



SUMMARY
OF THE ANNUAL REPORT
TO ACER AND THE EUROPEAN COMMISSION
ON THE REGULATORY ACTIVITIES AND FULFILMENT OF
DUTIES
OF THE REGULATORY AUTHORITY FOR ENERGY NETWORKS
AND ENVIRONMENT

30 July 2024

1 MAIN DEVELOPMENTS IN THE ELECTRICITY AND NATURAL GAS MARKETS

1.1.1 Evaluation of market development and regulation

Main changes in Italian legislation

As the acute phase of the energy crisis came to an end, 2023 was first and foremost characterised by the implementation of the emergency measures launched during 2022. The main rulings of the year relating to the energy sectors are summarised below, as usual in chronological order.

Law No. 6 of 13 January 2023, which converted the "Aid *quater*"¹ Decree-Law, contains several measures to tackle the energy crisis. Some of the most important include:

- the possibility, offered to companies with utilities located in Italy, to make payment in **instalments the amounts**² due as consideration for the energy component of electricity and natural gas for consumption effected from 1 October 2022 to 31 March 2023 and invoiced by 30 September 2023;
- **the increase in the supply of domestically produced gas to industrial final customers at an affordable price** (introduced by a previous decree in 2022³), in order to contribute to the strengthening of the security of natural gas supply and the reduction of climate-changing gas emissions, including methane;
- the **postponement by one year, to 10 January 2024, of the end of standard offer service in the natural gas sector**, as well as the postponement from 31 December 2022 to 10 November 2023 of the final deadline for the supply of natural gas purchased by the GSE as part of the provision of the filling service of last resort;
- the authorisation of expenditure of € 410 million for 2022 to **reinforce the social bonuses** for electricity and gas referred to in Decree-Law No. 115/2022.

Law no. 14 of 24 February 2023⁴:

- **extended to 30 June 2023 the suspension of the effectiveness** of any **contractual clause** allowing the supplier of electricity and natural gas to unilaterally change the general terms and conditions of the contract relating to the definition of the price (Art. 11, paragraph 8). The rule does not apply to contractual clauses permitting the updating of contractual economic conditions upon their expiry;
- has established that, as of 1 January 2023, suppliers and operators of the service of last resort must offer vulnerable customers the supply of natural gas at a price reflecting the actual cost of

¹ Law No. 6 of 13 January 2023, Conversion into law, with amendments, of Decree-Law No. 176 of 18 November 2022, on urgent support measures in the energy sector and public finance.

² In excess of the average amount recorded, consumption being equal, during the reference period from 1 January to 31 December 2021.

³ Art. 16 of Decree Law no. 17 of 1 March 2022.

⁴ Law No. 14 of 24 February 2023, Conversion into Law of Decree-Law No. 198 of 29 December 2022, containing Urgent Provisions on legislative deadlines.

supply in the wholesale market, the efficient costs of the marketing service and the contractual conditions and quality of service, as defined by ARERA (art. 11, paragraph 8-bis). It has also been envisaged that, until 30 September 2023, within the limit of the resources actually available, ARERA shall identify the need for resources to be allocated to the limitation of the consequences for end users deriving from price increases in the natural gas sector, giving priority to financing the mechanisms for remedying non-payment of bills in favour of the operators of the default distribution service and the service of supply of last resort and allocating any residual resources to reducing, in 2023, the general charges of the system for the natural gas industry;

- amended an earlier legislative decree⁵ on **incentives for biogas and biomethane production**, stipulating that within the scope of the decrees by which the methods for incentivising biomethane produced or injected into the natural gas network are to be implemented and coordinated (to be adopted by 31 December 2023) the incentives may also be extended to the production of gaseous fuels from renewable energy resources, including the production of hydrogen from biomasses, in compliance with the emission limits provided for by the European Union regulations and the rules on government aid (Art. 11, paragraph 8-octies).

Article 51, paragraph 1-*quater*, of **Law No. 41 of 21 April 2023**⁶ established that the reimbursements recognised by the European Commission for expenses advanced by the State for measures to reduce energy costs be transferred, together with the national co-financing quotas and the resources of the Revolving Fund for the implementation of community policies, to the Cassa per i Servizi Energetici Ambientali (CSEA⁷) for the financing of rules aimed at recognising economically disadvantaged households or those in serious health conditions with facilitations for the supply of electricity and gas.

The subsequent **Law No. 56 of 26 May 2023**, which converted into law the “Aid-*quinquies*” Decree Law⁸, **again strengthened the social bonus** for electricity and gas, for the second quarter of 2023 and within the limit of € 400 million. In 2023, households in economically disadvantaged conditions are identified on the basis of the ISEE value⁹ up to € 15,000. From the second quarter and until the end of 2023, € 5 million is also allocated for social bonuses for economically disadvantaged families with at least four dependent children - for which the ISEE value is raised to € 30,000 (instead of the

⁵ The amendments concern Article 11 of Legislative Decree No. 199 of 8 November 2021 (“Implementation of Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable energy resources”).

⁶ Law No. 41 of 21 April 2023, Conversion into law, with amendments, of Decree-Law No. 13 of 24 February 2023, containing urgent provisions for the implementation of the National Recovery and Resilience Plan (PNRR) and the National Plan for Complementary Investments to the PNRR (PNC), as well as for the implementation of cohesion policies and the Common Agricultural Policy.

⁷ CSEA – Cassa per i servizi energetici e ambientali is a public economic body whose main mission is the collection of some tariff components and system charges from operators. It collects the proceeds of these components and subsequently distributes them to companies according to the rules issued by the Authority.

⁸ Law No. 56 of 26 May 2023, Conversion into law, with amendments, of Decree-Law No. 34 of 30 March 2023, containing urgent measures in support of households and businesses for the purchase of electricity and natural gas, as well as the fulfilment of health and tax requirements.

⁹ The Equivalent Economic Situation Indicator (ISEE): this is the tool used to measure the economic condition of households in Italy. It is an indicator that takes into account income, assets and the characteristics of a household (in terms of size and type).

previous € 20,000). The law quantifies the costs of the above-mentioned measures at € 405 million for 2023, from the resources available in the CSEA budget for 2023. The same law also provided for the application of **the reduced VAT rate of 5% to the consumption of methane gas** used for combustion for civil and industrial purposes in bills issued for estimated or actual consumption for the months of April, May and June 2023 (Q2 2023). The costs resulting from this measure are quantified at € 539.78 million. Again, in consideration of the reduction in wholesale natural gas prices, it confirmed for the month of April 2023 only, the negative rates of the UG2c¹⁰ tariff component applied to consumption brackets up to 5,000 m³ per year (to the extent of 35% of the value applied in the previous quarter), but maintained the **zeroing of the tariff components relating to the other general system charges for the gas sector** for the entire second quarter of 2023. The burdens resulting from these measures are set at € 280 million (paragraph 5).

In order to mitigate the impact of high energy prices on business costs, Article 4 of this law provided for **tax credits**:

- amounting to 20% of the expenditure incurred for the energy component in the second quarter of 2023 by energy-intensive enterprises¹¹ that experienced a cost increase per kWh of more than 30% compared to the same period in 2019;
- amounting to 10% of the expenditure incurred for the energy component in the second quarter of 2023 by non-energy intensive enterprises with electricity meters with an available power of 4.5 kW or more;
- amounting to 20% of the expenditure incurred for the purchase of gas (consumed for non-thermal uses) in the second quarter of 2023 by companies, if the reference price of natural gas, calculated as the average referred to the first quarter of 2023 of the reference prices of the intraday market (MI-GAS) published by the GSE, has undergone an increase of more than 30% of the corresponding average price referred to the same quarter of 2019.

The charges for the recognition of tax credits are estimated at € 1,348.66 million for 2023.

Finally, Article 24 creates at the Ministry of Enterprises and Made in Italy a Fund with an endowment of € 2 billion for 2023, aimed at supporting energy-intensive enterprises (identified in a list published by the CSEA) located in island regions and for which a National Crisis Table is established at the Ministry.

The approval of Article 36-ter of **Decree-Law No. 48 of 4 May 2023**, which, in order to safeguard the staff employed in contact centres for the management of activities connected with the electricity standard offer service - a service that is gradually being phased out -, generated some critical issues¹² in arranging for the inclusion of the **social clause** in competitive procedures for switching households from the protected market to the gradual standard offer service. The social clause provides that, in the event of a succession of companies in the contract with the same principal and for the same contact centre activity, the employment relationship continues with the successor contractor, also in accordance with the provisions of collective bargaining agreements. This article was then amended by Article 14 of Decree-Law No. 181 of 9 December 2023, which established that the operators of

¹⁰ This is a retail marketing cost compensation component to curb the expenditure of final customers characterised by low consumption, which is made up of a fixed quota, expressed in €/customer/year, and a variable quota (expressed in c€/m³) applied to consumption between 121 and 200,000 m³/year, to a differentiated extent according to consumption brackets.

¹¹ Identified in a list published by the CSEA.

¹² Also noted by ARERA in its recommendation paper of 6 July 2023, 308/2023/l/eel.

the standard offer service, on the date on which the provision came into force, would continue to make use of contact centre services provided by third parties with the safeguarding of the same employment levels, until the conclusion of the procedures for identifying the suppliers of the vulnerability service, without prejudice to the natural expiry of the contracts governing such services, whichever is earlier.

The subsequent **Law No. 95 of 26 July 2023**¹³, intervened on the construction of **new regasification capacity** and, again, on the containment in the third quarter of 2023 of the effects of price increases in the electricity and natural gas sector. Specifically, it established that the authorisation for the construction and operation of facilities aimed at increasing the national regasification capacity through floating storage and regasification units to be connected to the transmission network shall be issued by the competent Extraordinary Commissioner of the Government, following a single procedure that also includes environmental assessments. The containment of the effects of price increases for the third quarter of 2023 saw a new allocation in the limit of € 110 million for social bonuses to be assigned to households with ISEE up to € 15,000; it also provided for the maintenance of the zeroing, for the same quarter, of the rates of the tariff components relating to general system charges for the gas sector, with charges estimated at € 175 million. The resulting total costs (€ 285 million) were to be covered from the resources (from appropriations for the reinforcement of the social bonus for electricity and gas) available in CSEA's 2023 budget. Also confirmed was the reduced VAT rate of 5% for the supply of methane gas for estimated or actual consumption in July, August and September 2023, the costs of which (€ 473.87 million) are covered through the corresponding use of the sums paid to the state budget revenue by CSEA by 31 July 2023.

Law No. 103 of 10 August 2023¹⁴, amending previous provisions:

- on the subject of **electricity interruptibility**, it assigned ARERA the task of defining the criteria and methods for allocating interruptible resources, to be awarded through competitive bidding procedures, based on technical criteria defined by the Electricity Transmission Grid Operator, consistent with the service's immediacy requirements and in compliance with the principles of technological neutrality, in which end users and accumulations participate;
- has established that the **extensions and upgrading of existing gas networks** and plants in municipalities already methanised and the new constructions of networks and plants in municipalities to be methanised belonging to climatic zone F and classified as mountainous territories, as well as in municipalities that have submitted an application for a contribution in relation to the completion of the methanisation programme in Southern Italy are assessed, for the purposes of the cost-benefit analysis, taking into account the positive externalities in relation to the contribution of the interventions themselves to the decarbonisation process and to the increase in the degree of efficiency and flexibility of the networks and plants themselves. When determining the tariffs for the aforementioned municipalities, ARERA will have to take into account the higher investment costs, as well as the need to remunerate functional interventions to ensure the feed-in of gas from renewable energy resources;
- ruled that an electricity supplier may charge its individual or aggregate customers a **sum of**

¹³ Law No. 95 of 26 July 2023, Conversion into law, with amendments, of Decree-Law No. 57 of 29 May 2023, containing urgent measures for territorial entities, as well as to ensure the timely implementation of the National Recovery and Resilience Plan and for the energy sector.

