional reasons against further confirmatory notices issued by the Municipality of Ancona. The hearing has not yet been set.
Given the uncertainty concerning the outcome of the objection, the company continued to recognise the full fee in the Financial Statements.

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] of 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 € 195,000 during 2014 and sponsorship costs deemed to be non-deductible donations for € 325,000 in 2015, and (ii) the non-deductible VAT on the invoices for non-existent costs for about € 43,000, 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 action, since, according to the Finance Police, the documentation for the costs consisted of 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 an order confirming 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 € 211,000 and about € 401,000 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 accept 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 set aside € 350,000 in the consolidated financial statements at 31 December 2017 to cover the probable expense for taxes and penalties, with the latter reduced by one third as provided for in the case of acceptance of the assessment notices.

In 2019, based on the assessment notices issued for 2014 relating to IRES, IRAP and VAT, a total of € 132,000 was paid in total for taxes, penalties and interest, by accepting the assessment notices.

Given that what was paid to settle the findings relating to 2014 does not diverge substantially from the provisions set aside at 31 December 2017, and considering that no notices have currently been received for 2015, the residual provision for € 218,000 is deemed appropriate.

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 € 148,000, applied to goodwill for around € 6,690,000, acquired on the basis of a business unit contribution operation.

Essentially, the tax authorities deem that in a business unit contribution operation the goodwill 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.

In March 2020, the first-instance hearing was held and the Group received a favourable judgement. On 22 October 2020, the Regional Tax Commission submitted an appeal application in the second instance. In January 2021, Promoteo submitted the relevant rebuttal arguments to the appeal application.

In the scope of the tax mentorship undertaken with the Regional Tax Department in the Marches region, the above finding was also re-proposed for tax years after 2014. Specifically, with regard to the 2015 tax year, the Marches DRE issued additional assessment notices, in which respect Prometeo S.p.A. submitted an appeal on 20 July 2021. The 2015 references also had judgments that become definitive with the Provincial Tax Commission of Ancona, on 23 November 2021, the Commission handed down another judgment in favour of the Group.
On 30 March 2022, the DRE Marches issued another assessment notice referring to the same case as above, for the year 2016. Additionally, in reference to the proceedings of first instance for the year 2016, the tax court of first instance of Ancona handed down a judgement in favour of Prometeo S.p.A. on 7 November 2022.

Lastly, on 31 July 2023, an assessment was also notified by the Marche Regional Tax Office (DRE) for the year 2017 with reference to the same matter of goodwill. The Group lodged an appeal, which was heard on 21 February 2024, pending the decision by the Tax Court of First Instance.

Pending the undertaking of legal action, the Group is continuing with its defence in the various instances still open, as described above

Supported by its consultants, the Group believes the allegation raised on the tax recognition of this goodwill to be unfounded; therefore, no provision has been made against the risks deriving from losing the dispute.

Dispute referring to the electricity surcharges pursuant to Italian Decree Law 511/1988

On 23 October 2019, in its judgement no. 27101, the Court of Cassation stated the legal principles whereby provincial surcharges are not applicable to excise duties on electricity as per Art. 6 of Italian Decree Law 511/88, in the applicable version, *ratione temporis*, subsequent to the amendments introduced by Art. 5, section 1 of Italian Legislative Decree no. 26/2007. The judgement confirmed the non-application of the regulation in question, deeming it contrary to Art. 1, paragraph 2 of Directive 2008/118/EC of 2007, also following the interpretation provided by the EU Court of Justice ratified by specific judgements.

Even though in the scope of other pending proceedings, the Court of Cassation rejected the claims for reimbursement submitted by end consumers in respect of Customs Offices, in this case, finding the lack of passive legitimacy on the part of the end customer, as they are extraneous to the tax relationship established between the financial administration and the vendor company that acts as a withholding agent. In the aforementioned decisions, the Supreme Court nonetheless provided the end customer with the option of "conducting a civil case referring to the recovery of amounts unduly paid, directly in respect of the service provider".
Based on these pronouncements, electricity vendor companies are receiving a series of reimbursement demands from end customers, referring to amounts unduly paid for the provincial surcharges for the years 2010-2012 as these do not yet fall within the term of prescription provided for a civil action. It should be remembered further that the provincial surcharge for excise duty on electricity was applicable until its cancellation on 31 March 2012, in terms of Italian Decree Law no. 16/2012, and was applied to electricity usage up to 200,000 KWh monthly.

With regard to the demands for reimbursement of undue payments that could result in civil litigation, the supplier is essentially obliged to oppose the reimbursement claims made by end consumers, as it will be impossible to obtain a reversal from the Customs Agencies. Should the supplier acquiesce to the demands of its customers, the reversal operation in respect of the Financial Administration would become impossible, given the provisions under Art. 14, paragraph 4 of the Consolidated Excise Duties Text, which strictly sets the deadline to reimburse what has been paid at two years from the time of payment. Otherwise, the assumption of the civil court ordering the supplier to make the reimbursement, again on the basis of Art. 14, paragraph 4 of the Consolidated Excise Duties Text, requires the taxpayer to request the refund from the Financial Administration within ninety days of the civil court judgement becoming final, imposing the return of the amounts paid.
Even though this mechanism could generate advances paid to the end consumer by the supplier, when ordered to refund the payment, it theoretically excludes the risk of a liability for the vendor company, because the amounts that will be reimbursed by suppliers would be recovered based on subsequent compensation action in respect of the Tax Authority.

The first hearings were held in the Civil Court during 2021, opposing the requests for refunds received from certain customers. Given that the position is wide open to interpretation, and in the absence of consolidated case-law, the Courts involved up to now in the individual matters, are adopting different approaches to the matter at hand. At the date of this document, pending the action relating to the claims for damages that have already become definitive in the first instance, during 2023, the Group repaid 8 customers that had put forward a request before the Court, for a total of approximately € 81,000. For these amounts, during 2023 the Group presented a specific claim for reimbursement to the respective Customs Agencies in the relevant territories.

To date, with regard to the above, given that the applications for refunds to the vendor companies involved in other specific cases, have been accepted by certain territorial Customs Agencies, the Group did not deem it necessary to make a specific allocation to the risk provisions.

Proceedings related to the appointment of Mr Macrì to the Board of Directors of Estra S.p.A.

