

PRESS RELEASE

## **ARERA: PUBLIC SERVICE FIGURES**

2019 figures for  
**electricity, gas, water, waste** in the Authority's Annual Report, now online.

Milan, 21 July 2020 - **Electricity bills** are rising throughout the Eurozone, further burdened by taxes and grid charges in Italy. **Gas consumption** is growing and Italian prices are higher than the EU average for domestic customers. Almost 12 billion euros have been invested in **the water sector**, supported in part by 312 euros from the typical household's average annual expenditure and in part by public resources, to cope with the average 43% water leakage from aqueducts.

Finally, the fragmented **waste** sector - with over 6,500 operators and 1,334 competent territorial bodies - for which the Tariff Method introduced by ARERA is trying to quickly introduce transparency and standard costs, given the discrepancy of treatment still present in the country. From situations in which disposal in landfills has a value of 9 €/tonne to areas where it reaches 187 €/tonne, just as in the 189 plants surveyed where the value goes from a minimum of 66 €/tonne to a maximum of 193 €/tonne.

This is just a brief summary of the **2019 data** for electricity, gas, water and waste that ARERA - the Italian Regulatory Authority for Energy, Networks and Environment - has published in its **Annual Report** and made available on its website from today.

The **479 pages of tables, figures and analyses** show a snapshot of public services in the country before COVID-19.

According to the structure of the volume, sectoral data is as follows:

### **ELECTRICITY: GROWING PRICES IN THE EU FOR DOMESTIC CUSTOMERS HIGHEST PRICES IN GERMANY**

**In 2019 there was an upward trend for prices before taxes and charges for domestic consumers throughout Europe, a trend that is also influenced in Italy by a more marked increase in net prices (energy and transport costs). The final prices of the two most representative consumption classes (annual consumption between 1,000 kWh and 2,500 kWh/y and between 2,500 kWh/y and 5,000 kWh/y) are still below the Eurozone average, respectively -5% (from -10% in 2018) and the second with a slight deviation from the Eurozone (+2%, compared to -5% in 2018), in a growth trend for which it will be important to verify trends and underlying reasons.**

Subsequent consumption classes confirm levels above those of the Eurozone, both before and after taxes and charges. While the net price structure is digressive, **the tax component that burdens Italian domestic consumers still has a non-digressive structure, unlike what happens in the rest of the European Union**, where this component is higher for the higher consumption classes (up to 20% more) and vice versa lower for the lower classes (up to 25% less). The introduction of the new Eurostat survey methodology and the consequent reclassification of customers according to consumption classes, as well as the adjustments made due to the fact that invoices are due every two years, may have influenced the historically lower prices of the first class in Italy (consumption of up to 1,000 kWh/y): for the latter, in fact, there has been a shift from strong negative differentials to strong positive deviations from the Eurozone average. **With the entry into force and completion of the reform of electricity tariffs introduced by the Authority (January 1, 2016), the progressive realignment of**

**the network fees applied to the different classes of consumption began, which helped bring Italian net prices closer to average European prices**, thanks to the gradual phasing out of the previous progressive tariff structure.

Among the main European countries, **Germany is confirmed as the country with the highest prices** for domestic electricity customers for all classes, except the first with consumption below 1,000 kWh/a, where the prices in **Spain** and Italy are the most expensive. **Compared to Germany, Italian domestic customers are gradually paying lower prices as the consumption class falls from -10% of the highest consumption class to -26% of the class between 1,000 and 2,500 kWh/y.** However, the differential between Italian and German domestic prices has narrowed.

#### **ELECTRICITY: PRICES HIGHER THAN THE EU AVERAGE FOR ITALIAN COMPANIES BUT CHEAPER THAN GERMANY AND UK**

**After the positive figures for 2017 and 2018, which had seen the industrial sector gradually narrow the gap between average gross prices in Italy and the cheapest prices in the Eurozone, there is a pause in this favourable trend for 2019.** In fact, the gap with average prices in the Eurozone is growing again, with **industrial customers continuing to pay higher prices than the Eurozone average in 2019**, for all classes, due to the rise in net prices (energy and transport costs) and taxes and charges.

For the first consumption class (consumption of less than 20 MWh) it went from +8% in 2018 to +45% in 2019, while for the others (consumption between 20-500, 500-2,000, 2,000-20,000 MWh/y) it went from about +10% in 2018 to values close to 20%. For classes with consumption between 20,000 and 70,000 MWh/y and from 70,000 to 150,000 MWh/y, the figures rise from 6% to 18% and from -12% to +9% respectively. Price differentials seem to have returned to levels close to those recorded in 2016, although they are still well below those of previous years, when they were all close to 30%.

In detail, in 2017, the final prices of Italian industrial customers had benefited from stronger net price decreases than in the Eurozone, at least for the first four classes, as well as reductions in the charges and taxes component. An even greater reduction in the charges and taxes component had had a positive effect on the 2018 figures, which more than offset the greater increases that, on the other hand, had affected the net Italian prices of almost all classes. On the contrary, the situation in 2019 appears to be determined both by further increases in net prices compared to those in the Eurozone and by even greater increases in the charges and taxes component. **Italian prices, however, remain lower, as usual, than those of German industrial consumers with the exception of the first consumer class, but also those of the UK at least for the last three consumer classes**, while Spain maintains lower prices in all consumer classes and increases the gap compared to the lowest prices in France (up to +60% for the higher consumer classes).