¹⁴ Law No. 103 of 10 August 2023, Conversion into law, with amendments, of Decree-Law No. 69 of 13 June 2023, containing urgent provisions for the implementation of obligations deriving from acts of the European Union and from pending infringement and pre-infringement proceedings against the Italian State.

money in the event of early termination of a supply contract, provided that the contract is jointly fixed-term and fixed-price, provided that this charge has been expressly, clearly and easily comprehensibly indicated both in the information document communicated prior to the conclusion of the contract and in the contract itself and has been specifically approved and signed by the customer;

- under the rules for the development of **electricity storage** capacity, which provide for a survey by the Electricity Transmission Grid Operator (for the national transmission grid operator) of the need for such capacity and its allocation through competitive, transparent, non-discriminatory auctions conducted by the Electricity Transmission Grid Operator itself, the task for the Electricity Transmission Grid Operator to submit a plan for the direct construction of the missing storage systems for approval by the Ministry for the Environment and Energy Security in the event that, following the auctions, all or part of the necessary capacity is not allocated.

Law No. 169 of 27 November 2023¹⁵ renewed ARERA's task of updating the values of the electricity and gas social bonuses applicable in the fourth quarter of 2023, so that, for each type of customer involved, the target levels of reduction in expenditure expected in the same quarter are equal to 30% of the expenditure for electricity before tax and equal to 15% of the expenditure for natural gas after taxes and fees¹⁶. ARERA was also entrusted with the task of submitting, by 31 May 2024, with reference to the year 2023, the **report on the actual use of the resources earmarked for the containment of the effects of price increases** in the electricity and natural gas sectors for 2023¹⁷. Again for the fourth quarter of 2023, the tariff components relating to general system charges for the gas sector and preferential VAT at a rate of 5% on methane gas supplies in bills issued for estimated or actual consumption for the months of October, November and December 2023 were kept at zero; for households with a social bonus for electricity, an extraordinary contribution has been recognised for the same months, increasing with the number of members of the household according to the types already envisaged for the same social bonus, and the system of facilitations for companies with high electricity consumption has been reformed.

Subsequently, **Law no. 170 of 27 November 2023**¹⁸ introduced **new provisions to guarantee the security of the national electricity system**, allowing the operators of coal-fired power generation plants with a nominal thermal capacity of more than 300 MW, who have taken advantage of the derogations necessary for the full use of the plants and who, in view of the ban on imports of Russian coal, are unable to find coal of a quality sufficient to guarantee compliance with the emission limit values on the market, to take advantage of additional derogations provided that the plants are included by the Electricity Transmission Grid Operator in the list of those that are essential for the security of the electricity system, the Electricity Transmission Grid Operator declares that any unplanned unavailability of the same plants would entail a high risk of non-compliance with the security standards of electricity system operation, and that the derogation is limited to what is

¹⁵ Law No. 169 of 27 November 2023, Conversion into law, with amendments, of Decree-Law No. 131 of 29 September 2023, containing urgent measures on energy, interventions to support purchasing power and to protect savings.

¹⁶ Targets set, respectively, by the Decree of the Minister of Economic Development of 29 December 2016 for electricity and by Art. 3, paragraph 9 of DL No. 185/2008 for gas.

¹⁷ ARERA submitted this report on 28 May 2024 (<https://www.arera.it/atti-e-provvedimenti/dettaglio/24/210-24>).

¹⁸ Law No. 170 of 27 November 2023, Conversion into law, with amendments, of Decree-Law No. 132 of 29 September 2023, containing urgent provisions on the extension of regulatory deadlines and tax payments.

necessary to allow compliance with the security standards of electricity system operation.

Law No. 214 of 30 December 2023, the 2022 Annual Market and Competition Law, stipulated that:

- every two years (and no longer annually) Snam Rete Gas (and no longer the grid operators) shall transmit to ARERA and the Ministry of Business and the Made in Italy the ten-year grid development plan, also taking into account the interventions of the other grid operators, and that the Electricity Transmission Grid Operator shall prepare a ten-year plan for the development of the national electricity transmission grid every two years and submit it by January 31 of each two-year period to the Ministry of the Environment and Energy Security and to ARERA it will be the Ministry of the Environment (and no longer the Ministry of Business and the Made in Italy) that will approve the Plan within 18 months of its submission, subject to the opinion of the Regions and Autonomous Provinces territorially affected by the interventions and the assessments of ARERA itself;
- the Ministry of the Environment, in cooperation with ARERA, **promotes information campaigns and training programmes for businesses and customers on the potential of second-generation smart meters**. ARERA is to regulate the obligations of distribution companies to ensure that customers are informed about the functionalities of smart meters, ensuring their full interoperability with final customers' energy management systems and smart grids. The Acquirente Unico (AU¹⁹), in its capacity as manager of the Integrated Information System (IIS), shall, at the request of the final customer or of a third party formally designated by the latter, make available, through the "Portale Consumi", the supply meter data and prepare a computerised register listing the third parties accessing the final customer's data. The register shall make available to final customers, free of charge, any information concerning access to data by third parties, including the history of such access and the type of data accessed;
- inclusion and permanence on the **list of persons authorised to sell natural gas to final customers** (also relating to the supply of liquefied natural gas by means of tanker trucks and natural gas by means of tank wagons, as well as biogas) are a necessary condition for carrying out natural gas sales activities to final customers. The Ministry of the Environment and Energy Security, on the recommendation of ARERA, after consulting the Market and Competition Authority, defines the conditions, criteria, modalities and technical, financial and good reputation requirements for the registration, permanence and exclusion of the subjects registered in the list. The Minister for the Environment and Energy Security shall also regulate a special procedure for the possible reasoned exclusion of members from the list, which shall also take into account violations and irregular conduct in the activity of gas sales, ascertained and sanctioned by the competent authorities;
when a **remote contract is stipulated over the telephone**, consent is not valid if the customer has not first acknowledged receipt of the document containing all the contractual terms and conditions, transmitted on paper or on another available and accessible permanent storage device.

Decree-Law no. 181 of 09 December 2023, converted into Law no. 11 of 02 February 2024:

- introduces some measures to **promote self-generation of renewable energy in energy-intensive sectors**;

¹⁹ AU-Acquirente Unico (Single Buyer) is the public company created to supply electricity to domestic customers and SMEs that have not yet switched to the free market. Since 2009, AU's activities have gradually expanded to benefit the correct functioning of energy markets.

- requires that when tendering for the award of the natural gas distribution service, the economic conditions offered by each bidder also contain **energy efficiency measures** that can be implemented in the minimum district of reference to achieve additional energy savings with respect to the annual targets (already defined by Legislative Decree 164/2000). If the awarded gas distribution companies do not realise the additional quota of energy savings that they committed to achieve in the tender, they shall pay the local authorities belonging to the district concerned the tariff contribution determined by the national regulator for the remuneration of energy efficiency interventions with the application of a surcharge, as a penalty, commensurate to the quantity of energy not saved per single year;
- entrusts ARERA with the task of regulating, on the recommendation of the GSE, the **procedures for the gradual exit, as of 31 December 2024, of the operating plants applying on-the-spot trading**, in implementation of the provision set forth in Article 9 of Legislative Decree No. 199/2021. This rule provides that the incentive mechanism of on-the-spot trading will be abolished 90 days after the entry into force of the ministerial decrees implementing the new incentives for the production of electricity from renewable energy resources (not yet adopted); new plants that will come into operation after this date will be able to access the new incentive mechanisms, i.e. the dedicated energy withdrawal (with modalities that will refer to market economic conditions);
- establishes a **mechanism for the contracting of electricity generation capacity fuelled by sustainable bioliquids**, to the extent necessary to ensure their contribution to the flexibility of the electricity system;
- entrusts the Electricity Transmission Grid Operator with the task of setting up a **digital portal to ensure the efficient planning of the national transmission grid facilities**, in coordination with the development of renewable energy resource plants and energy storage systems;
- entrusts the Ministry for the Environment and Energy Security with the task of **promoting** - through the Acquirente Unico and for a period not exceeding 12 months - **specific campaigns to ensure adequate information for households**, including those who qualify as vulnerable, on the consequences of the termination of the standard offer service and the start of the gradual standard offer service;
- transfers, with effect from 1 January 2024, to the Ministry of the Environment and Energy Security the Fund set up from the proceeds of the penalties imposed by ARERA for the financing of projects for the benefit of customers of electricity, gas and the integrated water service in order to ensure a high level of coordination of policies and actions to protect energy customers and the integrated water service;
- **regulates the vulnerability protection service** by providing that, as of the date of termination of the standard offer service for the electricity sector, vulnerable customers have the right to be supplied with electricity, as part of the vulnerability service, in accordance with the conditions laid down by ARERA and at a price that reflects the cost of electricity in the wholesale market and efficient costs of the marketing activities of the service itself, determined on the basis of market criteria. It entrusts the Acquirente Unico with the task of performing, according to modalities established by ARERA itself and based on market criteria, the function of centralised procurement of wholesale electricity for subsequent supply to operators of the vulnerability service. This service is provided by suppliers on the list of entities qualified to sell electricity at retail level and identified through competitive procedures carried out by the Acquirente Unico. ARERA must outline the vulnerability service, establishing: the limitation of the service to the sole supply of electric energy; the assignment of the service, for a duration not exceeding four years, by means of competitive procedures relative to homogeneous territorial areas in respect of the principles of transparency, publicity, maximum participation, and non-discrimination; the entity of the

maximum consideration for the assignment of the service; the obligation for each supplier to carry out the activity relative to the vulnerability service in a separate manner with respect to any other activity the prohibition for the supplier to use the marketing channel of the vulnerability service to promote offers on the market, to use the data and information acquired in the performance of the vulnerability service for activities other than the marketing of the service itself and to use the same brand under which it performs activities outside the service itself.

In the event that the vulnerability service is not awarded at the end of the competitive procedures, the Acquirente Unico shall call for a new selection procedure within six months of the conclusion of the previous one. The Acquirente Unico must also carry out specific monitoring activities concerning the electricity supply conditions applied to households after the conclusion of the competitive procedures for the allocation of the gradual standard offer service, as well as the correct application of the service conditions by the operators of the gradual standard offer service. The results of the activities are contained in a report transmitted by ARERA to the parliamentary commissions, competent for the subject matter, by 31 March 2025 and annually thereafter.

The **2024 Budget Law** (Law No. 213 of 30 December 2023, State Budget for Financial Year 2024 and Multi-Year Budget for the Three-Year Period 2024-2026) still recognises for the months of January, February and March 2024 the extraordinary contribution already provided for by the "Aid-quinquies" Decree for the months of October, November and December 2023, and in the same manner, to households with the social electricity bonus. To this end, it authorises expenditure of € 200 million.

Finally, it should be noted that Legislative Decree No. 26 of 7 March 2023²⁰ introduced **new provisions to strengthen customer protection** in the event of unfair terms, unfair commercial practices, unfair competition or untruthful commercial communications, addressing some particularly important issues, such as transparency towards customers, with appropriate communications on price changes, and providing for harmonised sanctions at European level in the event that a trader uses terms defined as unfair, as well as greater protection for unsolicited sales.