On 27 May 2021, ANAC notified Estra S.p.A. and other parties that it had initiated proceedings with regard to the appointment of Mr Francesco Macrì as Chairman of the Company. The proceedings were initiated in order to ascertain whether the appointment of Mr Macrì to the Board of Directors was subject to the prescriptions pursuant to Italian Legislative Decree no. 39 of 8 April 2013 referring to appointments with the public administration and entities under public control ("Decree 39") , and if subject to these requirements, whether any non-compliance had occurred. More specifically, the investigation relates to Mr Macrì's potential ineligibility as a member of the Board of Directors of Estra S.p.A. at the time of his appointment, based on his recent appointment as municipal councillor for the Municipality of Arezzo.

On 22 November 2021, ANAC notified Estra S.p.A. of its decision to cancel the appointment of Mr Francesco Macrì as Chairman of Estra S.p.A. with immediate effect.

On 26 November 2021, the Board of Directors resolved to challenge the decision of ANAC before the relevant courts. More specifically, the Directors believe that Decree no. 39 should not apply to Group companies. The Decree refers mainly to the appointment of directors and officials, on the assumption that is supported by legal advice received, that Estra S.p.A. does not qualify as a company under public control in terms of this legislation.

With judgement no. 13057 of 13/10/2022, the Regional Administrative Tribunal of Lazio rejected the appeal lodged by Estra S.p.A. against ANAC in relation to Francesco Macrì, Coingas S.p.A. and the Municipality of Arezzo for the cancellation of Resolution no. 744 of 10 November 2021 adopted by ANAC and any other preliminary, connected and/or consecutive measures.
Assisted by its lawyers, the company appealed the aforementioned judgement to the Council of State and the hearing took place on 4 April 2023.
With judgement no. 470/2023 of 21 August 2023, the Council of State rejected the appeal presented by the company Estra S.p.A. against the judgement of the RAC Lazio no. 13057 of 13/10/2022.

The proceedings have not had an effect on these consolidated financial statements.

10.4.2 Employee severance indemnity

The employee severance indemnity [TFR] provided for in Art. 2120 of the Italian Civil Code, from the point of view of recognition 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 2023 to the obligations for defined benefits and the fair value of the plan's assets:

Obligations for defined benefits 31.12.2022	Corporate acquisitions	Costs for services	Interests	Settled benefits	Expected obligations 31.12.2022	Actuarial losses (gains) from experience	Actuarial losses (gains) from changes to financial assumption	Obligations for defined benefits 31.12.2023
7,634	17	296	272	-591	7,628	-130	303	7,801

The main assumptions are summarised in the table below:

Summary of the Economic Technical Basis

	Year ended 31 December 2023	Year ended 31 December 2022
Annual discount rate	3.17%	3.77%
Annual inflation rate	2.00%	2.30%
Annual severance indemnity increase rate	3.00%	3.22%
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
1.21%	0.50%

A quantitative analysis follows below summarising sensitivity in respect of the significant assumptions at 31 December 2023 and 2022:

Assumptions	Changes	Year ended 31 December 2023	Year ended 31 December 2022
Turnover frequency	+1/4%	7,707	7,379
	- 1/4%	7,707	7,352
Inflation rate	+1/4%	7,848	7,179
	- 1/4%	7,571	7,560
Discount rate	+1/4%	7,513	7,500
	- 1/4%	7,910	7,235

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				
	2024	2025	2026	2027	2028
Total	371	501	450	138	539

The average duration of the defined benefit plan obligation at the close of the 2023 financial period is approximately 16.8 years (approx. 15.6 at 31 December 2022).

10.4.3 Medium/long terms loans

In the financial periods ended 31 December 2023 and 31 December 2022, medium/long-term loans amounted to € 600,152,000 and € 665,964,000 respectively.
The item can be broken down as follows:

(amounts in thousands of euro)	Year ended 31 December 2023 Carrying Amount	Year ended 31 December 2023 Nominal Value	Year ended 31 December 2022 Carrying Amount	Year ended 31 December 2022 Nominal Value
Bonds maturing within 12 months	-	-	19,902	20,000
Bonds maturing after 12 months	146,199	150,000	145,439	150,000
Total payables for bonds	**146,199**	**150,000**	**165,341**	**170,000**
Shareholders' loans maturing within 12 months	1,602	1,602	1,435	1,435
Shareholders' loans maturing after 12 months	3,166	3,166	4,935	4,935
Total Shareholders loans	**4,768**	**4,768**	**6,370**	**6,370**
Loans maturing within 12 months	186,504	186,504	125,782	125,782
Loans maturing after 12 months	237,449	239,008	341,603	343,853
Total payables for loans	**423,953**	**425,512**	**467,385**	**469,635**
Leasing within 12 months	4,814	4,814	4,763	4,763
Leasing after 12 months	20,417	20,417	22,105	22,105
Total payables for leasing	**25,231**	**25,231**	**26,868**	**26,868**
Total within 12 months	192,920	192,920	151,882	151,980
Total after 12 months	407,232	412,592	514,082	520,893
Total medium/long term loans	**600,152**	**605,511**	**665,964**	**672,873**

The changes during 2023 are shown below:

(amounts in thousands of euro)	Balance at 31 December 2022	Corporate acquisitions	Granted/Opened	Repayments	Application of amortised cost	Balance at 31 December 2023
Bonds	165,341			(20,000)	858	146,199
Loans	467,385	42	132,300	(177,323)	1,549	423,953
Leases	26,868		3,245	(4,882)		25,231
Shareholders' loans	6,370			(1,602)		4,768
Total medium/long term loans	**665,964**	**42**	**135,545**	**(203,808)**	**2,408**	**600,152**

With reference to bond loans, we note that:

- On 28/11/2023, the extinction of the non-convertible bond loan for initial € 80 million and residual € 20 million, represented by bonds listed on the regulated market managed by the Irish Stock Exchange, issued in 2016 and now reached maturity (duration 7 years and fixed coupon of 2.45).

The table below shows the carrying amount at 31 December 2023 and 31 December 2022 for each bond loan issued:

(amounts in thousands of euro)	Year ended 31 December 2023	Year ended 31 December 2022
BOND 2016-2023	-	19,902
BOND EUPP 2022-2027	77,380	76,789
BOND USPP 2022-2029	68,819	68,651
Bonds	**146,199**	**165,341**

The bond loans existing at 31 December 2023, both issued during financial year 2022, are represented by:

- A non-convertible unsecured bond loan for € 80,000,000 represented by bonds listed on the regulated market managed by the Irish Stock Exchange, where the relative prospectus has been filed, issued on 14 April 2022. The loan is guaranteed by the subsidiary Centria S.r.l., entirely subscribed by institutional investors outside of the United States of America. Bonds, issued at a price of 98.509% of nominal value, are unrated, have a duration of 5 years and a fixed coupon of 3.050%.

