

ARERA: THE FIGURES FOR PUBLIC SERVICES

Summary of 2024 data for electricity, gas, water, waste and district heating to be published in the volumes of the Authority's Annual Report

Rome, 17 June 2025

The **presentation of the Annual Report 2024** to Parliament and the Government **is the last of the current** Board of ARERA. **Initial evidence** is anticipated, which will later be consolidated in the **two volumes of the Annual Report**, on the State of the Services and on the Activities carried out in 2024 by the Italian Regulatory Authority for Energy, Networks and the Environment. This year the body **also celebrates the 30th anniversary of its founding Law**.

The volumes will be published at the end of June on the website www.arera.it.

The data, summarised here, are for the **calendar year 2024**.

In 2024, international markets continued to show a **strong sensitivity to geopolitical events** in addition to stimuli more related to purely economic dynamics. The international scene, with continuing conflicts in Ukraine and the Israeli-Palestinian area, was compounded towards the end of the year by the announcement of trade tariffs by the new US administration.

The post-pandemic recovery is also confirmed by the economic growth rate of +3.3%, according to the International Monetary Fund, and by **the moderate increase in demand for all sources (natural gas, oil and coal)**. Confirming the growing role of LNG, 70 new ships were ordered in 2024, almost twice as many as in the previous 12 months. At the end of last year, the **LNG carrier fleet** amounted to 774 vessels, **+7% over 2023**, of which 711 are to be considered 'active' and the remainder operating as regasifiers and floating storage in various countries.

As far as **Italy is concerned**, **focus was on the end of the standard offer services in the electricity and natural gas sectors for non-vulnerable customers** and, in particular, on the outcome of the auctions for the allocation of the Gradual Standard Offer Service for the electricity market, which resulted in clear savings even compared to the Main Standard Offer Service. **Having almost exhausted the effects of government interventions to support households** experiencing economic hardship to compensate for the sharp increases in utility bills in 2022, **international price comparisons have returned to show the pre-crisis gap with leading European countries**.

Despite the fact that the protection regime for the non-vulnerable has also ended for the gas sector, **the highest number of enquiries and problems were recorded in the electricity sector**.

The number of natural gas and electricity suppliers has dropped, while the level of competition is improving, especially for natural gas where the first operator has been overtaken in market shares.

In the water sector, **planned investments continue and tariffs increase, as in the waste sector, concerning costs incurred in improving the service**.

SECTORAL DATA IS REPORTED BELOW

SECTORAL DATA

- *ARERA services and campaigns for consumers*
- *Electricity*
- *Natural gas*
- *Water*

- *Waste*
- *District heating*

ARERA CONSUMER SERVICES AND CAMPAIGNS

SOCIAL BONUSES: MORE THAN 4.5 MILLION IN BENEFITS FOR HOUSEHOLDS EXPERIENCING ECONOMIC HARDSHIP, DOWN AS PRE-CRISIS THRESHOLDS ARE RESTORED. THE NUMBER OF BONUSES FOR PHYSICAL DISCOMFORT INCREASES

The ISEE threshold for 2024 has reverted to the ordinary limit and the number of households eligible for the bonus was approximately 4.1 million, marking a 40.5 per cent reduction compared to 2023, while **benefits have been disbursed to 4.5 million households of which 2.8 million for electricity and 1.7 million for natural gas. The estimated disbursed amount corresponding to the recognised bonuses is about EUR 360 million for electricity bonuses and about EUR 93 million for direct gas bonuses.** In view of the continuing upward trend in energy prices, the Budget Law 2024 also provided for an extraordinary component (CCS) for electricity bonuses to be paid from the state budget for the first quarter of 2024. **As of 31 December 2024, there were 77,175 households with an active hardship bonus, marking a 16% increase over the previous year** as a probable consequence of rising energy costs and of increasing awareness of the benefit.

ENERGY AND ENVIRONMENT CONSUMER DESK: EUR 21 MILLION RECOVERED FROM CONCILIATION. APPLICATIONS UP (+6%), BUT CALLS DOWN (-27%), 97% RELATE TO LIGHT AND GAS

In 2024, the call centre received 1,122,521 calls during operating hours (-27% compared to 2023), with an average call time of 233 seconds (it was 252 in 2023). In line with previous years, **97% of calls concerned the electricity and natural gas sectors, with the social bonus remaining the most recurring topic, but falling to 42% of contacts (it was 67% in 2023).** There were 52,632 written requests for information (down from 54,750 in 2023), **almost all of which concerned the energy sector (48,658)**, compared to 3,895 requests for the water sector and 79 requests for district heating. The top five topics covered were: social bonus (24%), market (17%), billing (15%), contracts (13%) and vulnerable customers (9.5%).

Requests for the activation of special information procedures for energy sectors amounted to 51,423 in 2024, recording an increase over 2023 (+14%).