Developments in the electricity market

Facilities and main changes in regulation

In Italy, **power transmission** is carried out by approximately 75,450 km of power lines and circuits and more than 900 switching and conversion stations. The operator of the National Transmission Grid (TSO) is the Electricity Transmission Grid Operator (the company called "Terna"), 29.85% owned by the Italian state. The remaining 70.15% of the capital belongs to the market. In 2023, there are eight companies holding National Transmission Network (RTN) assets, one more than in 2022, due to the entry of the company Resia Interconnector, whose assets are part of the interconnection link with Austria that came into operation at the end of 2023. Considering the assets of all the companies belonging to the corporate group, in 2023 the Electricity Transmission Grid Operator group owns

²⁰ Legislative Decree No. 26 of 7 March 2023, Implementation of Directive (EU) 2019/2161 of the European Parliament and of the Council of 27 November 2019 amending Council Directive 1993/13/EEC and Directives 1998/6/EC, 2005/29/EC and 2011/83/EU of the European Parliament and of the Council for better enforcement and modernisation of Union rules on customer protection.

99.6% of the national power lines and 922 power stations that are part of the RTN. In December 2023, the AC interconnection with Austria came into operation. The new 220 kV power line, 28 kilometres long and built entirely in underground cable, allows Italy and Austria to increase electricity interchange capacity by 300 MW, doubling the current capacity.

As at 31 December 2023, 119 **power distribution** companies were registered in ARERA Registry of Operators, of which only 10 serve more than 100,000 customers and together distribute 98.3% of all energy withdrawn by users. There are four companies with more than 500,000 withdrawal points: e-distribuzione (Enel group), Unareti (A2A group), Areti (Acea group) and Ireti (Iren group). Overall, power distribution in Italy takes place through 1,287,100 km of networks, most of which (69%) are low voltage. The company e-distribuzione is the leading operator, with the dominant share of 85.1% of the distributed energy.

In January 2023, ARERA updated the provisions and minimum requirements for the consultation and preparation of the Ten-Year National Transmission Grid Development Plan. The **Electricity Transmission Grid Development Plan** for 2023 envisages total expenditure over the 2023-2032 reference horizon of approximately € 21 billion (+17% compared to the previous € 18 billion Development Plan 2021). It includes a series of investments in several innovative projects included in the **Hypergrid** project, an extensive modernisation of existing power lines accompanied by new submarine connections, aimed at exploiting direct current transmission (HVDC) technologies to significantly increase transport capacity with a limited impact on the territory. In August 2023, ARERA launched the public consultation of the Plan, which ended in October. With regard to the Ten-Year Network Development Plan, ARERA also has the task of assessing whether it is consistent not only with the needs identified during the public consultation procedure, but also with the non-binding European Ten-Year Network Development Plan (TYNDP). During 2023, this activity was conducted according to ACER's similar activity, which ended with the publication of ACER Opinion 04/2023 in April 2023 on the projects in the TYNDP and the National Electricity Plans.

The output-based regulation of the electricity transmission service in force for the years 2020-2023 provides an incentive mechanism for the realisation of additional transmission capacity up to target values that were determined by ARERA in October 2021. The regulation also provides for an additional bonus in the event that the aforementioned transport capacity is built at investment costs below the reference costs defined by ARERA. In 2023, ARERA determined the financial transactions for the Electricity Transmission Grid Operator for having realised capital-light capacity increases of 527 MW in 2022.

In April 2023, ARERA put out for consultation its guidelines for the identification of priorities and performance indicators for a **more selective development of investments in electricity distribution networks** and for the gradual introduction of minimum requirements for the consultation and preparation of **Distribution Network Development Plans**. As a result of the consultation, ARERA established the time-frame and procedures for the preparation and two-year public consultation of the Distribution Network Development Plans for distribution companies with more than 100,000 final customers, for the year 2023 and thereafter from 2025 for each odd-numbered year.

In 2023, for the largest distribution companies (with more than 100,000 withdrawal points), the regulation for the recognition of the costs associated with the **commissioning of 2G smart metering systems**, last set in December 2022 for the three-year period 2023-2025, continued to apply. With regard to the monitoring of the progress and performance of 2G smart metering systems by all distribution companies, in October 2023, ARERA defined the elements to harmonise and

systematise the way in which these companies must annually send data and information on the progress and performance of 2G smart metering systems to ARERA.

On the subject of **tariff regulation** and the consistency of general charges, it is noted that 2023 was characterised, for the electricity sector, by a gradual return to 'normality', since, in the face of a slowdown in energy commodity prices, the Government gradually reduced interventions to support electricity users; this led to a gradual reactivation of the tariff components covering the **general charges of the electricity sector** borne by users. For the first quarter of 2023 only, the tariff components covering the general charges of the electricity sector for household users and for non-household users for other low-voltage uses with available power up to 16.5 kW were cancelled (the loss of revenue from the A_{SOS} and A_{RIM} components for the above-mentioned users was covered by the state, which allocated € 963 million). According to current legislation (2023 Budget Law) from 2023 onwards, nuclear charges are no longer borne by electricity utilities, but directly by the state budget. This is the transfer to general taxation (so-called taxation) of nuclear liabilities, i.e. the costs of decommissioning and territorial compensation for local authorities hosting nuclear sites.

The electricity system is currently going through a phase of profound renewal linked to the decarbonisation objectives envisaged at European level, with an ever-increasing penetration of small-scale production resources spread throughout the territory and a gradual reduction in large-scale production resources concentrated on the large 'nodes' of the transmission network. This entails a radical change in the management of the electricity system: there are both greater reserve requirements to compensate for the volatility of production from random sources, and the need to enable more resources to provide ancillary services, in order to cope with the reduction of the large plants that had been providing these services until now. It is therefore necessary to **significantly innovate the regulatory framework for dispatching**, as the current rules, outlined in 2006, no longer appear capable of intercepting the changes taking place, because they were built around a system based on concentrated programmable resources. In the new context, the function of distribution networks also changes. They become 'active', i.e. capable not only of absorbing energy from the transmission network, but also of delivering energy in the opposite direction to the usual one. ARERA took up this challenge of innovating the dispatching framework back in 2015, opening a specific proceeding dedicated to both global and local ancillary services with the final intention of drafting a new *dispatching integrated text* in line with the evolution of the electricity system to replace the one currently in force. In 2023, **the new *Electricity Dispatching Integrated Text (TIDE)* was approved**, which, borrowing from the multi-year experience of pilot projects outlined in 2017, completes the path of innovation, proposing a **merit order dispatch model**, consistent with the European provisions set out in Regulation (EU) 2195/2017 on balancing the electricity system, in which all grid resources (at least in principle) can take on a dual role: the 'main' one of producing or consuming energy and the 'ancillary' one of providing services, consisting of the willingness to change their input and withdrawal profile to meet technical grid management needs. The new TIDE also provided an opportunity to rationalise the provisions on the organisation of the day-ahead and intra-day electricity market that had been stratified over the years and had been adopted in a context characterised by an Italian electricity market managed independently of the European markets and with regulation defined at national level. With market coupling, the rules became European and, following Regulation (EU) 942/2019, were adopted by decisions by ACER: the new TIDE captures these changes by summarising in a single document both the provisions that remained the responsibility of national regulators (such as the specific choice of products, the way in which bids are to be submitted and the specific roles of GME and the Electricity Transmission Grid Operator), and the references to the provisions in the ACER decisions and European regulations. The new TIDE will take effect on 1 January 2025.

The **Capacity Market**, which was established by a legislative decree in 2003, is aimed at achieving and maintaining the adequacy of production capacity, so that the demand for electricity is structurally met in accordance with predefined levels of security and quality. The first Capacity Market tenders were held in 2019 and covered delivery years 2022 and 2023. The technical-economic parameters and methodology for determining the operating price for the 2022-2023 and 2024-2025 delivery periods were defined in 2019 and 2021, respectively: the operating price (representative of the standard variable cost of a hypothetical open-cycle turbo-gas type production unit fuelled by natural gas) is equal to the sum of a set of components, including a component covering the cost for natural gas (natural gas component) and a component covering the burden of emission allowances to be rendered under the Emission Trading System (emissions component). The methodology for determining the Capacity Market price applied in the years 2022 and 2023 was then amended and supplemented as a matter of urgency, to ensure that the aforementioned price would more closely reflect the variable cost of peak technology, irrespective of the declaration of the emergency level of the gas system. To this end, it was decided, among other things, to index-link the natural gas and emission components on a daily basis for the definition of the operating price in the years 2022 and 2023 and to calculate the standard value of natural gas by applying the System Average Price, representative of the daily value of natural gas on the Italian network.

Article 18 of Legislative Decree No. 210 of 8 November 2021 provided for the introduction into the architecture of the Italian electricity market of a new system for the forward procurement of electricity storage resources, to be added to the energy, ancillary services and capacity markets. In 2023, ARERA defined the criteria and conditions for the operation of the **electricity storage capacity forward supply system**, aiming to: promote competition, through competitive, transparent, non-discriminatory procedures geared towards minimising the burden on end-customers; enhance coordination between developments in renewable generation capacity, electricity storage capacity and grid facilities; and promote the efficient use of forward-supplied storage resources, through the definition of contractual obligations that maximise their availability and, at the same time, do not distort the functioning of spot markets in the pursuit of short-term allocative efficiency. Parallel to national activities for the launch of the mechanism, dialogue between the Italian state and the European Commission intensified in 2023. In December 2023, the European Commission declared the mechanism compatible with the internal market, also in consideration of the contribution it will be able to make to achieving decarbonisation targets, allowing the integration of renewable energy resources into the Italian electricity system.

The output-based regulation of electricity distribution and metering services determined the premiums and penalties in October 2023. For the **regulation of the duration and number of unannounced interruptions, € 10.2 million in bonuses were disbursed**. Based on the 2022 electricity service continuity data, ARERA also published the eleventh national ranking of electricity distribution companies regarding the number and duration of interruptions.

In February 2023, ARERA identified **interventions eligible for premiums and/or penalties aimed at increasing the resilience of electricity distribution networks** to the stresses caused by critical risk factors. In September 2023, premiums and penalties were determined for eleven distribution companies, with a total net premium balance of € 13.6 million, related to the resilience enhancement measures completed in 2022 and previously approved by ARERA. Then, at the end of the year, the provisions on this subject were updated for the period 2019-2024; in particular, it was defined that, starting from the February 2024 application, the incentive mechanism would only apply to distribution companies to whose network at least 100,000 final customers are connected and the interventions would be eligible for a premium only, with potential cancellation in the event of a significant delay.

In terms of **distribution quality**, there was a worsening in 2023 compared to the three-year period 2020-2022, both for the average duration of outages without notice (100 minutes) and for the average number of long and short outages without notice per low voltage user (4.87). The deterioration in performance for 2023 is mainly attributed, as for the three-year period 2017-2019 and for the years 2012 and 2015, to the impact of exceptional weather events. The duration of unannounced outages for which the distributors are responsible stands at 44 minutes nationwide, and the number of long and short unannounced outages (which, together, correspond to outages lasting more than a second) for which the distributors are responsible stands at 3.43 outages per low-voltage user nationwide.

With regard to **requests for connection to high and extra-high voltage**, in the year 2023, the Electricity Transmission Grid Operator received 4,693 connection requests for electricity production plants, corresponding to a total power of 442.6 GW. In relation to the applications received during the year, 1,528 quotations were accepted (of the 3,128 made available), corresponding to a total capacity of 101.3 GW. For two of them, a request was submitted to make the Minimum Technical Solution of Detail (STMD) available, which the Electricity Transmission Grid Operator, however, did not make available by 31 December 2023. As far as active connection requests to medium- and low-voltage grids are concerned, in 2023, the distribution companies received more than 398,000 connection requests for power generation plants, corresponding to a total capacity of 38.5 GW, in relation to which over 331,000 quotations of all those made available during the year were accepted in 2023, for a total capacity of about 10.6 GW. Over the year, more than 298,000 connections, corresponding to just over 2.7 GW, were realised in relation to the requests received in 2023. As far as the connections of passive users are concerned, the data collected show that 252,030 connections were made to the distribution networks in 2022, almost all of them in low voltage. For 71% of them, the supply was activated during the year.