- A non-convertible unsecured senior bond placed with American institutional investors (so-called "US Private Placement"), issued on 15 September 2022 for the amount of € 70,000,000.
  The bonds, issued at par and with a duration of 7 years, admitted to trading on the non-regulated market of the Wiener Börse AG, have a fixed coupon of 4.20% and will be repaid at par in a single tranche at the maturity date.
  The issue is part of an uncommitted issue programme of bonds that can be subscribed by the Pricoa Group ("Private Shelf Facility") up to US$ 125,000,000, with a 3-year duration.

Both issues were aimed at the partial repayment of existing debt as well as support for the Group's investment plan, and pursue a strategy of diversification and improvement of the Group's indebtedness, by extending its average duration.

With reference to loans, we can note in particular:

- a loan agreement was structured and finalised on 24/03/2023 for € 80,000,000 supported by a guarantee issued by SACE S.p.A. to hedge 90% of the total amount in accordance with the provisions of Decree Law no. 50 of 17 May 2022 definitively converted with amendments into Law 91/2022 and published in the Official Gazette no. 164 of 15 July 2022 and pursuant to Article 2.5 *et seq.* of the SACE General Conditions, in support of the financing requirements of the net working capital of the natural gas and electricity sales activity. The loan, taken on by the Parent Company Estra S.p.A., was utilised by the same for the disbursement of an intercompany loan of the same amount in favour of Estra Energie S.r.l., fully disbursed on 27/03/2023;

- with a view to extending the duration of the debt, the drawing of the residual sum of € 50,300,000 of the pool financing taken out on 9 August 2022 with leading credit institutes for a total of € 150,000,000, expiring on 8 August 2027, and at the same time carrying out partial repayment of € 50,000,000 of the pool financing of € 125 million disbursed on 29 December 2022 and expiring on 30 September 2025, supported by a guarantee issued by SACE S.p.A. to hedge 90% of the total amount in accordance with the provisions of Decree Law no. 50 of 17 May 2022, definitively converted with amendments into Law 91/2022 and published in the Official Gazette no. 164 of 15 July 2022 and pursuant to article 2.5 et seq. of the SACE General Conditions.
  The financing agreement, signed on 31 March 2022 for a total of € 150,000,000, is divided into two medium/long-term secured credit facilities:
    - a credit facility (Facility A), for a maximum amount of € 120,000,000 in support of the costs incurred and to be incurred based on the Group's CapEx plan and
    - a credit facility (Facility B), for a maximum amount of € 35,000,000 to be used in support of the Company and the Group's general cash requirements.

The item "Leasing" refers to the financial liabilities relating to financial or operating lease payments in accordance with IFRS 16 for the right to utilise the asset underlying the contract – refer to the notes on the corresponding items of the tangible assets.

Shareholders' loans includes amounts due to shareholders for medium/long term loans, subordinate to bank and bond debt agreed by the Shareholders, in particular:
- debt to the shareholder Alia Servizi Ambientali originally for € 15,000, repayable in 24 instalments starting from 30 June 2015, with constant principal amounts at an annual rate of 3% and residual debt at 31 December 2023 of € 3,750,000;
- debt to the shareholder Coingas 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 2023 for € 185,000;
- debt to the shareholder Alia Servizi Ambientali for € 1,000,000 paid in 2022 in favour of the company Bisenzio Ambiente S.r.l., repayable in 14 bi-annual instalments starting from 30 June 2023, with constant principal amounts, remunerated at the Euribor rate (6 months) increased by a spread of 310 bps and residual debt at 31 December 2023 for € 833,000.

10.4.4 Deferred tax liabilities

In the financial periods ended 31 December 2023 and 31 December 2022, deferred tax liabilities amounted to € 25,656,000 and € 27,516,000 respectively.

The composition and changes in 2023 in the item are as follows:

(amounts in thousands of euro)	Balance at 31 December 2022	Corporate acquisitions	Allocations	Reversals/Uses	Other changes	Balance at 31 December 2023
Dividends not collected	256	-	-	(247)	-	9
Amortised cost bond loans	12	-	-	(21)	-	(9)
Capital gains on assets under concession	2,017	-	210	(76)	-	2,150
Capital gains on intangible assets	19,557	638	238	(1,692)	-	18,741
Capital gains on property, plant and equipment	4,682	-	-	(493)	-	4,189
Other	349	-	132	(30)	27	479
Derivatives on commodities fair value	643	-	-	-	(546)	97
Deferred tax liabilities	**27,516**	**638**	**580**	**(2,558)**	**(520)**	**25,656**

The composition and changes in 2022 in the item are as follows:

(amounts in thousands of euro)	Balance at 31 December 2021	Corporate acquisitions	Allocations	Reversals/Uses	Other changes	Balance at 31 December 2022
Dividends not collected	32		240	(16)		256
Amortised cost bond loans	87			(75)		12
Capital gains on assets under concession	2,298			(281)		2,017
Capital gains on intangible assets	20,980		237	(1,660)		19,557
Capital gains on property, plant and equipment	1,005	4,039	0	(362)		4,682
Other	201		148	-		349
Derivatives on commodities fair value	-				643	643
Deferred tax liabilities	**24,603**	**4,039**	**625**	**(2,394)**	**643**	**27,516**

10.4.5 Other non-current liabilities

In the financial periods ended 31 December 2023 and 31 December 2022, other current liabilities amounted to € 19,360,000 and € 17,211,000 respectively.
The balance at 31 December 2023 refers to multiple-year deferred income for fibre optic rentals for the year relating to data transmission in the telecommunications sector (€ 19,360,000).

10.4.6 Non-current and current contractual liabilities

At 31 December 2023 non-current and current contractual liabilities amounted to € 26,743,000 and € 1,220,000 respectively (€ 26,145,000 and € 944,000 at 31 December 2022) and are mainly connected with contributions received by users for gas connections, booked to the income statement pro-rata temporis along the period of amortisation of the related investments.