In 2024, the **Conciliation Service received 34,564 applications (+6% compared to 2023).** 38% of conciliation applications were submitted by delegates of customers or end-users other than the associations representing household and non-household customers, 33% directly by the customers concerned, and 29% by delegates of CNCU (National Council of Consumers and Service Users) associations. As far as sectors are concerned, electricity (13,826) and natural gas (11,407) prevail, followed by the water sector and dual fuel (a single bill for electricity and gas) with, respectively, 5,185 and 3,803 applications, and finally the practices activated by prosumers (producer-consumers of electricity (346) and district heating (44).

The agreement rate is reduced to 63% (70% in 2023) with an average conclusion time of 57 days (one day more than in 2023). Looking at the three main sectors by number of applications, it is the water sector that has the highest agreement rate (66%), followed by gas (63%) and electricity (59%).

In 2023, the “compensation”, i.e. the economic charge obtained by customers or end-users through the conciliation agreement (in the form of recovered value even compared to the value of the dispute or refunds, compensation, recalculation of erroneous billing, waiver of costs and default interest, etc.) **is approximately EUR 21 million.**

COMPLAINTS: MORE THAN EUR 2 MILLION IN COMPENSATION PAID TO ELECTRICITY AND NATURAL GAS CUSTOMERS. CUSTOMER SATISFACTION SURVEY RESULTS ARE STILL IMPROVING

The authority **monitors the quality of services provided by companies**. With regard to compliance with the indicators of the commercial quality of sales services in the **electricity sector**, last year companies received: 298,690 written complaints (-8.3% compared to 2023), 261,117 requests for information (-20.7%), 6,566 bill adjustments (-0.6%) and 565 double billing adjustments (-57.2%).

Automatic compensation for non-compliance with standards was mainly paid for delays in written complaints. Overall, compensation of over EUR 1.1 million was paid in 2024 (just under EUR 1.7 million in 2023) mostly to households in the free market.

In 2024, **natural gas** sales companies received 202,784 written complaints, up from the previous year (19.5%), with 83.3% coming from households in the free market. Written enquiries amounted to 127,311 (-19.9%) and bill adjustments to 7,775 (-16.8%). A total of 21,134 **indemnifications** were paid out (about -5% compared to 2023), most of them for failure to respond to written complaints within the defined time, with a total of over **EUR 922,000** paid out, slightly down from the previous year (-5%).

In addition to analysing the data submitted by suppliers, every year the Authority carries out a **customer satisfaction survey on the quality of responses to written complaints and enquiries** by interviewing customers who received a reply in writing. The results show that, for complaints, 57.9 per cent of customers are overall satisfied with the response received, while 42.1 per cent are dissatisfied. Of the main quality factors, “ability to solve the problem” was the most important, followed by “clarity of answers”.

The overall customer satisfaction index (ICS) has improved on the previous year, recording a value of 91, which is **one of the highest values recorded in recent years** (+3.3).

CONSUMER INFORMATION CAMPAIGNS ARE GROWING. INCREASED MEDIA PRESENCE (AROUND 9,000 MENTIONS) AND SOCIAL MEDIA (OVER 80,000 FOLLOWERS)

In 2024 ARERA implemented an integrated communication strategy to accompany the transition to the free energy market, with deadlines for natural gas (1 January) and electricity (30 June).

Campaigns carried out. The main initiative was “Chiedi all’ARERA” (June-August), a multi-channel campaign with TV/radio spots, social adverts and 10 video tutorials on YouTube to explain energy issues. Finally, collaboration with Factanza to reach GenZ with branded content on “end of protection service” and “Il portale offerte”. The campaign achieved significant results, precisely 60 million viewers on RAI, 32 million contacts on Mediaset, and 12 million users on social media.

Early in the year, the commercial “Alessandro Volta - ilportaleofferte.it” (December 2023-January 2024) was relaunched on the RAI networks. Subsequently, the “Defend Yourself This Way” campaign (of 2022) was relaunched together with AGCM (The Italian Competition Authority) to counter aggressive commercial pressure from call centres.

More generally, media presence in 2024 recorded a total of 8,891 mentions on radio, TV, print and online in 2024, with a focus on electricity (45.7%) and natural gas (28.5%). The topic “end of protection” generated 2,429 dedicated articles. Social media continued to grow: +6% of total followers (around 80,000), with LinkedIn booming (+13%, over 60,000 followers) and YouTube (+50% of subscribers, 2,852 total). X, LinkedIn and YouTube profiles have recently been joined by an Instagram channel and ARERA's new institutional Facebook page. A total of 505 contents were produced following a strategic editorial plan, and coordinated with press communication with 43 press releases, more than a quarter of which were dedicated to disclosure topics on the end of the standard offer service and social bonuses.

Completely revamped website as well www.arera.it with a focus on consumer orientation rather than on technical information for operators.