As regards **international coordination**, again in 2023, ARERA cooperated actively with other European regulators, through the European Agency for the Cooperation of Energy Regulators (ACER), the Council of European Energy Regulators (CEER) and the regional platforms provided for in the European electricity market regulations, as well as through bilateral meetings to explore topics of common interest, in particular with regulators from neighbouring countries. In continuity with previous years, interaction continued the implementation of the network codes and guidelines adopted as a result of the Third Energy Package and in the transposition of the provisions of the Clean Energy Package.

The CEER's new international strategy aims to broaden global relations between authorities and regulatory agencies, to focus interaction on energy transition and to multiply assistance and cooperation efforts in favour of new and emerging institutional realities. As part of the broadening of the prospects for cooperation between regulators, ARERA's participation in the work of the "**Comité de Prospective**", an initiative for dialogue between institutions and stakeholders on the evolutionary scenarios of the French energy system in terms of transition, energy saving and electrification of final consumption, is noteworthy.

ARERA was also very active, as always, in relations with non-EU countries: given the current international context and the energy and climate crises of recent years, the Mediterranean and Balkan areas continue to be of strategic interest for our country's energy system. ARERA, in fact, is a founding member of the **Balkan Energy School (BES)**, which was set up as a non-profit association under Italian law and based in Milan at ARERA, and in 2023 it continued its activities in support of **MEDREG (Mediterranean Energy Regulators)**, of which it is a permanent deputy chair.

Since 2016, ARERA has also been a member of **NEON - National Energy Ombudsmen Network**,

due to the establishment of the Conciliation Service and as the competent authority for ADR (Alternative Dispute Resolution) under the Consumer Code and, more generally, for customer protection in the energy sectors. The association promotes, in particular, the development and knowledge of ADR tools, also through the exchange of experiences and good practices and the sharing of activity reports among members, also supporting initiatives related to the evolution of the European regulatory framework, both sectoral and cross-sectoral.

Wholesale and retail markets

According to provisional data released by the Electricity Transmission Grid Operator, **electricity demand** in 2023 (287.4 TWh) decreased by 2.9%; the decrease was recorded in all consumption sectors. Energy available for consumption was met just over 84% by net domestic production (minus energy for pumping) and the remaining 16.8% by the balance from abroad. Net domestic production decreased by almost 7% year-on-year, while imports increased by 15.2% and energy for exports decreased by 24.6%. Peak demand was reached on 19 July 2023, when power demand at peak came to 58.5 GW (+1.9% from the peak recorded in 2022 of 57.4 GW). Although 2023 was a hot year, the summer peak did not reach the absolute record for the Italian electricity system, taken in summer 2015 (equal to 60.5 GW).

Gross domestic production fell to 255.9 TWh, a decrease of 6.9% compared to 2022. More specifically, there was a 19.3% decrease in thermoelectric production against a 15.6% increase in energy production from renewable energy resources. In thermoelectric generation, there were significant decreases in generation from solids (-41.5%) and from petroleum products (-26.9%), while generation from natural gas decreased less, by 15.9%. In the area of renewable energy resources, which account for approximately 44% of the national electricity generation mix, only geothermal (-2.5%) and bioenergy (-9.1%) generation decreased. The largest increase occurred in hydropower production (+42.4%) back to the quantities of the years before 2022, a year characterised by a major water emergency. The shares of wind and photovoltaic production increased by 13.7% and 9.2% respectively. The share of gross generation of the top three corporate groups (Enel, Eni and Edison) decreased slightly to 34.4% (from 34.8% in 2022), while those of the two following groups increased slightly. There are four groups with a gross installed capacity share of more than 5%: Enel, A2A, Edison and Eni.

The **amount of incentivised electricity** was approximately 56 TWh in 2023. For 2023, all in all the costs of incentivising renewable energy resources amounted to approximately € 7 billion, which is higher than last year.

Imports increased by about 7.1 TWh over the previous year, from 47.4 to 54.5 TWh (+15%). Since, at the same time, exports decreased by a higher percentage (-24.6%, from 4.4 to 3.3 TWh); the increase in the **foreign balance** was amplified: compared to 2022, in fact, foreign electricity entering the Italian system increased by 19%. Reliance on imports increased due to the need to meet demand against a lower coverage of domestic production, which, in the provisional data released by the Electricity Transmission Grid Operator, declined more (-6.4%) than demand (-2.8%).

In 2023, the amount of **electricity traded on the day-ahead market (MGP) in the Italian system** amounted to 78 TWh, a value that decreased by 3.9% compared with 2022. Exchange-traded volumes decreased (209.9 TWh; -0.5%), albeit to a lesser percentage than bilateral trading on the PCE²¹ (68.1 TWh; -13.0%), almost entirely referring to domestic areas. Trade with foreign countries increased,

²¹ PCE is the Energy Accounts Platform where electricity forward contracts are registered.

driven by an increase in imports totalling 55.8 TWh (+15%), or 27% of total stock exchange sales, to the detriment of exports, which came to 3.8 TWh (-31%) or 2% of total stock exchange purchases. The share of volumes traded by institutional operators alone, i.e. the Acquirente Unico (18 TWh; -34%) and the GSE (30 TWh; +6%), which together account for 9% of the volumes traded, decreased again.

In 2023, the **average purchase price of electricity (PUN)** dropped considerably to € 127.2/MWh (-58.1%); this drop was spread across all three hourly bands: € 138/MWh (-59%) during peak hours, € 126/MWh (-58%) during off-peak hours on working days, and € 117/MWh (-57%) on public holidays.

The total volumes traded in 2023 on the **Intra-day Market** (29.1 TWh) increased compared to the previous year; the average prices recorded on this market are strongly correlated to the corresponding values of the MGP. Over the course of the year, average monthly prices (MI1) showed progressive declines to a minimum of € 103/MWh in May, reflecting the lowest value also recorded in the MGP.

On the electricity **forward market**, with regard to standardised products with physical delivery, in 2023, there were only eight pairings for a total of 27 GWh.

In 2023 there was a significant drop **in prices on European stock exchanges**, which had reached record levels in 2022. The energy crisis that began in 2021 cannot be said to be completely over - so much so that the average prices observed in 2023 are still very high, roughly 2.5 times higher than in 2019 - but it has passed its most acute phase. The Italian PUN, in fact, has once again shown a trend rather distant from the prices that have become established on the stock exchanges of neighbouring countries, Germany and France first and foremost, because it is highly dependent on gas-fired generation and for this reason tends to be more affected by the fluctuations that occur on the international markets for this source.

In 2023, **3 penalty proceedings** were initiated **for violations of** the wholesale market integrity and transparency provisions of **REMIT**. In particular, market manipulative conduct, failure to comply with the obligation to disclose certain inside information to the public in an effective and timely manner, and failure to comply with disclosure obligations to ACER were alleged.

After the slight decline in 2022, the results of the Annual Survey show that just over 241 TWh **were sold to the retail market** in 2023 to 37.3 million customers. Compared to 2022, total electricity consumption therefore decreased by 4.4%, while withdrawal points increased slightly (0.2%). The contraction in consumption occurred proportionally evenly for households and non-households, but in absolute terms it is obviously greater for non-households, who purchased about 8.8 TWh less than in 2022, while household consumption decreased by around 2.3 TWh. The reduction in the demand for electricity from the non-household sector can be explained partly by the modest economic growth (+0.9% change in GDP estimated by Istat), and partly by the weakness observed in the more energy-intensive sectors.

In more detail, Italian households purchased a total of 56 TWh compared to 58.3 TWh in 2022 (-4%), while energy purchased by the non-household sector fell from 193.9 to 185.2 TWh, (-4.5%), thus moving back away from pre-Covid levels (198 TWh in 2019), which had been partly recovered in 2022. In 2023, the number of domestic withdrawal points was 30.2 million, of which just under 8.9 million were served in the standard offer service and around 21.4 million in the free market; households served on the free market have now risen to 70.7%. Looking at the volumes purchased, the free market now accounts for three quarters (75.5%) of the total energy purchased by Italian households. The average unit consumption of households in the standard offer market is slightly lower than that of households purchasing energy in the free market: 1,548 kWh/year versus 1,977

kWh/year.

It should be mentioned that price protection ended in 2021 for small and micro-enterprises with a committed power of more than 15 kW. For other micro-enterprises (those with a committed capacity of less than 15 kW) and all non-household, non-vulnerable customers, the standard offer service ended on 1 April 2023. Therefore, the total volumes sold under the **standard offer service** in 2023 still include those purchased by micro-enterprises with a committed power of less than 15 kW for part of the year. If the consumption of the household sector is added to the consumption of the latter, the share of electricity sold in the standard offer service is very small, amounting to 6% of the volumes of the entire Italian electricity market (corresponding to 24.2% of the total withdrawal points). In 2023, 14.2 TWh were sold, under the standard offer service, to approximately 9.2 million withdrawal points (calculated on a *pro die* basis). Compared to 2022, consumption fell by 7.4 TWh (-34%), while the number of withdrawal points served decreased by 3 million (-24.2%).

Enterprises for which the standard offer service is terminated by law are supplied within a special **gradual standard offer service** by a supplier selected by tender (respectively called gradual standard offer service for small enterprises and gradual standard offer service for micro-enterprises). In 2023, these two services supplied a total of approximately 919,000 withdrawal points, to which just over 3 TWh were supplied. More specifically, the gradual standard offer service for small enterprises covered about 93,000 customers (about 1.5 TWh), while the one for micro-enterprises included 827,000 withdrawal points (1.5 TWh)²².

With 219 TWh sold, the share of electricity intermediated by the **free market** rose to 90.6% (73.1% of withdrawal points) in 2023, even though the portion of electricity purchased in the **safeguard service** rose slightly to 2.1% (0.3% of withdrawal points) from the 1.9% recorded in 2022, just like gradual standard offer services, which went from 0.9% in 2022 to 1.2%.

In 2023, as in the previous year, **switching** was very high among customers, for households it grew by one percentage point compared to 2022, whether measured in terms of withdrawal points or in terms of volumes, approaching that of non-household customers. 18.9% of households - about 5.7 million withdrawal points - changed supplier at least once during the year. The volumes corresponding to this portion of customers amounted to 24.5% of the total energy purchased by the household sector, while the volumes corresponding to the 17.9% of households who changed supplier in 2022 corresponded to 23% of the energy withdrawn. The recent context of still high prices, in a moderately growing economy, is undoubtedly a strong incentive to change supplier, but it should also be noted that the gradual removal of price protection has certainly created a climate of ferment and curiosity towards the free market.

On the supply side, the **number of suppliers on the retail market** decreased for the first time in 2023: this is probably due to the 2023 coming into force of the electricity suppliers' list²³ (the "EVE"), which imposed a number of requirements on companies wishing to sell electricity in order to obtain authorisation to operate.

The **average number of commercial offers** that each sales company is able to propose to its potential household customers was 26.4 for households and 30 for non-households. Out of the 26.4

²² The division between the two services is the result of an estimate made by ARERA on the data collected on the gradual standard offer service without distinguishing between that for small and micro-enterprises.

²³ Established by Law No. 124 of 4 August 2017 and governed by Regulation adopted by Minister of Ecological Transition No. 164 of 25 August 2022.

offers made available on average to the household, 17.7 are **only available on-line** (11.7 in 2022), i.e. only through the Internet. The success of on-line offers among households remains limited: in 2023, 7.2% of households signed a contract offered in this way. If we look at non-households, on the other hand, of the average 30 offers offered to customers, 19.8 can be subscribed to on-line.