10.5 CURRENT LIABILITIES

10.5.1 Short-term borrowings

In the financial periods ended 31 December 2023 and 31 December 2022, short-term borrowings amounted to € 7,259,000 and € 44,681,000 respectively.

The item can be broken down as follows:

(amounts in thousands of euro)	Year ended 31 December 2023	2022
Bank advances and current account uses	4,189	41,554
Payables to bondholders for interest accrued	3,070	3,127
Short-term borrowings	**7,259**	**44,681**

Bank advances, of a significantly lower amount compared to the previous period given the current available funds, were used mainly by the Group together with available liquidity, to meet the possible financial requirements generated by net commercial working capital, in particular for companies operating in the sale of natural gas and electricity, which also due to their seasonal nature, generally record physiological growth in the first half of the year due to the misalignment in the time frame between collections from customers and payments to suppliers.

The Group relies on several short-term credit facilities as described in the paragraph of note "Objectives and criteria for financial risk management".

10.5.2 Trade payables

In the financial periods ended 31 December 2023 and 31 December 2022,trade payables amounted to € 278,318,000 and € 522.953,000 respectively.

The item can be broken down as follows:

(amounts in thousands of euro)	Year ended 31 December 2023	2022
Payables to suppliers	277,251	522,360
Payables to holding companies	355	36
Payables to associates	651	557
Payables to companies subject to holding company's control	60	-
Trade payables	**278,318**	**522,953**

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 debts are due within 12 months and in respect of persons operating in Italy, with the exception of non-significant amounts towards EEC and Non-EEC customers for gas purchases.
The significant decrease in the balance at the end of financial year 2023 compared to the end of 2022 is due mainly to the decline in the prices of gas and electricity commodities.
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, please see the note "Transactions with Related parties".

10.5.3 Current tax liabilities

In the financial periods ended 31 December 2023 and 31 December 2022, current tax liabilities amounted to € 17,369,000 and € 2,411,000 respectively.

The item can be broken down as follows:

(amounts in thousands of euro)	Year ended 31 December 2023	2022
IRES/IRAP payables	17,369	2,411
Current tax liabilities	**17,369**	**2,411**

10.5.4 Other current liabilities

In the financial periods ended 31 December 2023 and 31 December 2022, other current liabilities amounted to € 69,823,000 and € 113,088,000 respectively.

The item can be broken down as follows:

	Year ended 31 December	
(amounts in thousands of euro)	**2023**	**2022**
Payables due to staff for salaries	6,463	6,012
Payables to social security institutions	2,271	2,130
Payables to Energy and Environmental Services Fund [CSEA]	4,995	3,791
Payables for dividends resolved	-	16,000
Accruals and deferrals	3,171	3,155
Guarantee deposits	33,951	32,079
Payable for settlement agreement with the Municipality of Prato	-	2,002
Other payables	9,251	42,660
Payables to purchase equity investments	600	1,400
Irpef withholding agents	1,390	1,144
VAT payable	6,445	430
Excise duty and additional taxes	1,256	10
Substitute tax	-	2,081
Other tax liabilities	31	194
Other current liabilities	**69,823**	**113,088**

The payables to CSEA are payables recognized in relation to the Energy and Environmental Services Fund mainly referred to pass-through tariff components of natural gas transmission, and are in line with the previous year.

The item “Guarantee deposits” refers to payments by customers as guarantees on gas consumption in the scope of one-year contracts.

The payable to the Municipality of Prato for the settlement agreement, equal to € 2,002 at 31 December 2022 and fully paid at 31 December 2023, refers to the portion payable in terms of the contract in 2023 following the outcome of the dispute on determining the compensation to the Group as the outgoing operator of the natural gas distribution services for the Municipality of Prato, with judgement no. 387/2020, the ordinary Court of Prato ordered Estra S.p.A. to pay the Municipality of Prato an amount of € 6,000,000. Reference is made to the paragraph “Dispute referring to the determination of the compensation due to the outgoing operator for the natural gas distribution service Municipality of Prato Toscana Energie”.

The item “Other payables” recorded a significant decrease of € 33,409,000 compared to the previous year, when the payables recorded by the Group’s gas distribution companies to the sales companies had been reclassified. These positions were generated following the measures ratified by the “Aid” Decree Laws, which provided for the application of discounts to mitigate increases in bills. The regulation added the discount applied to the tariff components in relation to the sales companies operating in the territories where the network of the Group’s distribution companies is based, as well as in relation to CSEA. The ratified and applied discount, proving to be higher than the transmission tariff, led to the issue of credit notes to the sales companies.

The item “Payables to purchase equity investments” for € 600,000 refers to the residual debt for the acquisition of the 100% stake in Ecocentro Toscana S.r.l.

The item “Substitute tax” refers to the payable emerging due to the revaluation of company assets for statutory accounting and tax purposes and tax realignment of company assets for the tax recognition of the step-up values recorded in the financial statements at 31 December 2020. The substitute tax was paid in three instalments of equal amount, the last of which was paid in financial year 2023.

With regard to liabilities for excise duty and additional taxes on gas and electricity consumption, reference is made to the item “other UTIF current assets”.

10.5.5 Financial instruments and measurement at fair value

In terms of IFRS 13, the table below shows the carrying amount for existing financial instruments, per category, compared with the corresponding fair values at 31 December 2023 and 31 December 2022.

FINANCIAL ASSETS	Year ended 31 December 2023		Year ended 31 December 2022	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets at fair value with changes recognised in income statement	**1,976**	**1,976**	**15,067**	**24,349**
Forward commodity contracts	1,976	1,976	13,716	22,521
Commodity Swaps	-	-	1,351	1,828
Financial assets at fair value with changes recognised in shareholders' equity	**-**	**-**	**3,029**	**2,478**
Commodity Swaps	-	-	3,029	2,478
Receivables and loans	**400,951**	**400,951**	**457,726**	**425,218**
Loans to companies subject to joint control	230	230	230	230
Loans to associates	4,643	4,643	4,643	7,331
Medium/long term guarantee deposits	2,464	2,464	3,138	2,370
Trade receivables	397,252	397,252	442,369	405,857
Receivables from banks	1,231	1,231	7,346	9,430
Cash and cash equivalents	**157,915**	**157,915**	**345,872**	**143,107**
Non-current assets held for sale	**-**	**-**	**-**	**42**
TOTAL ASSETS	**560,843**	**560,843**	**821,694**	**595,194**