ELECTRICITY

ELECTRICITY: IN 2024 ITALY SHORTENS THE PRICE GAP WITH EUROPE BUT CHARGES AND TAX COMPONENTS NEUTRALISE POSSIBLE SAVINGS. GERMAN HOUSEHOLDS ALWAYS PAY THE MOST, FOLLOWED BY ITALIAN HOUSEHOLDS

After a 2023 characterised by the aftermath of the energy crisis with generalised increases in average electricity prices for households throughout the Union, **the persistence of a complex international scenario in 2024 resulted in significant differences in Europe: in 10 countries prices increased** (among them France +19% and Portugal +15%), **in 17 they decreased (Italy -8%, Luxembourg -33%)**. As a result, public measures to contain energy costs were adopted, rescheduled or suspended. **In Italy, the extraordinary 2022-2023 measures were exhausted** with the restoration of ordinary VAT rates on natural gas, and the gradual return to the ordinary conditions of social bonuses, both in terms of the number of beneficiaries and of supplementary contributions. Despite the large differences between individual countries, the weighted average price in the euro area remained basically unchanged (+0.2%) at 31.04 c€/kWh, while **Italy was among the countries that experienced the largest reduction in gross electricity prices for households, which fell from 38,64 to 35.7 c€/kWh**. Thus, the differential to the European average was reduced to 15% (it was 24.7% in 2023). In comparison with the main reference countries, the highest prices are confirmed to be those paid by German households (41.13 c€/kWh), followed by Italian 35.70 c€/kWh, French (28.03 c€/kWh) and Spanish (26.26 c€/kWh) households. The same ranking applies to **net prices, i.e. without charges and taxes, which in Italy are 14% higher than the Eurozone average (25.92 c€/kWh vs. 22.73 c€/kWh)** despite reductions in both the recorded energy component (-21%) and network costs. **In fact, the final prices paid by Italian households continue to be penalised by the components of charges, taxes and fees, whose 28% increase cancelled out the reductions recorded by the energy component and network costs**. Compared to the international scene, the **Italian tax component is the highest**, higher than that of France (+51%), Spain (+36%), and the Eurozone average (+18%). Looking at consumption classes, the Italian price differential with German prices in 2024 is negative in all classes, with a minimum (-20%) in the DE class (above 15,000 kWh/y), which represents a residual share of household consumption (around 2%). The differentials with France, although decreasing with respect to 2023, remain positive in all classes, with a maximum (+11.8%) in the DA in which small consumers (up to 1,000 kWh/y) are included. Compared to Spain, the differential is also positive and growing for all classes, from +17% for class DA to +37% for DD (5,000 to 15,000 kWh/y).

ELECTRICITY: IN ITALY, CONSUMPTION (+2.3%) AND PRODUCTION (+3.2%) PICK UP, ALMOST HALF THE ELECTRICITY GENERATED IS STILL FROM GAS (45%) STRONG RECOVERY OF HYDROELECTRICITY DUE TO INCREASED RAINFALL (+30.2%), DROP IN THERMOELECTRICITY (-6%). HIGH INCIDENCE OF CATASTROPHIC EVENTS

Electricity consumption has increased by 2.3%. The recovery has affected almost all sectors except industry (-0.5%). **83.7% of Italian demand was met by net domestic production** (excluding energy for pumping), and the remaining 16.3% by the balance from abroad. **Gross national production has grown by 3.2% to 273.3 TWh with renewables still up (+14.9%)**, mainly driven by the increase in hydroelectric production (+30.2%) which, at 52.8 TWh, **almost touched its highest level in the last ten years**, offsetting the drop in thermoelectric production (-6%). Moreover, for the third year in a row, more than **351 extreme weather events** causing damage were recorded (the same level as in 2023) compared to, for example, 60 in 2015. The catastrophic events of 2024 include the two new floods in Emilia-Romagna in September and October.

In 2024, the Enel group will remain the leading producer with a share of 13.4% (still down from 16.9% in 2023) followed by Eni at 9.1% (stable compared to 2023), still in first place for thermoelectric generation (18.5%), followed by Edison with 8.9%. Enel dropped to fourth place with 7.8% (it was 15.2% in 2023).

Overall, for the year 2024, **the costs resulting from the incentivisation of renewable energy sources amounted to about EUR 8.9 billion (they were EUR 7 bn in 2023 and EUR 6.4 bn in 2022)** against an amount of incentivised electricity of about 35.5 TWh, 36% of which was produced by photovoltaic plants, 25% by wind power plants, 22% by biomass, 14% by hydroelectric plants and, finally, 2% by geothermal sources.

ELECTRICITY: WIDESPREAD DROP IN EUROPE FOR NON-HOUSEHOLD CUSTOMER PRICES, -8.3% EVEN IN ITALY, BUT PRICES REMAIN UNCOMPETITIVE DUE TO THE CHARGES, TAXES AND FEES COMPONENT (+65% OVER EUROZONE)

In 2024, electricity prices for non-household customers showed a decline of varying intensity in almost all European countries, with the Eurozone average falling by 14%, ranging from -2.7% in Germany to -20.2% in France. **The gross price, including charges and taxes, paid by Italian companies also decreased from 28.9 to 26.52 c€/kWh (-8.3%).** However, Italy has once again lost competitiveness compared to most other European countries (+24% compared to the Eurozone average) mainly due to the increase in the **component related to charges, taxes and fees (+15%)**, which rose from 8.5 c€/kWh in 2023 to 9.8 c€/kWh in 2024. This component is now **the highest among the analysed countries with +134% compared to France and +65% compared to the Eurozone average.**

Analysing prices by consumption class, France and Spain remain the most competitive countries, with the former seeing a drop of 38% for customers with a consumption of 70 thousand to 150 thousand kWh/year (from 14.7 to 9.1 c€/kWh), while the latter maintains a 7% reduction in all classes, in contrast to Germany, which has maintained higher levels in all classes. In Italy, in the consumption classes in which more than half of the energy purchased for non-household use is concentrated, i.e., classes IB and ID, Italian customers incurred a higher total price than their Eurozone counterparts, by 11% and 9% respectively.