With regard to the preferred **type of price**, it was found that 66.8% of households signed a fixed-price contract in the free market (i.e. with the price not changing for at least one year from the time of signing), while 33.2% chose a variable-price contract, i.e. with the price changing at a time and in a manner determined by the contract itself. The preference for variable price tends to grow over time, albeit at a moderate rate; last year, the variable-price contract was chosen by 23.3% of households. Variable-price contracts are more popular among non-households: 68.3% of them chose the variable price, while the fixed-price contract was chosen by 31.7% of the non-household points. The fall in prices experienced during 2023 nevertheless reverberated to a considerable extent in variable price contracts: in 2023, households with this type of contract paid an average of € 227.33/MWh for the energy component, i.e. almost € 150/MWh less than the average in 2022, just as non-households paid an average of € 172.68/MWh, i.e. € 135/MWh less than in 2022.

In variable-price contracts, **indexation** to the trend of the average PUN is by far the most frequent modality in both contracts to households (89.9%) and those to non-households (83%). The second most popular price indexation method chosen by households is that of a discount on one of the components set by the Authority for the standard offer service, which concerns 6.8% of customers. Households who signed a dynamic-price contract (which envisages index-linking to the hourly PUN) accounted for 3.3% of the variable-price households, while contracts with limited indexation gathered only 0.05% of households. Dynamic price contracts, on the other hand, represent the second most important mode of indexation among non-households, who chose them in 8.7% of the cases; a small share (1.8%) of non-households chose a contract indexed to some external, controllable variable (which sometimes also refers to gas prices at TTF).

About 33.7% of households have signed a contract that provides a rebate or **discount** of one or more free periods or a fixed sum in cash or volume; amongst non-household customers, the figure is 15.9%.

The Annual Survey also investigated the presence of **additional services**, revealing, as in the past, for fixed-price households a clear propensity to purchase energy with a contract that includes at least one additional service (the share of customers entering into contracts without any additional service is 2.2%, down sharply from 7.3% in 2022); among additional services, as in the previous year, the greatest preference is for contracts with a guarantee to purchase electricity produced from renewable energy resources (51.7%) and for ancillary energy services (37.6%). Even among customers opting for variable-price contracts that include additional services, the greatest interest lies in the guarantee of purchasing electricity produced from renewable energy resources (38.9% of cases). The results collected for non-household customers show a significant lack of interest in additional services. Of those who chose a fixed-price contract, 71.3% signed a contract that is free of additional services; the remaining part of this customer base shows appreciation for the guarantee of energy from renewable resources (25.1%).

In 2023, the level of **concentration in the retail market** decreased slightly, as can be seen from the various measures normally used to measure it. The C3, i.e. the market share of the top three operators (corporate groups), fell to 48.2% from 48.7% in the previous year. The HHI index returned below the first attention threshold (of 1,500), having fallen from 1,515 to 1,376. An HHI value between 1,500 and 2,500 indicates a moderately concentrated market, while a value above 2,500 identifies a highly concentrated market (the maximum value of the index is 10,000). The number of corporate groups

needed to exceed 75% of total sales increased from 10 to 11. However, the concentration in the Italian electricity market has two opposing sides: in the household segment it is high, albeit steadily decreasing, while in the non-household segment it is low.

The results of the analysis of the data submitted by the operators show that in 2023 the **average pre-tax electricity price** for households was 316 c€/kWh (256 c€/kWh the average value of the component covering procurement costs and marketing services). The usual high variability is, however, still seen, in the unitary expenses incurred by our customers: the average prices charged to households by annual consumption class in fact show values ranging from € 248/MWh, found for the large customers (consumption in excess of 15,000 kWh/year), to € 601/MWh, for the smallest class (0-1000 kWh). The price falls steadily as the size of customers increases. The free market is 6.2% higher than the standard offer market; this differential is significantly higher for small consumption classes.

Concerning the **commercial quality of the supply service**, in 2023 the companies that served customers in the electricity sector received a total of 325,681 written complaints, 329,429 requests for information, 6,606 requests for bill adjustments and 1,320 requests for double bill adjustments; 97.95% of the complaints were related to failure to respond to written complaints within the time-frame. In 2023, automatic compensation payments were made for more than € 1.7 million. 57.4% of the compensation was received by households in the free market, 22.4% by non-households in the free market, 10.9% by households in the standard offer market, 5.2% by multi-site customers, 2.3% by non-households in the standard offer market and 1.75% by medium voltage customers.

In 2023, supervisory activities included both **inspections and document control activities**, which made it possible to check the work of a wide range of subjects and new areas of activity.

With regard to **sanction proceedings** in 2023, the following proceedings were also initiated: one proceeding against an electricity distribution company for violation of the provisions on switching, two proceedings for violation of the obligation to participate in ARERA's conciliation procedures, and three proceedings for violation of the provisions protecting final customers in cases where the network user and the commercial counterparty are different parties and the latter is in breach of its contractual obligations to the former.

Developments in the gas market

Facilities and main changes in regulation

In Italy there are eight companies operating the **national** (10,490 km) and **regional** (24,936 km) **gas transmission network**. The largest gas transmission operator company is Snam Rete Gas; in addition to it, two other companies own and operate small sections of the national network: Società Gasdotti Italia and Infrastrutture Trasporto Gas. The Snam group (consisting of Snam Rete Gas and Infrastrutture Trasporto Gas) owns 93% of the networks. The Italian gas transmission network is connected with several international gas pipelines: in the North it connects with the TENP natural gas pipeline for the import of gas from Northern Europe and with the TAG for the import of Russian gas; in the South it connects with the Transmed (Trans-Mediterranean Pipeline) for the import of Algerian gas and with the Greenstream for the import of Libyan gas, it connects with the TAP for the import of Azeri gas. In addition, four **liquefied natural gas terminals** are operational, which are injected into the Italian national transmission network through their interconnection with the national grid. The maximum total regasification capacity of the four terminals is 22.5 G(m³)/year.

Natural gas **storage** is carried out on the basis of 15 concessions held by five companies: Stogit, Edison Stoccaggio, Italgas Storage, Geogastock, Blugas Infrastrutture. All active storage sites are built at depleted gas fields. In 2023, in view of the criticality for the national gas system resulting from reductions in Russian gas flows, the Italian government authorised the upgrading of two sites by gradually increasing the maximum operating pressure. Stogit, which belongs to the Snam group, is the main storage company owning 10 of the 15 concessions. The Italian gas storage system is of significant size: in the 2023-2024 thermal year, which ended on 31 March 2024, the system offered availability for allocation in terms of total space for active reserve (so-called working gas) amounting to 17.79 G(m³), of which 4.6 G(m³) is for strategic storage. The space offered at tender was 100%. The nominal peak delivery achieved during the year was 260 million standard cubic metres/day.

Natural gas **distribution** in Italy takes place through 271,212 km of network (of which 301 km will not be in operation in 2023), 57.1% in low pressure, 42.2% in medium pressure and 0.7% in high pressure. The length of the networks increased by 3,646 km compared to 2022. In 2023, there were 186 companies active in gas distribution (the same number as in 2022), of which six were very large (with more than 500,000 customers). The number of companies with more than 100,000 redelivery points has fallen in recent years (28 units, down from 33 in 2013). However, their share in terms of gas distributed has always remained stable at around 82% and, indeed, has risen to 85% in the last three years. Overall, the 186 operators active in 2023 distributed 25.6 G(m³), 2.7 G(m³) fewer than the previous year, to approximately 22 million customers. The service was operated through 6,578 concessions in 7,359 Municipalities.

During 2023, there were no evaluation activities of the new National Development Plans, however, in March, as a result of the urgent evaluation process started during the evaluation of the 2021 and 2022 **Natural Gas Transmission Network Development Plans**, and after a specific public consultation, ARERA expressed a positive assessment on the development intervention "Upgrading for new imports from the South" (the "Adriatic Line"). In addition, ARERA has ordered the amendment of the minimum requirements for the consultation and evaluation of the Plans and for the cost-benefit analysis of the development interventions of the natural gas transmission network, as a result of the proceedings initiated in October 2022 to implement a Council of State ruling. In the following month of May, provisions were introduced on the optimisation of biomethane connections and the simplification of connection directives, and ARERA made some changes to the minimum requirements for the preparation of ten-year plans for the development of the natural gas transmission network and for the **Cost-Benefit Analysis (CBA)** of interventions. In November 2023, ARERA assessed and approved the recommendations for updating the CBA application criteria submitted by the main transmission operator (after consultation with stakeholders), and at the same time amended the minimum requirements to take into account the aforementioned proposals of the main transmission operator, the comments made during the consultation and the need for progressive convergence between methodologies for the CBA of the gas transmission and electricity transmission sector.

A **new regasification terminal** operated by the Snam Group and currently located **in the port of Piombino** came into operation in 2023. The plant is an FSRU (Floating Storage and Regasification Unit) and has an annual regasification capacity of about 5 billion S(m³). In January 2023, ARERA approved the recommended procedure for the first allocation of regasification capacity at this terminal. In April 2023, ARERA, also with a view to favouring the increase in the availability of gas to replace that of Russian origin, **amended certain parts of the Regasification Integrated Text** to allow the offer of multi-year capacity products including the thermal year following the allocation year. Provisions were also introduced on the modalities and prices for the offer of multi-year regasification capacity, offered on the basis of the expressions of interest received for the OLT

Offshore LNG Toscana and FSRU Italia terminals in Piombino. Lastly, in September, ARERA approved the amendments to the GME regulations for the Platform for the Allocation of Regasification Capacity (PAR) necessary for the activation of the new management section of the PAR, which is in addition to those already existing for each of the regasification terminals already active in Italy, within which auctions and first come first served procedures will be held for the allocation of the capacity made available at the new terminal in Piombino managed by Snam FSRU Italia.

To cope with the crisis triggered by the conflict between Russia and Ukraine, Regulation (EU) 1032/2022 of the European Parliament and of the Council of 29 June 2022 defined mandatory minimum filling levels of European gas storages. In compliance with EU regulations, measures were also introduced in Italy to speed up the filling of national stockpiles through the **filling service of last resort**. In January 2023, ARERA defined the functional criteria for the implementation of this service for 2023 by the balance responsible entity. With the aim of preserving available stocks and facilitating the new storage filling cycle for the winter of 2023-2024, in March 2023 ARERA asked storage companies to make the counterflow filling service and the residual storage service available to users, which provides for the allocation of space capacity in the supply phase.

On the subject of access to the transmission service, during 2023 ARERA intervened with various rulings to reform the processes for allocating capacity at the redelivery points of the transmission network. At the end of the year, **the introduction in Italy of a Neutrality Charge** (modelled on the German one) to cover the costs of the service of last resort at all exit points of the national transmission network, including interconnection points with foreign countries, was **envisaged (as of 1 April 2024)**.

In May 2023, ARERA adopted new provisions for **optimising the connections of biomethane plants** with the transmission network and simplifying the relevant directives.

In 2023, ARERA approved the **tariff regulation criteria for the LNG regasification service for the 6PR LNG (RTRG 2024-2027)**, in substantial continuity of criteria with respect to the previous regulatory period, and the **tariff regulation** for the natural gas **transportation and metering service** (RTTG) for the period 2024-2027 (sixth regulatory period - 6PRT), confirming the adoption of the weighted distance methodology for capacity and providing for a change in the entry/exit split from 28/72 to 25/75.