FINANCIAL LIABILITIES	Year ended 31 December 2023		Year ended 31 December 2022	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial liabilities at fair value with changes recognised in income statement	**1,026**	**1,026**	**11,306**	**11,306**
Forward commodity contracts	1,026	1,026	11,306	11,306
Commodity Swaps	-	-	-	-
Financial liabilities at fair value with changes recognised in shareholders' equity	**-**	**-**	**1,326**	**1,326**
Cash flow hedge IRS derivatives	-	-	10	10
Commodity Swaps	-	-	1,316	1,316
Liabilities at amortised cost	**919,680**	**919,680**	**1,265,676**	**1,265,676**
Trade payables	278,318	278,318	522,953	522,953
Medium/long terms loans	600,152	600,152	665,964	665,964
Short-term borrowings from banks	7,259	7,259	44,681	44,681
Guarantee deposits	33,951	33,951	32,079	32,079
Liabilities directly associated with assets held for sale	**-**	**-**	**-**	**-**
TOTAL LIABILITIES	**920,706**	**920,706**	**1,278,309**	**1,278,309**

Given their nature, in the case of most items, the carrying amount 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.

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 two years.

The values used to calculate the result per basic share are shown below.

	Year ended 31 December	
	2023	**2022**
Net income pertinent to Parent Company shareholders (thousands of Euro)	27,263	14,661
- Operating activities	27,263	14,661
- Assets held for sale		
Average number ordinary shares in circulation in period	227,834,000	227,834,000
Result per basic and diluted ordinary shares (Euro)	**0.12**	**0.06**
Result from operating activities per basic and diluted ordinary shares (Euro)	**0.12**	**0.06**

The result per 2023 share, net of non-recurring operations, in terms of CONSOB Resolution number 15519 of 27 July 2006 (€ 30,353,000), is 0.12.

In this regard we can note that the 500,000 treasury shares held by the Parent Company were excluded from the calculation.

12. Guarantees and undertakings

The Group had provided the following guarantees at 31 December 2023 and 2022:

Guarantees issued on behalf of associates	**31/12/2023**	**31/12/2022**
Guarantee issued to Unicredit in favour of Blugas Infrastrutture S.r.l. for funding	250	4,257
Guarantee issued to the Tuscany Region in favour of Bisenzio Ambiente S.r.l. in terms of DGRT no. 743 of 6 August 2012	2,357	2,357
Total	**2,607**	**6,614**
Guarantees granted in the interests of others	**31/12/2023**	**31/12/2022**
Sureties issued to the Tax/Customs Authorities for tax refunds	3,522	7,211
Sureties to other parties	451	451
Guarantees issued on behalf of local entities for work or concessions relating to the use of public land	9,508	8,227
Total	**13,481**	**15,889**
Total guarantees	**20,095**	**22,503**

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.

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 2023, after evaluating the effects of IRS, around 33% (37% in 2021) of the Group’s loans were at a fixed rate. In particular, the loans with a longer duration are fixed rate (bond loan and net metering service users issued in 2022)

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 limited 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 2023 and 2022:

SENSITIVITY OF FINANCIAL FLOWS	31/12/2023				31/12/2022			
	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	(1,490)	1,497			(1,480)	1,492		
CHANGES TO FAIR VALUE			29	(29)			95	(96)
TOTAL	**(1,490)**	**1,497**	**29**	**(29)**	**(1,480)**	**1,492**	**95**	**(96)**

13.2 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.
Over time 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 causes 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, recourse to insurance cover and obtaining guarantees from customers.

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 amount 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 2023 and 2022:

Trade receivables	**Year ended 31 December**			
(amounts in thousands of euro)	**2023**		**2022**	
Gross trade receivables	471,124	100%	509,069	100%
Provision for write-downs	-75,522	-16%	(66,700)	(13%)
Trade receivables	**395,602**	**84%**	**442,369**	**87%**

The table below provides details on gross trade receivables according to ageing at 31 December 2023 and 2022:

Trade receivables	**Year ended 31 December**			
(amounts in thousands of euro)	**2023**		**2022**	
Falling due	318,741	68%	418,326	82%
Due from 0-30 days	57,481	12%	18,742	4%
Due from 31-90 days	30,051	6%	11,512	2%
Due from 91-180 days	9,398	2%	7,398	1%
Due from 181-365 days	14,260	3%	20,733	4%
Due over 365 days	41,192	9%	32,358	7%
Gross trade receivables	**471,124**	**100%**	**509,069**	**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 2023 are the carrying amounts shown in the Note Financial instruments and measurement at fair value, with the exception of financial guarantees.

13.3 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 2023.

(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	150,000	-	-	80,000	70,000
Bank loans	425,512	173,949	130,984	120,425	154
Leases	25,231	4,814	4,640	10,128	5,649
Medium/long terms loans to shareholders	4,768	1,602	1,417	1,750	-
Total	**605,511**	**180,365**	**137,041**	**212,303**	**75,803**

The Group closed financial year 2023 with a strong liquidity position, amounting to € 157.9 million, with access to extensive short-term credit facilities granted by leading credit institutes.
At 31 December 2023, the Group had unused facilities (in the form of bank advances, advances on trade receivables or supplier maturities) for approximately € 169 million.

13.4 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 2023 and 2022 is shown below. This derives from the consolidated financial statements for the years ended on the same dates, in compliance with the Guidelines on disclosure obligations pursuant to Regulation EU 2017/1129 (so-called "Prospectus Regulation"), published on 4 March 2021 by the European Securities and Market Authority (ESMA):