ELECTRICITY: MORE THAN 1.6 MILLION NON-VULNERABLE HOUSEHOLD CUSTOMERS IN THE GRADUAL STANDARD OFFER SERVICE SINCE JULY. SLIGHT RECOVERY IN HOUSEHOLD CONSUMPTION, MORE THAN HALF PREFER FIXED-PRICE OFFERS. THE NUMBER OF SUPPLIERS HAS FURTHER DIMINISHED

In 2024 the electricity sector was characterised **by the start of the Gradual Standard Offer Service for non-vulnerable households on 1 July.** In 2024, the number of household withdrawal points reached 30.5 million: of these, **5.6 million were served in the Main Standard Offer Service, 1.7 million in the Gradual Standard Offer Service, and about 23.2 million in the free market** (it was 21.4 million in 2023). In percentage terms, domestic points served **in the free market rose to 76.3 per cent, those served in the Main Standard Offer Service fell to 18.2 per cent, and those in the Gradual Standard Offer Service were 5.5 per cent.** An analysis of consumption from a geographical perspective shows that in 2024 the share of households purchasing electricity on the free market is predominant in all regions: the lowest share of energy purchased on the free market is in Calabria (85.4%), while the highest is in Val d'Aosta (96.9%).

Household switching has increased again, whether measured in terms of withdrawal points (+4.9%) or in terms of volumes (+2.3%). In 2024, **23.8% of households switched supplier at least once during the year.** In 2023 the rate had been 18.9%. It is likely that the exit from the Main Standard Offer Service” has had a discrete impact on the switching activity of households, prompting them to seek information and look for an alternative supplier.

In 2024, the number of active suppliers dropped once again to 741 (it was 765 in 2023 and 806 in 2022). Volumes sold to the end market remained stable at around 243 TWh (-4.4%) to 37.6 million households.

The Enel group remains, as always, the dominant operator in the Italian electricity market with 24.8% of total sales (-6% compared to 2023), followed by the A2A group with a much smaller share of 8.3% (7.3% in 2023) and the Edison group with 6.3% (5.9% in 2023). The degree of **concentration in the free market has decreased** somewhat. Indeed, the share of the top three groups is 39.3% (it was 44.1% in 2023); that of the top five is 51.3% (from 55.2% in 2023).

Last year, **54.8 per cent of households signed a fixed-price contract in the free market**, while 45.2 per cent chose a variable-price one (in 2023 these percentages were 66.8 per cent and 33.2 per cent, respectively), **but the choice may have been influenced by the prevalence of variable-price contracts available on the market. Concerning prices, households paid on average a lower price for the energy component of 237.18 €/MWh, compared to 259.84 €/MWh in 2023 (almost -23 €/MWh difference from the previous year).** Despite these reductions, after the interlude of 2022, **the free market once again shows higher values than the standard offer service for the two largest consumption classes.** As of 1 January 2025, the price of electricity for a resident (vulnerable) household in a standard offer service, with annual consumption of 2,000 kWh and 3 kW of power, is 28.21 c€/kWh after tax and 31.28 c€/kWh before tax, while for the gradual standard offer service these values are 22.33 c€/kWh and 24.81 c€/kWh.

NATURAL GAS

NATURAL GAS: NEW RECORD FOR WORLD CONSUMPTION AND RISING PRODUCTION (+1.4%). IN THE EU, PLUMMETING PIPE IMPORTS (-2%) AND LNG (-16%). STORAGE FILLING AT 34% AGAINST 59% IN 2023

The year 2024 saw an upturn in global gas consumption from 4,095 to 4,212 billion cubic metres (^{bcm}), **a 2.8% growth that brought the value to a new all-time high**, driven mainly by countries in the Asia Pacific region, which absorbed more than 45% of the incremental demand. In the European Union, after a 7% decrease in 2023, gas consumption increased slightly by 0.5% and a total volume of about 332^{bcm}, still far from the 412^{bcm} of 2021. The change in consumption was not of the same sign for all European countries. Indeed, the increase in Germany (+1.6%), Italy (+0.6%), and the Netherlands (+1.3%) was contrasted by a reduction in France (-6.2%) and Spain (-4.2%), where the weight of alternative sources in the electricity mix was greater, respectively nuclear (+12% over 2023) and renewables (+11%).

On the production side, the increase was about 1.4% supported, as in previous years, by growth (+2%) in unconventional gas, which accounts for 32% of the total. In Europe, growth remained at the same level thanks to increases from Turkey (full activity of the Sakarya field, +178%) and especially Norway (+8%), which offset the now structural decline in the UK and the Netherlands.