In the gas sector, unlike in the electricity sector, **the cancellation of tariff components covering general system charges**, which began at the end of 2021 to compensate for the strongly bullish trend in wholesale energy commodity prices, **was maintained until the end of 2023**, by virtue of the legal provisions described above. Until April 2023, the extraordinary UG2c component has also been confirmed, with a negative sign, to be applied to the lowest consumption, falling in the brackets up to 5,000 sm³/year, in fact a discount applied to all customers for small to medium consumption, both in the free market and in the protected market. These manoeuvres were financed through allocations from the State Budget set in the first two quarters of 2023.

In December 2023, ARERA, after consultation, approved the **regulatory criteria for the quality of natural gas transportation service** (RQTG) for the period 2024-2027 (sixth regulatory period - 6PRT), in substantial continuity with the previous regulation.

The regulation of the **quality of gas distribution and metering services** has the aim of minimising the risk of explosions, outbreaks and fires caused by distributed gas and, therefore, has as its ultimate goal the safeguarding of persons and property from damage resulting from accidents caused by distributed gas. In 2023, there was a decrease in the inspection percentage of the high/medium pressure network and a slight increase in the low pressure network compared to the previous year.

The arrival time at the (telephone) call location updated to 2023 shows a national average value of almost 38 minutes, slightly increased compared to 2022. In addition, the percentage of compliance with the maximum arrival time within 60 minutes was 99.8% compared to an obligation of at least 90%. Early intervention can prevent gas accidents that could have very serious consequences; however, almost half of all calls to emergency call centres actually turn out to be false alarms.

Data on connections are distinguished according to whether they are connections to transmission pipelines or to distribution networks. In 2023, 67 **connections to transport networks** were made, of which 65 were high-pressure pipelines and 2 medium-pressure pipelines. On average, a wait of 120 working days was recorded for high-pressure pipelines and 132 days for medium-pressure pipelines. Of the total connections made, 57% activated supply during the year. Even in the case of **local distribution networks** in 2023, approximately 10,000 fewer connections were made than in the previous year: their number fell from 71,607 to 61,826. As always, most of the connections involved low-pressure pipelines (94.6%) and the remainder medium-pressure pipelines. There was a slight increase in waiting times both for connections to medium-pressure networks (from 7.7 to 9.2 working days), and for connections to low-pressure networks (from 23.3 to 34.1 working days).

In March 2023, ARERA set out its guidelines on how to manage the extension, for **settlement** purposes, to the smallest smart meters (classes G4 and G6), proposing the adoption of monthly readings for redelivery points that have been in service for more than 12 months and to which a withdrawal profile with a thermal component is associated, and following a gradual adoption path between October 2023 and April 2024.

Taking into account recommendation papers received from operators, in October 2023 ARERA updated and supplemented the regulations previously in force concerning **the liability of distribution companies on the formation of what is termed the "in-out delta"**, i.e. the difference between the quantities injected at the exit points of the transmission network interconnected with distribution networks and the quantities withdrawn by final customers connected to the distribution network.

With regard to **international coordination** activities, it should be noted that in the gas sector, too, ARERA has the task of assessing whether the Ten-Year Network Development Plan covers all investment needs identified during the consultation procedure and whether it is consistent with the non-binding European Ten-Year Network Development Plan (TYNDP). In order to evaluate the TYNDP 2022, ACER requested the national regulators to send comments on their projects, which ARERA sent on the Italian initiatives included in the TYNDP 2022 concerning both traditional gas and hydrogen projects. ACER's work concluded with the publication of ACER Opinion 06/2023 of 14 July 2023 on projects in the TYNDP and national gas plans. In June 2023, ARERA, jointly with the regulators of Greece (RAE) and Albania (ERE), approved the 'Market Test Guidelines 2023' regarding the launch of a new round of incremental capacity requests related to the development of the TAP natural gas pipeline. Then, in October 2023, jointly with the regulators of Greece (RAE) and Albania (ERE), ARERA approved the Project Proposal governing the 'binding second phase' of the Market Test for the TAP natural gas pipeline started in 2021.

Wholesale and retail markets

According to provisional data released by the Ministry of the Environment and Energy Security (MASE), gross natural gas consumption in 2023 decreased by 7 G(m³), recording a 10.3% decrease (). The decline was due to several factors, such as the reduced demand for electricity, which led to a reduction in domestic electricity production, the occurrence of winter temperatures that were still among the highest in recent years, and the modest GDP growth (0.9%). Finally, part of the reduction

in consumption could be explained by the continuing high level of gas prices, albeit lower than in 2022.

Domestic production fell by a further (-12.2%) to an all-time low of 2.7 G(m³). Net imports decreased by 12.9 % to almost 8.8 G(m³), less than in 2022. The drop in net imports occurred entirely due to the 10.8 G(m³) reduction in **gross imports** only partly offset by the drop in exports (-2 G(m³)), which had grown abnormally in 2022.

Storage volumes at the end of the year were about 0.5 G(m³) higher than at the start of the year. The **level of foreign dependence**, measured as the ratio of net imports to the gross value of household consumption, has reduced; in 2023, 96.3% of the gas available in Italy came from abroad. Taking system consumption and network losses into account, **net gas consumption** in 2023 can be estimated at 61.2 G(m³), 10.3 percentage points below that of 2022.

In the preliminary data released by the MASE, therefore, Italy imported 10.8 G(m³) less natural gas in 2023 than in 2022 (-14.8%). As a result of the sanctions imposed by the European Union on Russian exports in response to the war against Ukraine, which started on 24 February 2022, **gas imports from Russia** have almost dropped to zero over the past two years. The origin of the 61.2 G(m³) of imported gas in 2023 sees several countries with significant quantities: 25.5 from Algeria - a historical supplier of Italy -, 10 from Azerbaijan, 6.8 from Qatar, 5.3 from the US, 6.6 from Norway and the Netherlands, 2.5 from Libya and the remaining 2 from other countries.

According to (provisional) data from ARERA's Annual Energy Sector Survey, approximately 58 G(m³) were imported into Italy in 2023, 10 less than in 2022. The decrease is thus higher than the data from the Ministry of the Environment and Energy Security. 6.6% of the total gas supplied abroad is purchased on European stock exchanges.

Five corporate groups each own more than 5% of the total gas supplied (i.e. produced or imported): Eni, Edison, Azerbaijan Gas Supply Company Limited, Royal Dutch Shell and Enel (the same as in 2022); together they imported 45.7.1 of the 57.7 G(m³) of foreign gas that entered the Italian market. The five groups are also the only ones that have a share of more than 5% of the available gas (which in addition to imports and production also includes gas in storage), with an overall share of 81.8% (slightly higher than the share of gas supplied).

The analysis of import contracts (annual and multi-year) active in 2023 in terms of **residual life** shows that 55.7% of the contracts will expire within the next five years (the same share was 32.4% in 2022) and 61.7% will expire within the next ten years. Of the contracts in force today, 4.4% have a residual life of more than 15 years. This share has fallen sharply (it was 39% in 2021 and 15% in 2022) and concerns a now very small total quantity of 3.8 G(m³).

In 2023, **total demand in the gas sector**, understood as the sum of gas volumes sold in the wholesale market (including resales) and in the retail market plus self-consumption, decreased again (-5.5%), having dropped to 265.7 from the 281.3 G(m³) recorded in 2022. This is due to the significant reduction in both self-consumed gas and gas traded in the total sales market (wholesale and retail market).

The **wholesale market** handled 210.7 G(m³), a decrease of 2.6% compared to 2022, the retail market handled 42.8 G(m³), a decrease of 1.6% compared to 2022, and fuel gas amounted to 12.1 G(m³), also a sharp decrease (-13.8%).

In 2023, the **number of companies** that operated in the wholesale market grew by 46 (303 compared to 257 in 2022), but it is important to note that the count of operators - which is based on companies that respond to the Annual Survey - is the phenomenon that is most affected by the different rate of

response to the Survey from one year to the next. The volume of gas they sold in the wholesale market, on the other hand, decreased by 5.6 G(m³), with the result that the average unit sales volume dropped by 17%, from 842 to 695 M(m³); this is the third consecutive year that this market has shrunk, following the already significant drops observed in 2021 and 2022. The **level of concentration** in this market remained substantially unchanged: the share of the top three companies (Engie Global Markets, Shell Energy Europe and Eni) was 26.1% compared to 25.3% in 2022. The cumulative share of the top five companies (the three already mentioned plus Engie Italia and Eni Global Energy Markets) went from 37.5% to 37.3%. The HHI index calculated on the wholesale market alone also went from 450 to 448.

The main trading platform in the wholesale market in Italy is the **Virtual Trading Point (PSV)**, operated by the transmission network operator, Snam Rete Gas. Alienations that can be registered are both those that take place through bilateral contracts and those that take place within the regulated markets managed by the GME. In 2023, 311 entities traded, sold and acquired gas at the PSV only 55 of these were traders, as they were not users of the transmission system. The number of PSV subscribers stood at 374 (+8%). The number of subscribers who traded increased significantly (+24%), from 251 to 311. Even more so was the number of pure traders, which rose from 39 to 55, an increase of 41%.

Trading volumes in the markets decreased by 10.8%. The volumes traded on the stock exchange in fact dropped to 31.6 G(m³) from 35.5 the previous year, due to a reduction in volumes handled in the centralised markets (-11.6%), which was accompanied by a fair reduction in gas traded too as clearing house (-4.2%). Nevertheless, the average number of daily transactions increased slightly compared to 2022 (+6%), while the average daily number of OTC transactions fell slightly (-2.8%).

In the **markets organised and managed by the GME**, total volumes of 155 TWh were traded in 2023, a clear reduction compared to 2022 (-13%).

Liquidity in the **Day-Ahead Market** remained high (69%) despite a decline in traded volumes (106.5 TWh; -16.3% on 2022). The monthly trend also showed higher levels in the earlier months of the year. The AGS segment of the MGP traded a total of 27.9 TWh, which is a sharp decrease compared to 2022 (-45.6%).

The share of volumes traded in the **Intra-day Market** increased moderately (29%; in 2022 it was 24%) to a total of 44.5 TWh, up 3.3% compared to 2022; trades in continuous trading (44.4 TWh; +9.5%) continued to be predominant while, in the AGS segment, volumes were even more marginal than the previous year (0.2 TWh; -93.9%). Negotiations in the Market for Gas in Storage (MGS) were also down, with trades amounting to 3.3 TWh (-36.2%), while - as in the past - Snam did not activate any sessions in the Market for Locational Products. There was also no trading in forward-traded products in MT-GAS, while allocations to the 'Royalties' segment of P-GAS amounted to 0.6 TWh.

The **prices recorded on the various platforms** can all be traced back to an annual average of around € 42/MWh, in line with the annual average price of over the counter transactions at the PSV (€ 43.05/MWh; -65%). In particular, the average prices of the two declining M-GAS segments, respectively € 41.87/MWh for MGP-GAS and € 42.72/MWh for MI, showed an interim trend that mirrors that of the PSV price.

The provisional results of the Annual Survey showed that **just under 43 G(m³) were sold in the retail market** in 2023, to which must be added 635 M(m³) supplied through last resort and default services. Overall, therefore, the value of final sales was 43.5 G(m³), a decrease of 8.1 G(m³) over 2022.

However, in order to have a figure comparable with that of the final gas consumption published by the MASE, and commented on in the previous pages, it is necessary to take into account the volumes

relating to self-consumption, 12.1 G(m³), which brings the value of total consumption resulting from the Annual Survey to 55.6 G(m³), i.e. a value comparable to the 60.3 G(m³) from the ministerial source. As usual, there are differences between the two sources, which classify the volumes of gas handled during the year differently. In the Annual Survey data, the **level of total consumption in 2023 is thus 15.3% lower** than in 2022.