	Financial debt (amounts in thousands of euro)	2023.12	2022.12
A.	Cash and cash equivalents	157,915	345,872
B.	Cash equivalents		
C.	Other current financial assets	3,207	25,442
	- current derivative financial instruments	*1,976*	*18,096*
	- Receivables from banks	*1,231*	*7,346*
D.	**Cash and cash equivalents (A) + (B) + (C)**	**161,122**	**371,314**
E.	Current financial payables (including debt instruments, but excluding the current portion of non-current financial debt)	194,789	202,997
	- current financial debt	*7,259*	*44,681*
	- current derivative financial instruments	*1,026*	*12,632*
	- bank debts	*186,504*	*125,782*
	- bonds issued	-	*19,902*
F.	Current portion of non-current financial debt	6,416	6,198
	- payables to other lenders for financial leases	*386*	*375*
	- payables to other lenders for operating leases	*4,428*	*4,388*
	- payables to shareholders for loans	*1,602*	*1,435*
G.	**Current financial debt (E) + (F)**	**201,205**	**209,195**
H.	**Net current financial debt (G) - (D)**	**40,083**	**(162,118)**
I.	Non-current financial debt (excluding the current portion and debt instruments)	23,583	27,040
	- payables to other lenders for financial leases	*3,277*	*3,663*
	- payables to other lenders for operating leases	*17,141*	*18,442*
	- payables to shareholders for loans	*3,166*	*4,935*
J.	Debt instruments	383,649	487,043
	Non-current bank debts	*237,449*	*341,603*
	Bonds issued	*146,199*	*145,439*
K.	Trade payables and other non-current debt	-	-
L.	**Non-current financial debt (I) + (J) + (K)**	**407,232**	**514,082**
O.	**Total financial debt (H) + (L)**	**447,314**	**351,963**

At 31 December 2023, net financial debt was € 447.3 million, down on the € 95.3 million at 31 December 2022, mainly due to the increase in net working capital. This change is due to the increase in net trade receivables in the energy efficiency segment, for redevelopment works on properties from the 110% Superbonus, the increase in net trade receivables in the Gas and Electricity Sales SBU due to higher volumes of gas and electricity sold in the 4th quarter compared to the previous financial year, to operations to optimise working capital carried out in 2022 and not re-proposed in the current financial year relating to the transfer without recourse of receivables from the public administration or industrial customers and rescheduling of trade payables, and the increase in net trade receivables on the regulated market which had been characterised in 2022 by regulatory measures to reduce so-called system charges invoiced by the sales companies.

The main changes are related to liquidity and non-current financial debt as a result of medium/long-term loan repayments carried out in the year.

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*:
    a) non-performance of the obligations arising from convictions, on condition that predetermined relevance threshold are exceeded;
    b) 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;
    c) 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. 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 (lower than 4.5x);
- the ratio between net financial debt and shareholders' equity (lower than 1.2x);
- the ratio between net financial debt and RAB of the subsidiary Centria S.r.l., consolidated with those of its investee companies (lower than 1x).

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.

Additionally, in line with market practises for similar transactions, bond loans require the Group to observe a series of negative covenants, i.e. limits on the option of carrying out certain transactions, such as termination of a significant part of its business.

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 related 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 2023 and 2022 there were no infringements of covenants associated with loans and bond loans.

13.5 Risks associated with commodity prices

The Group is exposed to commodity price risk, so it has to manage risks associated with the misalignment between the indexing formulae related to the purchase of raw materials (natural gas and electricity) and the indexing formulae related to the sale of the same commodities.

The risk relates to both trading activity in a strict sense (spot transactions aimed at achieving additional short-term profits) and "industrial" activity of delivering gas and electricity to final customers.

With reference to trading, the activity is opportunely segregated but is performed within rigorous risk policies that provide for, among other things, observance of limits in terms of Risk Margin and VAR, set by the company's Board of Directors and monitored constantly.

With reference to "industrial" activity, Group policy is designed to minimise the risk associated with fluctuating 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. In particular, the Group has structured a series of commodity derivatives aimed at pre-setting the effects on sales margins irrespective of the changes in market conditions. All transactions in derivatives are concluded for the purpose of hedging, even if they do not formally come within the criteria defined by the standard IFRS 9 for hedge accounting.

The Group has adopted a specific policy aimed at defining the guidelines of the Estra Group related to governance, the management strategy and the control of risks associated with activities in commodities performed by the Group Companies and, more particularly, the subject of the policy is price risk.

The objective is to stabilise the cash flows generated by the Group's portfolio of assets and contracts, protecting the Group's gross operating margin from fluctuations due to price risk on the commodities traded and to qualify the Group's financial performance with a view to mitigating the risk, through the definition and continuous monitoring of the risk limits.

The Group's policy is oriented to minimising recourse to the financial markets for hedging through making good use of the netting logics included in the Portfolio of reference. To this end, the Group plans as a priority the physical balancing of volumes of its sales of energy commodities on the markets for the various time deadlines, through the portfolio of existing contracts, both medium-term (with reference to the thermal year of the following period) and spot. Secondly, the Group pursues a strategy of making sources and physical uses uniform, so that the formulae and indexing with which the costs deriving from energy commodity purchases are associated reflect as far as possible the formulae and indexing of the Group's revenue, making use to this end also of derivative instruments.

For the purposes of managing and controlling Price Risks, the Estra Group makes use of the consolidated parameters in the international best practice. In particular, the Contribution Margin of the industrial portfolio is subject to monitoring; this includes both Profit & Loss (*realised P&L*) accrued at the date and the future Mark to Market (MtM). The realised P&L corresponds to the portion of P&L already accrued in the accounting year of reference, calculated on the basis of the final value of all the market prices that have determined costs and revenue. The Mark to Market (or *unrealised P&L*) corresponds to the portion of future P&L not yet accrued in the accounting year of reference, measured at fair value on the basis of the forward curve for quoted prices and on forecast curves for non-quoted prices.

Exposure to price risk of the contract portfolio is measured, for each index, as a change in Mark to Market, that is of the Contribution Margin, determined by a unit change in the price of the commodity in question and is permitted within the pre-set limits established by the company's Board of Directors.

As of 31 December 2023, the Group had the following commodity risk derivative instruments included among other current financial assets and liabilities:

Current financial assets	**Year ended 31 December**	
(amounts in thousands of euro)	**2023**	**2022**
Forward commodity contracts	1,976	13,716
Cash Flow Hedge Commodity Swaps	-	3,029
Commodity Swaps with change in fair value through profit or loss	-	1,351
Derivative instruments	**1,976**	**18,096**

Current financial liabilities	Year ended 31 December	
(amounts in thousands of euro)	2023	2022
Forward commodity contracts	1,026	11,306
Cash Flow Hedge Commodity Swaps	-	1,316
Commodity Swaps with change in fair value through profit or loss	-	-
Derivative instruments	**1,026**	**12,632**

The net balance of the fair values of existing derivative instruments at 31 December 2023 was, therefore, positive for € 950,000.