In 2024, **the volumes imported from EU countries were around 275^{bcm}**, down 6% on 2023 and 18% on 2022. 63% came via natural gas pipeline and 37% via LNG. Overall, the main supplier was Norway with 33%, followed by Russia with 19%, the USA with 17%, and North Africa with 14%. According to the European Commission's data, with regard to **natural gas pipeline imports (-2% on 2023)**, the main supplier is still **Norway** with a 50% share, while **on the LNG side**, the predominant share came from the **United States (45%)**. Among the reasons for the reduction in LNG imports, which fell by 16% compared to 2023, the main ones were the resumption of regular pipe flows, transit issues through the Red Sea, and higher prices offered by Asia to attract more cargo.

Finally, stockpiles (EU average) closed the 2024/2025 winter season with about 27^{bcm} lower reserves than the previous one, for a filling level of 34% vs. 59%. At the moment, Italian storage facilities are 62% full (source: Gas Infrastructure Europe).

NATURAL GAS: SIGNS OF PRICE REBALANCING GLOBALLY WITH PRICES FALLING IN EUROPE (-15%) AND IN ASIA (-12%). SPREAD BETWEEN VTP AND TTF AT 2.3 €/MWh

In 2024, natural gas markets showed signs of rebalancing while remaining sensitive to stimuli in the international geopolitical environment. **In Europe, the yearly average spot price at the Dutch TTF was €34.4/MWh, a decrease of 15% compared to 2023 and of 72% compared to 2022, while the Italian VTP marked €36.7/MWh, with year-on-year percentage decreases similar to the Dutch hub. The average annual spread between VTP and TTF was 2.3 €/MWh.** In the Asian market, LNG

prices averaged 12 per cent lower than in 2023, and 34 per cent lower than in 2022. A comparison with the European market shows that in the first half of the year, Asian quotations remained almost constantly higher than those of the FTT, but the ratio reversed in the second half of 2024, and particularly in the last few months, favouring the arrival of LNG cargoes to Europe.

NATURAL GAS: IN 2024 ITALY RECORDS A SLIGHT RECOVERY IN CONSUMPTION WHILE PRODUCTION FALLS (-4.1%). IMPORT DEPENDENCY FALLS. ALGERIA FIRST SUPPLIER. EXPORTS ALMOST REDUCED TO ZERO

After two years of intense decline, **the drop in natural gas consumption in 2024 came to a halt, showing a slight recovery of 0.3^{bcm}**, bringing demand back to 61.8^{bcm} from 61.5^{bcm} in 2023. **Conversely, domestic production fell by 4.1%** to just under 2,600 million m³, compared to 2,705 million m³ in the previous year. Net imports also fell, from 59.2 to 58.8 bcm (-0.7% compared to 2023) due to the drop in gross imports, which fell by 2.4 bcm (-3.9% compared to 2023), only partially cushioned by the **near-zeroing of exports** (-2 bcm).

The level of dependence on foreign countries has decreased: in 2024, 95.2% of the natural gas available in Italy came from abroad (it was 96.3% in 2023). **The ENI group controls 65% of production (62.4% in 2023).**

For the third year in a row, **imports** fell to 59.4 bcm from 61.8 bcm in 2023 (-3.3%), bringing them **close to the 15-year low** recorded in 2014 at 55.8 bcm.

The largest drop of 3.6 bcm was in North African gas volumes: -2.2^{bcm} from Algeria (which remains the largest supplier with 23.3^{bcm}), just as volumes from Libya almost halved, from 2.5 to 1.4 bcm. LNG imports also fell to 14.7^{bcm}, down 11% from the 16.5 bcm purchased in 2023. The main countries of origin remain Qatar, Algeria and the USA from which 95% of LNG arrives.

Eni, which ranks first among importing companies, with a market share of 30.9% (32.3% in 2023), followed by Edison (17.6%) and Azerbaijan Gas Supply Company (15.9%). The top three importers supplied 64.4% of the natural gas entering the Italian market (it was 63.8% in 2023).

NATURAL GAS: END OF THE STANDARD OFFER SERVICE FOR NATURAL GAS FOR THE NON-VULNERABLE. THE LEVEL OF MARKET CONCENTRATION IS REDUCED WITH EDISON IN FIRST PLACE FOLLOWED BY ENI. MORE THAN 87% OF HOUSEHOLDS ARE ON THE FREE MARKET

The year 2024 was characterised, also for the natural gas sales sector, by the end of the standard offer service for non-vulnerable households who switched to the free market on 1 January 2024.