In 2023, the **number of active suppliers** in the retail market decreased, for the first time since the early 2000s, substantially (-34 units) to 481; as the volume of gas sold decreased by 15.9 %, and the number of suppliers decreased to a lesser extent (-6.6 %), the average unit sales volume decreased by almost 10 %, from 99 to 89 M(m³) and reached a new all-time low. Of the companies active in the end market, 5.4%, i.e. 26 out of 481, sold more than 300 M(m³) in 2023; together, these companies cover 84.1% of all the gas purchased on the retail market.

Analysing the sales performance of corporate groups, instead of individual companies, however, allows a more accurate assessment of market shares and the **level of concentration in the retail market**. 2023 highlights some significant innovations. The Eni group, for the first time, was not in first place, having been overtaken in overall sales quantities by the two historically trailing groups, Edison and Enel, which this year moved into first and second place respectively. The data shows, however, that the sales quantities of the first three groups are very close: 167 M(m³) separate Edison's volumes from those of Enel and 92 M(m³) separate Enel's sales from Eni. There is therefore little differentiation in market shares: 14.3% that of the Edison group (was 15.4%), 13.9% that of the Enel group (was 13%) and 13.7% that of the Eni group (was 16%). Given the reduction in the distance between the top three groups and the decline of two of their three shares, the average level of concentration in the gas end-supply market in 2023, historically low, decreased slightly, albeit with differentiated levels between the types of customers served. Using metering calculated on the volumes sold, it can be seen that the number of groups with a share of the total market of more than 5% rose to 7. Moreover, in 2023, the top three groups control 41.9%, while in 2022 the share was 44.3%. The Herfindahl-Hirschman Index (HHI) calculated on the sales market was 769, lower, therefore, than the 2022 index, which was 809. The highest concentration is found in sales to electricity generation, industry and households, where C3 is above 50%; the lowest is observed in sales to apartment blocks and trade customers. Compared to 2022, slight increases in the level of concentration are observed (via the C3 and HHI indicators) in the household and trade sector, while a decrease is observed in all other sectors.

Net of last resort and default supplies, as described, previously approximately 55 G(m³) - of which 12 were for fuel gas and 51 for supply - were sold to 21.7 million redelivery points in 2023. In all, compared with 2023, **gas supply on the end market** reduced by 15.4%; in detail, fuel gas, which mostly belong to the industrial and electricity generation sectors, recorded a decrease of 13.8%; the quantities of gas sold in the free market, at 39.6 G(m³), showed a decrease of 14.7%, while sales in the market with a reference price, at 3.2 G(m³), fell by 45%. The total quantities supplied in default and last resort services decreased slightly in 2023, to 630 M(m³) compared to 675 M(m³) in 2022 (-6.6%). If default and last resort services are also considered, the gas sold in the market with a reference price rises to approximately 3.9 G(m³). Consumption of the household sector dropped by 11.2% and that of condominiums by 15.6%. The consumption of the production sectors (industry and thermoelectric generation) decreased from 42.2 to 34.8 G(m³), thus recording an decrease of 17.5%. Tertiary sector consumption (trade and services, together with public service activities) dropped by 11.3%, from 7.5 to 6.7 G(m³). Considering sales in the strict sense and thus excluding fuel gas, 92.5% of gas is purchased on the free market and the remaining 7.5% in the standard service. In terms of customers, however, 26.3% purchase on the market with a reference price, while 73.7% on the free market.

Considering only the **household sector**, it can be seen that the share of volumes purchased on the free market in 2023 reached 74.1% for households and 89.6% for condominiums (both shares are calculated net of fuel gas). In terms of withdrawal points, in 2023, the share of households that acquired gas in the standard service dropped to 27.9%; in 2022, it was 33.2%. The breakdown of sales to the end market (net of fuel gas) by consumption sector and customer size shows that on average the class with annual consumption up to 5,000 m³ buys 29.9% of all gas sold in the retail market.

On the basis of data provided by transmission operators and data from the IIS, the **switching** percentage, i.e. the number of redelivery points that changed supplier in the calendar year 2023, was 15.2% overall, or 17% when assessed on the basis of the consumption of customers who switched (the percentages are increasing for all customers), the increase in switching rates of households, in particular, may partly be due to the imminent cessation of the standard offer service. Switching by household customers in 2023 increased by another percentage point: just under 2.5 million customers, equivalent to a share of 14.6% (and corresponding to a volume share of 20.9%), had made at least one switch. Far greater, at 27.6%, was the fraction of condo households that turned to a new supplier, for volumes corresponding to 41.1% of the relevant consumer sector. A total of 37% (equivalent to 57% in terms of volumes) of the entities operating a public service activity chose to change to a new supplier, while the 'other uses' that changed their supplier accounted for 21.2% of the total in terms of customers, and 14.1% in terms of volumes (corresponding to approximately 6.2 G(m³)).

Also in the gas sector, as already mentioned for electricity, the Annual Survey asked suppliers a number of questions aimed at assessing the quantity, types and modalities of offers that companies make available to customers who have chosen to supply in the free market. The **average of the commercial offers** that each gas seller is able to propose to its potential customers is 17.1 for households, 7.7 for condominiums with domestic use and 14.1 for non-households. Of the offers made available to the household customer on average, 13.8 **can only be purchased on-line**; the interest of households in such offers in 2023 grew, as it turned out that 113.4% of customers signed a contract offered via this mode (in 2022, this share was 10.1%). Considering condominiums, instead, of the 7.7 offers on average proposed to these customers, 3.1 are subscribed through the network. However, only 2% of the redelivery points of condominiums actually subscribed online. Finally, in the case of non-households (other uses), of the 14.1 offers made available to them on average, 4.9 are subscribed to on-line; among these customers, however, the success of on-line offers is more significant, since 20.2% of customers are reported to have subscribed to the type of offer discussed here.

With regard to the preferred **type of price**, it was found that 44% of households signed a fixed-price contract in the free market (i.e. with the price not changing for at least one year from the time of signing), while 56% chose a variable-price contract, i.e. with the price changing at a time and in a manner determined by the contract itself. The percentages are reversed in the case of condominiums, among which variable-price contracts are by far the most popular ones (86.8%). Even among non-households, those who prefer variable-price contracts are more numerous (76.7%) than those who have signed a fixed-price contract (23.3%); the percentage of customers who chose a variable price contract has increased considerably compared with 2022.

Looking at the supply cost component of the price of these contracts, it can be seen that variable-price contracts are less convenient for all types of customers. However, the differential with a variable-price contract is very significant for non-households, while it is relatively small for condominiums and households.

For all customer types, the most frequent price **indexation mode** in variable-price contracts is the

one linked to the PSV price trend, which, however, is not the one with the most advantageous economic conditions. Next, the type of variable price most chosen by households was that with indexation to the trend in TTF quotations, while for condominiums and non-households it was that with a discount on one of the components established by ARERA for the standard offer service. The cheapest contract (for the procurement cost component) is the one with limited indexation, which, however, is chosen by a negligible percentage of customers. For all customer categories, the type with indexation to the performance of markets managed by the GME also emerges as particularly convenient.

Of households, 40.2% have signed a contract with a **rebate or discount**; lower percentages are found for other customers (18% of both condominiums and non-households).

Among households, the **presence of additional services** in natural gas sales contracts is more prevalent among those with fixed prices (76.5%) than among those with variable prices (41.6%). In fixed-price contracts that provide an additional service, there is a clear preference (43.6%) for those that allow participation in a points programme and the guarantee of 100% "green" energy (10.5%) as well as a good preference (9.4%) for those that offer additional energy services. Concerning the cost of additional services (assessed through the price component that covers procurement and sales costs), it can be observed that the cheapest fixed-price contract for households is the one with a free gift or gadget, although it is chosen by practically no customers. For households with variable prices, on the other hand, the most popular options for contracts with at least one additional service turn out to be those with a 100% green energy guarantee (17.6%), right after contracts with additional energy services (8.7%). Finally, as far as non-households are concerned, the choice of contracts without additional services is by far the most widespread, on average, about 79% of such customers, whether fixed-price or variable-price, choose a contract without other options. The price of such contracts is slightly higher than the average price in comparison with all the additional services available.

An analysis of the data collected in the *Annual survey* shows that last year, the average gas price net of taxes (weighted by quantities sold), charged by sales companies to final customers was 77 c€/m³. This price is a third less (-31%) than the previous year (111.2 c€/m³). The decrease, which stems from the sharp drops in the cost of raw materials in wholesale markets after the peaks reached in 2022, does not affect all customer categories in the same way, being related to their size class.

Price trends since 2012 for households (households and condominiums), broken down according to the main contractual conditions under which supply can take place, i.e. the standard offer service and the free market, show lower values for the standard offer service for all years and all dimension classes, with the exception of 2022. In 2022, in fact, the free market was cheaper than the standard offer service (-17.6%) due to the major diffusion of locked-price contractual formulas that have delayed, in the immediate future, the transfer to final customers of the strong growth in raw material gas prices that occurred during the months following the start of the Russia-Ukraine conflict. This transfer took place, at least in part, in 2023, when the price on the free market rose by more than 10%, while in the standard offer service it fell by almost 30%; consequently, in this last year, the convenience ratio was completely reabsorbed and reversed, as the free market again became significantly more expensive (+28%).

From the analysis based on the data communicated by the 401 suppliers for the gas sector, the **actual average times for replies to complaints and bill adjustments** were 21.65 and 27.03 calendar days respectively, below the minimum standards set by ARERA (30 and 60 days respectively). The **actual average response time to enquiries** was also well below the general standard, i.e. a total of 8.87 calendar days. As far as **double bill adjustments** are concerned, the actual average correction

time is 18.02 calendar days, far lower than the standard of 20 days set by ARERA.

In 2023, sales companies serving the reference price and free market of natural gas received a total of 169,739 written complaints, 159,044 enquiries, 9,341 bill adjustments and 269 double-bill adjustments. There were 22,165 (+36.2% compared to 2022) cases of non-compliance with the standards set for services relating to the commercial quality of sales in the gas sector, which resulted in customers being entitled to compensation; 96.6% of these cases were due to failure to meet response times to customer complaints. During the year, compensation for gas customers totalling more than € 977,000 was paid out (+39.9% vs 2022).

In 2022, **customers with dual fuel contracts** sent 31,203 written complaints, down 11.8% year-on-year, and 48,397 written requests for information, also down 5.7%. Bill and double-bill adjustments amounted to 2,121 (-16.8% vs 2022) and 37 (+32.1% vs 2022) respectively. Overall, there were 3,384 cases of non-compliance with standards that resulted in the right to automatic compensation in the bill for services related to the commercial quality of sales. Overall, compensation amounting to € 140,980 was paid to the dual fuel customer segment.

Consumer protection and dispute resolution

The consumer protection system in the sectors regulated by the Authority consists of two macro-areas: the first concerns information and assistance to customers (basic level); the second concerns the resolution of problems and disputes that may arise between customer and service provider (second level). The **Energy and Environment Consumer Help Desk** and the **Conciliation Service** are operated on behalf of ARERA by the Acquirente Unico. The Help Desk provides answers to calls to the call centre, written requests for information, requests to activate special information procedures and second-level complaints.

In 2023, the Help Desk and the Conciliation Service recorded a marked increase in incoming volumes: 1,546,809 calls were received at the Help Desk call centre during working hours (+23% compared to 2022); of these, 1,209,482 calls were actually handled. The average duration of conversations in the year was 252 seconds, up from 238 seconds in 2022.