Assuming an instantaneous increase of 5% of the entire forward curve of natural gas and electricity prices, the cumulative fair value of the financial instruments on commodities would worsen by € 1,627,000, going from a positive balance of € 950,000 to a negative balance of € 677,000.

The effect of the change in the natural gas price would refer entirely to derivatives with a change in the fair value in the income statement.

Vice versa, with an instantaneous reduction of the entire *forward curve* of the commodity prices of 5%, the effects would be of the same amount with the opposite sign.

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 2023, the Group received the following contributions from public Entities (amounts in Euro).

Beneficiary	Granting entity		Type of operation	Amount
	Company name	Tax number		
CENTRIA S.R.L.	MUNICIPALITY OF BIBBIENA	00137130514	Plants account contribution (Gas distribution connections)	10,120
CENTRIA S.R.L.	PUBLIACQUA S.P.A.	05040110487	Plants account contribution (Gas distribution networks and connections)	95,122
CENTRIA S.R.L.	MUNICIPALITY OF MURLO	80003070523	Plants account contribution (gas distribution networks)	134,059
TOTAL				**239,302**

For more information, see the Aid Register.

15. 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.

In this regard, at the same meeting on 18 December 2023, the Estra Board of Directors approved the new “Procedure for related-party transactions established in line with CONSOB Regulation no. 17221 of 12/3/2010 and subsequent amendments” and the “Related-Party Transactions Committee Regulations” in line with those in force at Alia.

The following table presents the total amount of transactions that have been entered into with related parties for the financial years ended 31 December 2023 and 2022. 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 2023

Related parties/FS item	Year ended 31 December 2023						
	Revenue from sale of goods and services	**Other operating revenue**	**Costs for services**	**Personnel costs**	**Other operating costs**	**Financial income**	**Financial expenses**
Alia Servizi Ambientali S.p.A.	2,327	292	259	97	6		202
Intesa S.p.A.		23	31	(274)	16		
Coingas S.p.A.	20	15	6				10
Viva Energia S.p.A.	463		7	34			
Shareholders	**2,810**	**330**	**303**	**(144)**	**22**	**-**	**212**
Nuova Sirio S.r.l.	9	4					
Companies subject to joint control	**9**	**4**	**-**	**-**	**-**	**-**	**-**
Blugas Infrastrutture S.r.l.		15				209	
A.E.S. Fano Distribuzione Gas S.r.l.	138	179	(591)	(17)	2	25	
SIG S.r.l.	568	100		(17)		2	
Sei Toscana S.r.l.	2,842	23	539	(166)			
Associates	**3,548**	**316**	**(52)**	**(200)**	**1**	**235**	**-**
Publiacqua S.p.A.	162		186				
Ambiente Toscana OpCo S.p.A.							
Programma Ambiente Apuane S.p.A.							
Revet S.p.A.	2,382	55	64				
Aer S.p.A	67						
Companies subject to holding company's control	**2,610**	**55**	**250**	**0**	**0**	**0**	**0**
Total	**8,977**	**705**	**501**	**-344**	**23**	**235**	**212**
Percentage incidence on corresponding FS item	***0.74%***	***4.20%***	***0.26%***	***-0.70%***	***0.15%***	***2.29%***	***0.56%***

Financial year 2022

Related parties/FS item	Year ended 31 December 2022						
	Revenue from sale of goods and services	**Other operating revenue**	**Costs for services**	**Personnel costs**	**Other operating costs**	**Financial income**	**Financial expenses**
Consiag S.p.A. (now Alia Servizi Ambientali S.p.A.)	523	14		(109)	5		178
Intesa S.p.A.		24		(280)	(9)		
Coingas S.p.A.	37	34	3				15
Viva Energia S.p.A.							
Shareholders	**559**	**72**	**3**	**(389)**	**(4)**		**193**
Nuova Sirio S.r.l.	7	4					
Companies subject to joint control	**7**	**4**					
Monte Urano S.r.l.	1,283	9				35	
Blugas Infrastrutture S.r.l.		14				209	
A.E.S. Fano Distribuzione Gas S.r.l.	97	102	(1,709)	(17)	1	25	
SIG S.r.l.	445	97	(3)	(15)		1	
Sei Toscana S.r.l.	1,526	7	607	(172)		23	
Associates	**3,352**	**229**	**(1,105)**	**(205)**	**1**	**292**	
Total	**3,918**	**305**	**(1,102)**	**(594)**	**(3)**	**292**	**193**
Percentage incidence on corresponding FS item	***0.22%***	***2.50%***	***(1.07%)***	***(1.27%)***	***(0.03%)***	***10.84%***	***1.35%***

- **Asset transactions**

Financial year 2023

Related parties/FS item	Year ended 31 December 2023					
	Trade receivables	**Other non-current financial assets**	**Other non-current assets**	**Trade payables**	**Current and non-current financial debt**	**Other current liabilities**
Alia Servizi Ambientali S.p.A.	1,969		262	317	8,631	
Intesa S.p.A.	233		180	28	2,711	
Coingas S.p.A.	31		80	10	1,598	
Viva Energia S.p.A.			1			
Shareholders	**2,232**	**-**	**523**	**355**	**12,940**	**-**
Nuova Sirio S.r.l.	17	230				
Companies subject to joint control	**17**	**230**	-	-	-	-
Blugas Infrastrutture S.r.l.	2,047	4,153				
A.E.S. Fano Distribuzione Gas S.r.l.	461	490		146		
SIG S.r.l.	269					
Sei Toscana S.r.l.	1,766			505		
Associates	**4,544**	**4,643**	**-**	**651**	**-**	**-**
Publiacqua S.p.A.	143		6	46		
Ambiente Toscana OpCo S.p.A.						
Programma Ambiente Apuane S.p.A.						
Revet S.p.A.	1,797			15		
Aer S.p.A	18					
Companies subject to holding company's control	**1,958**	**-**	**6**	**60**	**-**	**-**
Total	**8,751**	**4,873**	**529**	**1,067**	**12,940**	**-**
Percentage incidence on corresponding FS item	***2.20%***	***47.36%***	***21.48%***	***0.38%***	***5.98%***	**-**