In 2024, **the level of concentration in the final sales market**, already historically low, **was again lower than in the previous year: the top three groups controlled 38.7%, whereas in 2023 the share was 40.2%.** The Eni group moved up to second place with a share of 12% (it was third with a share of 13.3% in 2023), while the Edison group remained in first place with its share rising to 15.5% from 13.7% in the previous year, followed by the Enel group, which last year had reached second place and moved to third place with a share of 11.2% (13.1% in 2023). **Considering only the household sector**, it can be seen that the share of volumes purchased on the free market in 2024 reached 87.1% for households and 98.7% for condominiums (both shares are calculated net of fuel gas). In terms of withdrawal points, in 2024 the share of households in the Standard Offer Service for the vulnerable was 13% (in 2023 the share of households in the “former” Standard Offer Service was 27.9%). **In 2023, the overall switching percentage was 18.7% in terms of customers and 25.5% in terms of volumes:** both values show an increase compared to 2023, no doubt stimulated by the termination of the standard offer service on 1 January 2024 for those among them who are vulnerable. Geographically, the free market reached a large majority share in all regions, with peaks of over 90% in Lombardy, Friuli-Venezia Giulia, Emilia-Romagna, Umbria and Sardinia. In 2024, the percentage of households with a fixed-price contract in the free market decreased significantly from the previous year, from 44% to 28.6%. **Variable price contracts remain more advantageous for all customer categories - households, apartment blocks and non-households - than fixed-price contracts.** The differential in favour of variable price contracts is particularly high for households (29.4 c€/m³).

The free market remains more expensive than the market for vulnerable customers, with an average final price of 114.9 c€/m³ compared to around 100 c€/m³.

NATURAL GAS: IN 2024, ITALIAN CUSTOMERS WILL PAY MORE THAN THE REST OF THE EUROZONE. THE WEIGHT OF NETWORK COSTS, CHARGES AND TAXES

In international comparison with the main Eurozone countries, **the average price of natural gas (including taxes and charges) for households in Italy increased significantly in 2024 (+15.1%)** to 13.1 c€/kWh. Unlike 2023, Italian consumers paid 5.3% higher tariffs than the Eurozone average (-8.3% in 2023). The highest prices were achieved in the Netherlands (16.8 c€/kWh) and in Portugal (14.8 c€/kWh), and the lowest in Hungary (2.88 c€/kWh) and in Croatia (4.62 c€/kWh).

The increase is essentially caused by two factors: **the growth in grid costs** (from 2.6 c€/kWh in 2023 to 3.0 c€/kWh in 2024) and, above all, that of the **tax component** (from 0 to 3.2 c€/kWh). **The effects of government interventions** that had established the reduction of VAT to 5%, and the temporary zeroing of system charges that had cancelled the impact of the latter on the price of natural gas, came to an **end** in 2024.

Looking at the **differentials** with reference to consumption classes: prices for D1 customers (up to about 520m³/year) and D2 customers (520-5,200m³/year) both increased by 17% compared to 2023, to 17.12 c€/kWh and 12.30 c€/kWh respectively, while for higher consumption (D3, over 5,200m³/y) the change was -5.4%. In the euro area, prices rose only for the small consumer class (D1), but to a lesser extent (+6.5%), while for the other two classes D2 and D3, there was a decrease of 0.1% and 5% respectively. Price differentials between Italy and other European countries have thus returned to those of 2022.

When considering energy, Italians pay less only in the lowest consumption class (-6.2%), while the differential is essentially the same for the other two.

NATURAL GAS: GENERALISED FALL IN PRICES FOR NON-HOUSEHOLD CUSTOMERS. ITALIAN COMPANIES PAY LESS THAN FRENCH AND GERMAN ONES BUT MORE THAN SPANISH ONES

In 2024, the average price paid by Italian non-household customers stood at 6.75 c€/kWh, marking a drop (-18%) greater than that recorded in the euro area (-13.5%), whose average price stood at 6.93 c€/kWh. **Hence, Italian companies paid a gross price (i.e., including charges, taxes and fees) cheaper than almost all major European competitors (-9.8% compared to France, -7.7% compared to Germany) except Spain (+38%).**

The price reduction in Italy is entirely due to the **energy component of 4.4 c€/kWh (-32.7%),** which accounts for 65% of the final price, while the other two components, i.e., **network costs and charges and taxes,** both of which account for about 17% of the overall price, increased by **+0.9% and +125%** respectively in 2023.

Looking at the breakdown by consumption classes, Italian prices in 2024 were down in all classes except I1 (consumption up to 26,000 m³/year) where they increased by 2.2%. There was a significant reduction in classes I3 (25.2%) and I4 (-26.9%), absorbing, respectively, 22.4% and 27.4% of natural gas sales to non-household customers. In comparison with other countries, Italian consumers generally pay less than Germans in the highest consumption classes, have a variable relationship with France (cheap up to consumption of 26 million m³ per year), and are significantly cheaper than Spain in the lowest classes.

WATER SERVICE

WATER: INVESTMENT SPENDING RISES TO 28 BILLION EURO UNTIL 2029. MORE THAN 90 PER CENT OF THE PLANNED INTERVENTIONS HAVE BEEN IMPLEMENTED. PUBLIC FUNDS, SUCH AS THE PNRR (Italian National Recovery and Resilience Plan), ARE WELL GROUNDED

Within the preliminary activity conducted by the Authority in 2024 - and in the early months of 2025 - for the approval of tariff preparations for the fourth regulatory period 2024-2029, as of 8 May 2025, the tariff determination acts adopted by the Authority, for the period 2024-2029, concerned 30 managements, affecting 18,634,039 inhabitants.