Almost all the calls handled by the call centre concerned the electricity and gas sectors (97% of the total). By far the most discussed topic in the phone calls received by the Help Desk is the social bonus (67%), the other topics discussed in order of importance are dispute resolution methods (13%) and information on the status of the handling of files at the Help Desk (6.5%).

The number of **written requests for information** related to the energy sectors received by the Help Desk was 49,930, a decrease of 10% compared to the previous year. Again, the absolute majority of requests for information concerned the social bonus 45%, followed by billing (14%), the market (12%), contracts (11%) and non-payment of bills and suspension (7%).

Special information procedures make it possible to provide information without the need for assistance of the Help Desk staff. They are operational as of 1 January 2017 only for some specific topics in the energy sectors. Compared to the previous year, in 2023 the Counter received 44,929 requests for the activation of special information procedures (+7%), of which 64% concerned electricity, 23% gas, and 13% both sectors.

Activities relating to the second level of the protection system concern the **resolution of issues and disputes** arising in the relationship between the customer and the regulated service supplier. They can be settled through the special settlement procedures of the Help Desk or through conciliation

procedures. The latter may be brought before the Authority Conciliation Service or ADR entities registered on the Authority's special list.

Similarly to what happens for special information procedures, also for **special resolution procedures**, the Help Desk accesses information encoded in centralised databases. Unlike information procedures, special resolution procedures allow the outcome of the dispute to be determined. They imply assistance of the Help Desk staff, in case further information is needed to consult databases, or to verify the correct fulfilment of the regulation following the resolution of the dispute. In 2023, 31,638 requests for the activation of settlement procedures were received at the Help Desk (+40% compared with 2022). The social bonus procedure was confirmed as the most frequently used (93.5%), while the sector most affected by the special termination procedures was electricity, with almost half of the requests (49%), followed by gas with 29%; the other procedures concerned both energy sectors and dual fuel customers. 87% of the above-mentioned special procedures concerned the household sector, while in 89% of the cases these procedures were initiated by final customers without the help of proxies (90% in 2022). The most frequently used modality of access is the e-mail channel (66% of cases), followed by the One-Stop Portal of the Help Desk (30%).

ARERA's Conciliation Service is a dispute resolution procedure that can be activated by final customers of electricity and natural gas for issues arising with energy operators (suppliers and distributors), in case of missed or unsatisfactory response to a complaint. The procedure takes place entirely on-line and in the presence of a third-party, impartial mediator experienced in mediation. Any final agreement has settlement effect between the parties pursuant to art. 1965 of the Civil Code. Moreover, with the approval of art. 141, par. 6, letter c) of the Consumer Code, the attempt at conciliation has become a condition for proceeding before the courts for disputes arising in the sectors regulated by ARERA. The condition of admissibility does not apply when the disputes concern tax or fiscal matters, as well as in cases of urgent and precautionary legal rulings. In 2023, customers and end users in the energy sectors submitted 28,693 requests to the Conciliation Service (+36% compared with 2022). The increase is mainly due to the number of applications for the electricity sector (16,216 applications), followed by applications for the gas sector (8,420 applications) and those submitted by dual fuel customers (3,817 applications); finally, 240 applications were submitted by prosumers. Concerning the outcome of the requests received by the Service, 81% of the cases resulted in admission to the procedure; the procedures concluded with an agreement between the parties accounted for 70%; these percentages are almost identical to the previous year. It took the parties an average of 56 calendar days to reach agreement, 2 less than in 2022.

As an alternative to ARERA's Conciliation Service, the final customer may make a compulsory attempt at conciliation for judicial purposes also with recourse to other parties. ARERA, in implementation of the rules, established in December 2015 the **List of Organisations entrusted to handle ADR (Alternative Dispute Resolution procedures)**. On 31 March 2024, 30 ADR entities were registered in the Authority's List. The information transmitted by ADR entities shows a significant increase in the number of conciliation applications relating to the energy sectors received, compared to the previous year (+26%), 68% of the applications submitted, for all sectors, are attributable to ADR entities for joint conciliation.

Since 2009, a protection mechanism has been in place for households in situations of economic hardship or serious health conditions who receive a **bonus, i.e. a discount on the supply of electricity and/or natural gas**. In order to bridge the gap between the potential beneficiaries and the actual bonus recipients, which has always remained at considerable levels, Decree-Law No. 124 of 26 October 2019 innovated the regulatory framework by providing, *inter alia*, that from 1 January

2021, bonuses will be recognised automatically to those entitled to them (which are the persons whose valid ISEE²⁴ is within the limits provided for by the legislation) and, therefore, without the need for them to submit a special request to the Municipalities and/or tax assistance centres. In February 2021, ARERA approved the methods for requesting the regime for the automatic recognition of electricity, gas and water social bonuses for economic hardship, entirely replacing the regulation of the previous 'on request' system. However, the social electricity bonus for physical hardship does not fall within the scope of the measure, which remains 'on request' and continues to be managed through a separate system.

2023 was therefore the third year during which the system of automatic recognition of social electricity, gas and water bonuses, to help address the economic difficulties, came into effect. In view of the continuing price tensions in the wholesale markets (after the significant increase in electricity and gas prices experienced in 2022), in 2023 too there were numerous government interventions that introduced important innovations aimed at providing increasing protection and safeguards for economically disadvantaged households, in order to support their energy expenditure. ARERA implemented these rules by providing:

- the inclusion of a supplementary compensatory component from the state budget for the first and second quarters of 2023 for all claimants;
- that as of 1 January 2023, the normal value of the ISEE for access to social bonuses for economic hardship would be updated to € 9,530 (ARERA must update this value every three years on the basis of the average value of the national consumer price index for blue- and white-collar households in each three-year reference period);
- that for 2023 only, the ISEE threshold value required to access the social electricity and gas bonuses would be raised to € 15,000;
- that the value of bonuses be differentiated on the basis of the ISEE value, introducing a new bonus class (class d), for households whose ISEE is between € 9,530 and € 15,000, to which an electricity and gas bonus equal to 80% of the economic compensation established for households with ordinary ISEE (within € 9,530) be awarded;
- the introduction of an additional new class of bonus claimants (class b-bis) for large families with four or more children and ISEE between € 20,000 and € 30,000.

In 2023, the number of customers who obtained the social bonus for electricity supplies increased by 22% compared to the previous year, from 3,818,281 to 4,641,449, of which 4,576,621 (+21.5%) for economic hardship and 64,828 (+24.2%) for physical hardship. The total amount of bonuses disbursed for the electricity sector for economic hardship was approximately € 1,313 million, stable compared with the previous year. The extending of the pool of beneficiaries is partly due to the automatic bonus recognition mechanism, but mainly to government interventions.

As specified, on 31 December 2023, there were 64,828 households with a bonus for the use of electrical life-sustaining equipment (hardship bonus), an increase of 24.2% over the previous year. The **hardship bonus** is divided into three bands to take into account the type of equipment used, the average hourly consumption of each type of equipment and the average hours of use per day.

In 2022, the number of households benefiting from the **social bonus for gas supplies** due to economic hardship also increased considerably, going from 2,441,158 to 3,005,197 (+23.1%). The amount of bonuses paid out for the gas sector in 2023 was approximately € 849 million. Concerning

²⁴ Equivalent Economic Situation Indicator: this is the tool used to measure the economic condition of households in Italy. It is an indicator that takes into account income, assets and the characteristics of a household (in terms of size and type).

the percentage breakdown by number of components of households benefiting from the gas bonus for economic hardship, 87.6% concerned households up to 4 members, 15.2% over 4 members.

Also in 2023, the actions of ARERA continued, aimed at accompanying end consumers on the **path to overcoming standard prices**. As established by ARERA, therefore, the communications included in the bills continued to inform customers that changing contract or supplier is simple and free of charge and that continuity of service is guaranteed; they also provided the elements that should prompt the customer to make use of the tools aimed at making an informed and aware choice, such as the "Portale Consumi", the "Portale Offerte luce e gas" and the PLACET offers.

There were 8,505 offers in the "Portale" database as of 31 December 2023, of which 5,854 were free market offers, 2,170 PLACET (free price offers under uniform contractual conditions) offers and 481 offers without the calculation of the estimated annual expenditure. For the electricity sector, a total of 4,100 offers were available, for natural gas, 3,873; there were 44 dual fuel offers. For the electricity sector, 42.4% of offers for households were fixed-price offers, while for non-households this percentage dropped to 25.9%. Similarly for the natural gas sector, the available offers are mainly variable price. Households account for 76.4% of the available offers, condominiums for 72.2% and non-households for 71.5%.

With a view to further strengthening the information and the empowerment of final customers, in 2023 ARERA approved measures to update and streamline the relevant **Code of Business Conduct**:

- adaptation to the new provisions on early withdrawal charges for electricity final customers, introduced by Legislative Decree No. 210 of 8 November 2021, which implemented Directive (EU) 2019/944;
- the information obligations of suppliers in the event of renewal of economic conditions with modification of the same conditions in electricity and natural gas supply contracts.

At the end of 2023, ARERA started a procedure for the organic revision of the **Bill 2.0**, aimed at improving it from the point of view of simplicity, comprehensibility and uniformity; in view of the importance of this procedure and the need to ensure the widest participation of stakeholders, it is subject to the application of the regulatory impact analysis (AIR).

The **"Portale Consumi"** evolves continuously, aimed at both verifying and improving its performance and implementing its specifications. As in previous years, therefore, in 2023 new functions were further made available, including the indication of the maximum power absorbed in the period, and in-depth studies continued the evolution of the Italian and EU regulatory framework to allow data access to third parties authorised by final customers.

1.1.2 Implementation of the Clean Energy Package

Law No. 53 of 22 April 2021 is the ruling that defined the principles and guiding criteria for the delegation of powers to the Government for the implementation of the Clean Energy Package standards in the Italian legal system, with particular reference:

- to Directive 2018/2001/EU on the promotion of the use of energy from renewable energy resources (art. 5);
- to Directive 2019/944/EU concerning common rules for the internal market in electricity and amending Directive 2012/27/EU (recast) (art. 12);
- to the adaptation of national legislation to the provisions of Regulation (EU) 943/2019, on the internal market in electricity (recast), and Regulation (EU) 941/2019, on risk preparedness in the

electricity sector and repealing Directive 2005/89/EC (art. 19).

In implementation of this law, the following were then enacted: Legislative Decree No. 199 of 8 November 2021, on the 'Implementation of Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources' (so-called Decree Red II); Legislative Decree No. 210 of 8 November 2021 on 'Implementation of EU Directive 2019/944 concerning common rules for the internal market in electricity and amending Directive 2012/27/EU, as well as laying down provisions for the adaptation of national legislation to the provisions of EU Regulation 943/2019 on the internal market in electricity and EU Regulation 941/2019 on risk preparedness in the electricity sector and repealing Directive 2005/89/EC' and other decrees transposing European directives.

At the beginning of 2020, the **Energy and Climate Integrated National Plan (PNIEC)** was also published, which was sent to the European Commission by the Ministry of Economic Development in agreement with the Ministry of Environment and the Protection of Land and Sea and the Ministry of Infrastructure and Transport, pursuant to the so-called governance regulation (Regulation (EU) 1999/2018). The Plan, which is extensively described in the Annual Report 2020 (to which we refer) contains objectives, policies and measures that Italy intends to adopt in the coming years to achieve the European energy and climate targets for 2030. The Italian government is now working on its implementation.

The actions carried out in 2023 closely related to the Clean Energy Package concerned the approval of the new Electricity Dispatch Integrated Text (see par. 3.1.5) and the adaptation to the new provisions on early withdrawal charges for electricity final customers, introduced by Legislative Decree No. 210 of 8 November 2021, which implemented Directive (EU) 2019/944 (see par. 5.1.5).