Financial year 2022

Related parties/FS item	Year ended 31 December 2022					
	Trade receivables	**Other non-current financial assets**	**Other non-current assets**	**Trade payables**	**Current and non-current financial debt**	**Other current liabilities**
Consiag S.p.A. (now Alia Servizi Ambientali S.p.A.)	973		262	26	10,972	6,334
Intesa S.p.A.	255		180		3,508	4,030
Coingas S.p.A.	175		80	10	2,120	4,030
Viva Energia S.p.A.						1605
Shareholders	**1,403**		**522**	**36**	**16,600**	**16,000**
Nuova Sirio S.r.l.	10	230				
Companies subject to joint control	**10**	**230**				
Monte Urano S.r.l.	524					
Blugas Infrastrutture S.r.l.	1,890	4,153				
A.E.S. Fano Distribuzione Gas S.r.l.	2,353	490				
SIG S.r.l.	344					
Sei Toscana S.r.l.	1,631	(2,688)		557		
Associates	**6,741**	**1,954**		**557**		
Total	**8,155**	**2,184**	**522**	**593**	**16,600**	**16,000**
Percentage incidence on corresponding FS item	***1.84%***	***17.78%***	***16.64%***	***0.11%***	***2.49%***	***14.15%***

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 Alia Servizi Ambientali S.p.A. and Coingas S.p.A. (the **"Service contracts"**);
- Rental contracts to lease company offices in Prato, Arezzo and Siena for the ESTRA Group, respectively from shareholders Alia Servizi Ambientali S.p.A., Coingas S.p.A. and Intesa S.p.A. (the **"Rental contracts"**);
- Existing loan contracts with the shareholders Alia Servizi Ambientali S.p.A. and Coingas S.p.A. (the **"Loan contracts"**);

Main transactions with companies subject to joint control

- Medium/long-term loan contracts aimed at supporting operating activities and investments to Nuova Sirio S.r.l.

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 2023 amount to € 605,000.

The "**Rental contracts"** govern the leases payable for company offices in Prato, Arezzo and Siena for the ESTRA Group, respectively from shareholders Alia Servizi Ambientali S.p.A., Coingas S.p.A. and Intesa S.p.A. The contracts with the Shareholders Intesa and Alia Servizi Ambientali S.p.A. have a term of three years starting from 01 January 2019, tacitly renewable for a further three. The contract with the Shareholder Alia Servizi Ambientali S.p.A. has a term of 6 years starting from 01 January 2020. The fees paid to shareholders in 2023 amounted to € 2,114,000. The fees are subject to annual review based on 75% of the change in the Italian National Institute of Statistics [ISTAT] cost of living index for the previous year.

The **"Loan contracts"** refer to two existing loans between Estra S.p.A. and the shareholders Alia Servizi Ambientali S.p.A. and Coingas S.p.A. and an existing loan between Bisenzio Ambiente S.r.l. and Alia Servizi Ambientali S.p.A. with the following characteristics:

- Existing loan contract between Estra and the Shareholder Alia Servizi Ambientali 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%
- Existing loan contract between Estra and the Shareholder Consiag S.p.A. originally for € 1,850,000, repayable in 20 instalments starting from 30 June 2015, with constant principal amounts at an annual rate of 3%
- Existing loan contract between Bisenzio Ambiente S.r.l. and the Shareholder Alia Servizi Ambientali S.p.A. originally for € 1,000,000, repayable in 14 instalments starting from 30 June 2023, with constant principal amounts at the Euribor rate (6 months) increased by a spread of 310 bps.

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.

16. Emoluments to directors, statutory auditors and independent auditors

The table below shows the emoluments to directors, statutory auditors and independent auditors for 2023 and 2022.

Beneficiaries	Year ended 31 December 2023			Year ended 31 December 2022		
	At the parent company	Of the other companies of the group	Total	At the parent company	Of the other companies of the group	Total
Directors	264	425	689	247	375	622
Board of Statutory Auditors	93	342	435	94	296	390
Independent Auditors	107	276	383	193	273	466

The table below shows the fees paid for 2023 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**	**Fees 2023 (€ thousand)**
Independent audit of accounts	Parent Company independent auditor	Parent company	71
		Subsidiaries	173
Certification services	Parent Company independent auditor	Parent company	36
		Subsidiaries	49
Other services	Parent Company independent auditor	Parent company	-
	Parent Company independent auditor network	Parent company	-
Total			**329**

[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, the limited audit of the Non-Financial Statement for the Parent Company, the audit of the Parent Company's statement of debit and credit entries with local entities, and the audit of the statements pursuant to ARERA Resolution 32.2022.

17. Significant events after the reporting date

There were no significant events after the reporting date.

Prato, 27 March 2024

for the Board of Directors
The Chairperson
Francesco Macrì

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

Consolidated financial statements as at December 31, 2023

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), which comprise the consolidated statement of financial position as at December 31, 2023, and the consolidated statement of income, the consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows 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, 2023, 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.

Other Aspects

The Company, as required by law, has included in its financial statement disclosures the main financials of the latest financial statements of the company that exercises direction and coordination activity on it. The opinion on the financial statements of E.S.TR.A. S.p.A. does not extend to such data.

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

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forming our opinion thereon, and we do not provide a separate opinion on these matters.

We identified the following key audit matters:

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, 2023, 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 IT 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, measured on the basis of data communicated at the end of the year by the service distributors, subject to potential future adjustments as required by applicable laws and regulations, and on the basis of internal customers consumption forecasts. 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	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 IT 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.

matter.

The disclosures included in note "Significant accounting estimates" of the consolidated financial statements as at December 31, 2023 describe the revenues recognition principles adopted by the Group for gas and electricity sales.

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 them all matters that may reasonably be thought to bear on our independence, and where applicable, the actions taken to eliminate relevant risks or the safeguard measures applied.

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 Operations and of the Report on Corporate Governance and Ownership Structure of Group E.S.TR.A. as at December 31, 2023, 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 Operations and of specific information included in the Report on Corporate Governance and Ownership Structure as provided for by article 123-bis, paragraph 4, of Legislative Decree n. 58, dated 24 February 1998, with the consolidated financial statements of E.S.TR.A. Group as at December 31, 2023 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 Operations and the above mentioned specific information included in the Report on Corporate Governance and Ownership Structure are consistent with the consolidated financial statements of E.S.TR.A. Group as at December 31, 2023 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 consolidated 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, April 12, 2024

EY S.p.A.
Signed by:

Andrea Eronidi
Auditor

This independent auditor's report has been translated into the English language solely for the convenience of international readers. Accordingly, only the original text in Italian language is authoritative.