With reference to the sample, composed of 156 managements for which the proposal for the biennial update of tariff arrangements was sent to the Authority (serving a total of 48,779.140 inhabitants), **the average variation** (compared to the previous year) of the fees applied to users in 2024 is equal to **+6.67%** (4.56% in 2023) **with a certain heterogeneity at a geographical level**: +3.72% in the South and Islands area, +8.25% in the North-East, +6.27% in the Centre, and +8.01% in the North-West.

The **investments planned** for the 2024-2029 period - gross of the forecasts regarding the availability of public financing for the construction of water infrastructures - are, in per capita terms, equal to **EUR 565/inhabitant at the national level (corresponding to an annual expenditure for investments of 94 euro/inhabitant/year, an increase compared to the annual value of 69 euro/inhabitant/year that characterised the third regulatory period 2020-2023)**. The highest value is found in the Central area, with 802 euro/inhabitant for the fourth regulatory period 2024-2029.

In absolute terms, the **investment expenditure** for the above sample of 156 operators serving 48,779,140 inhabitants amounts in total (also considering the availability of public funds) to **EUR 28 billion for the six years of the fourth regulatory period, rising from EUR 4.6 billion in 2024 to EUR 5.6 billion in 2025**, then declining (due to a progressive reduction in available public funding) for the following years (for which the planning of interventions will in any case be subject to updates every two years), reaching EUR 5 billion in 2026, EUR 4.5 billion in 2027, EUR 4.3 billion in 2028 and EUR 3.9 billion in 2029.

The audits carried out confirmed a widespread ability to implement planned investments (albeit with some variability among the panel managements). The realisation rate was 96% in 2022 and 94% in 2023, with lower values for operators operating in the South and Islands area (whose realisation rate, for 2023, stood at 73%), for which certain criticalities seem to remain as regards the execution of interventions.

WATER: 365 EURO/YEAR IS THE AVERAGE EXPENDITURE FOR THE TYPICAL HOUSEHOLD. DESPITE IMPROVEMENTS, THERE ARE STILL CRITICAL ISSUES ON OUTAGES AND SEWERAGE NETWORKS, ESPECIALLY IN THE SOUTH AND ISLANDS

In 2024, **the average expenditure of a three-person household with an annual consumption of 150 m3 will be 365 euro/year** (EUR 2.43 per cubic metre consumed) at national level. **The figure is lowest in the North-West (276 euro/year) and highest in the Centre (448 euro/year)**. The value, however, **stops at 367 euro/inhabitant in the South and Islands area**. Looking at **the items that make up the bill of household users**, again with consumption of 150 m3/year, it appears that **about 38.6% of the expenditure is attributable to the water supply network service**, for which 141 euro/year is spent nationally, 12% is attributable to the sewerage service (43.9 euro/year), and 29.7% to the water treatment service (108.2 euro/year). Finally, the fixed fee accounts for 10.6% (36.6 EUR/year) and taxes for 9.1% (31.4 EUR/year). Also in 2024, as already noted in the last version of the Annual Report, with respect to the data collected with reference to the base year (2016), there emerges an advancement in the overall improvement process for the technical quality indicators identified by the Authority, and a slight but stable growth in the number of operators for which the governing bodies periodically carry out infrastructure and quality data surveys, also with reference to operators located in the geographical area of the South and the Islands.

The analysis of the investment needs for the 2024-2029 period at national level confirms, also for the fourth regulatory period, the **greater weight of investments for the reduction of water leakages in planning** (which continue to lead the priorities in the sector's planning since the first surveys carried out by the Authority in 2019), followed by investments for the reduction of interruptions (constantly growing at 15.69%), those for the improvement of the quality of purified water at 13.86%, and those for the upgrading of the sewerage system at 12.79%.

The first survey of investments to improve the macro-indicator M0 (the technical quality index that measures resilience, the ability of the water system to cope with different conditions, including climate change and peaks in demand) returns a requirement of operators of about EUR 1.4 billion, equivalent to 5.10% of total requirements.

The share of investments in integrated water service infrastructure that cannot be directly attributed to specific technical quality objectives set by the Authority stands at 11.45%. In general terms of service, the national picture remains predominantly oriented towards planned investments in water supply network **infrastructures** (52%, without considering the two prerequisites linked exclusively to profiles in the water supply network supply chain, which have a marginal weight) compared to those planned in sewerage networks and water treatment plants (overall 34.87%), with a minimum spread in the North-West (where the requirements in the sewerage and water treatment phases are almost equal to those in the water supply network), and a wider spread in Central Italy in favour of water supply network infrastructures, with the latter being above the national average (63.77%).

WASTE: SLIGHT DECREASE IN THE NUMBER OF OPERATORS, WHICH HAS FALLEN BELOW THE 8,400 MARK. THE TARIFF METHOD COVERS 84% OF THE INHABITANTS. UPWARD TREND (+1%) FOR SEPARATE WASTE COLLECTION AND NORTH AT THE TOP

As of April 2025, 8,386 **persons** were registered in the Authority's Register of Operators, a slight decrease from the 35 members registered last year. Confirming that the process of **territorial organisation of the service is still incomplete**, the number of entities registered as territorially competent bodies remains high (at 3,221), albeit gradually decreasing. In 2023, **national municipal waste production was about 29.3 million tonnes, marking a slight increase of 0.7 per cent compared to 2022. The growth trend in separate waste collection is confirmed, increasing by more than one percentage point compared to 2022**, from 65.2 per cent to 66.6 per cent (in terms of quantity, almost 19.5 million tonnes of sorted waste).

At the territorial level, the North-East and North-West regions maintain high levels of separate waste collection, exceeding the 65% target set for 2012 by Legislative Decree No 152/06 also in 2023, with results of 76.7% and 70.6%, respectively, of the total municipal waste produced, while the Centre stands at 62.3% and the South and Islands at 58.2%.

In addition, during 2024, the transmission to the Authority of the tariff preparations for the biennial update 2024-2025 continued. There has been a **positive increase in the number of parties complying with tariff regulation**: compared to the 6,202 tariff proposals recorded in 2023, 5,332 - of which 5,306 were municipal and 26 multi-municipal - relating to 5,696 municipalities (72% of Italian municipalities), **for a total of 50 million inhabitants served, or 84% of the national population.**

The analysis of the Economic and Financial Plans available to the Authority, with particular reference to the year 2024, shows an **average growth limit of the tariffs** determined by the ETCs of **6.5%, while the actual change in tariff revenues is more limited and equal to 5.4%**, an increase compared to the previous two-year period 2022-2023, where the average values of the growth limit and the actual increase in tariff revenues were around 3.7% and 2.5%. The increases in 2024 result from the **strong inflationary pressure** that occurred in 2022 and continued in 2023, which in tariff terms took effect in the two-year period 2024-2025 according to the MTR-2.

The **average annual TARI expenditure estimated for a typical household** (consisting of three household members in a 100 square metre dwelling) in 2023 is **EUR 311 nationwide, showing significant differences between geographical areas.**

For the year 2024, a total amount of eligible costs underlying tariff revenues of approximately EUR 10.3 billion was recorded, resulting in a total validated tariff revenue of EUR 9.7 billion.

DISTRICT HEATING

DISTRICT HEATING: NATURAL GAS IS CONFIRMED AS THE PRIMARY SOURCE WITH 69.8% OF TOTAL CONSUMPTION. TRANSITIONAL TARIFF METHOD EXTENDED TO 2025

In Italy, the **spread of district heating systems is still limited, but with a historically growing trend**: the increase in the extension of the networks recorded in the year 2023 was 97 km, while the connected volume grew by 1.7% (for both values, however, there was a slowdown in growth compared to previous years). **The five northern regions of Lombardy, Piedmont, Trentino-Alto Adige, Emilia-Romagna and Veneto alone account for more than 95% of the thermal power supplied.** In 2023, thermal power stations serving district heating networks produced 10,691 thermal GWh, 6,045 electric GWh and 162 refrigeration GWh. **Natural gas remains the clearly dominant energy source with 69.8%** of total energy consumption, while other sources make a significant contribution from waste (15.4%) and bioenergy (biomass, biogas and bioliquids, at 11.2%). Seventy per cent of the users have a contractual power of 50 kW or less, while 23% have more than 50 and up to 350 kW, and only 7% have more than 350 kW. Larger users, despite being relatively few in number, account for a large share of total consumption (over 50%). The number of companies operating on district heating networks is 249 (255 a year ago). Of these, 85% are involved in activities strictly related to the operation of networks and the supply of thermal energy to customers (distribution and/or metering and/or sales), while the remainder are only involved in the production of thermal energy. **The energy distributed by district heating networks is mainly used for room air conditioning** (heating and cooling) and the production of hot water for sanitary use, while its use in industrial processes is marginal. A significant share of the market is made up of residential (64.0%) and tertiary (33%) users. Demand from the industrial sector remains marginal (3%).

Following the significant increase in service prices of recorded data as of the last quarter of 2021 (from EUR 81/MWh in 2020, to EUR 93/MWh in 2021, reaching EUR 155/MWh in 2022) the Authority has initiated a fact-finding investigation, the results of which were forwarded to the government and parliament in November 2022. **In the light of the above data, in 2023 the government ordered the extension to all district heating networks of tariffs regulated by ARERA** (already envisaged for some types of networks). **The Authority has, therefore, defined an initial framework of transitional rules for 2024**, intervening to overcome the main critical issues highlighted during the fact finding investigation on service prices, determining the avoided cost according to a methodology that better reflects the costs of alternative technologies, and inserting a cap on the price of fuels to ensure consistency between service costs and revenues (even in the presence of tensions in international energy markets). Hence, the Authority **postponed the deadline for the conclusion of the procedure** to define the tariff method applicable when fully operational, while providing for a **continuation of the application of the transitional method until the end of the year 2025, with the simultaneous approval of certain refinements to the method itself (MTL-T).**

During the year 2024, the Authority also continued its evaluation of the applications submitted by the operators. As of 31 December 2024, **126 heat distribution networks were excluded from regulation** (these are essentially internal heat distribution microgrids, which are not aimed at providing district heating or district cooling services in the territory).