#### **ELECTRICITY: STABLE RENEWABLES AND PRODUCTION FROM COAL ALMOST HALVED (-46.9%).**

CONSUMPTION AT 301 TWH (-1%) IN ITALY, HALF OF GAS PRODUCTION.

**In 2019, electricity consumption (301.4 TWh) decreased slightly by -1% (compared to +0.5% in 2018)**, mainly due to the drop in consumption in the agricultural and industrial sectors (-2% each), partially offset by domestic consumption (+1%). 88% of national demand was met by domestic production, up by about one percentage point, reducing imports (-7%) and increasing exports (+78% but still limited in absolute values). **Gross domestic production was virtually constant, rising from 289.7 TWh in 2018 to 291.7 TWh in 2019 (+0.7%).**

Renewables hold steady (+0.4%) despite the contraction of hydroelectric (after the 2018 boom) to -6.2% and geothermal (-1.2%). Production from coal (-46.9%) was almost halved, offset by an increase in **production from natural gas (+11.4%) and oil products (+2.4%). Gas accounted for almost half (49.1%) of gross production** (up from 44.4% in 2018).

Enel's share of production was 17% (19.4% in 2018), still declining. For the first time Enel is no longer the top operator in thermoelectric generation, as Eni's production was higher, despite a lower installed power.

**The amount of electricity incentivised remains unchanged at 63 TWh, for a system cost also stable at 11 billion euros**, out of total general charges of about 15 billion euros. On the other hand, the quantity of electricity purchased by the Italian System was 295.8 TWh (+0.1 compared to 2018).

### **ELECTRICITY: 49.4% OF DOMESTIC CUSTOMERS HAVE CHOSEN THE FREE MARKET (+ 3%)**

THE NUMBER OF SUPPLIERS IS STILL GROWING TO 723 (+88 UNITS COMPARED TO 2018). **The total number of delivery points remained substantially unchanged (-0.2%) at just under 37 million, of which 29.5 million domestic and 7.2 million non-domestic** (-1.1% compared to 2018). 80.1% of domestic customers are resident with an average consumption of 2,184 kWh. An analysis of the distribution data shows that the electricity consumption of Italian households is rather low: **53.5% of domestic customers are in the annual consumption class of less than 1,800 kWh** and withdraw a quarter of all electricity distributed to domestic customers, while the remaining 46.5% (with average consumption exceeding >1,800 kWh) withdraw 73.8% of the total. Households consume around 22% of all distributed energy. This year, for the first time, the analysis of switching activity includes data collected from distributors and data from the Integrated Information System. This shows that **household switching increased in 2019 compared to 2018 (14.3% compared to 9.1% in 2018** in terms of delivery points and 16.9% compared to 10.2% in 2018 in terms of volumes). Looking at the final sales market data, **49.4% of domestic customers are in the free market (up from 46.4% in 2018)**. The difference in average consumption between households in the free market, which averages 2,063 kWh/year, and in the standard offer market, 1,869 kWh/year, is narrowing, a sign that while previously the domestic customers with higher consumption switched, the process is now spreading to other households.

On the supply side, **the number of suppliers on the retail market grew sharply again in 2019 (+88 units in the free market, reaching 723 operators)**, confirming a growing trend that has continued unabated since liberalisation in 2007. **The dominant player in the entire Italian electricity market remains the Enel Group, with a slightly downward trend this year, falling from 37.6% in 2018 to 36% of volumes sold, followed at great distance by Edison (up to 5.4%) and Hera up to 4.9** from 4.3%. Overall, the top five operators hold 82.5% of the domestic sector (84.7% in 2018), although overall, compared to 2018, there is a slight **decrease in the level of market concentration, with the share of the top three operators** increasing from 46.8% to 46.3% of total sales.

In 2019, **the average price of electricity (weighted with quantities sold), net of taxes, charged by sales companies to domestic customers was 21.50 c€/kWh in the standard offer service and 24.21c€/kWh in the free market**. The difference between the two markets, which can be explained in part by large differences in the types of contracts available on the two markets, was therefore 2.7 euro cents, which drops to 2.6 euro cents if we only consider the cost component for energy (10.19 ¢cents/kWh in the standard offer market against 12.81 ¢cents/kWh in the free market).

## **NATURAL GAS**

### **GAS: WORLD DEMAND CONTINUES TO GROW (+3.6%)**

NEW RECORD FOR LNG, (+13%) COMPARED TO 2018

**World gas consumption** continued to grow in 2019, reaching 3,948 billion m<sup>3</sup>, with an increase of 3.6% compared to 2018, for an additional 136 billion m<sup>3</sup> at a global level: the OECD area contributed 63 billion m<sup>3</sup> and China 24 billion m<sup>3</sup>. Within the OECD area, the incremental volumes are largely attributable to the American area, amounting to 44 billion m<sup>3</sup>, while the increase in the Asian and European area was 5 and 14 billion m<sup>3</sup> respectively.

In Europe, consumption in the EU grew by more than 5%, rising from 470 to 495 billion m<sup>3</sup>, mainly due to higher demand from the thermoelectric sector, thanks to falling gas prices and the simultaneous rise in emissions permit prices.

The United States and China were once again the two main centres of growth in consumption in 2019, despite the slowdown caused by weak economies, a mild winter throughout the northern hemisphere and the relaxation of government policies on the transition from coal to gas.

**On the supply side**, OECD production of natural gas increased by 93 billion m<sup>3</sup> in 2019 compared to 2018. Most of the growth was observed in the Americas and more specifically in the United States, +89 billion m<sup>3</sup>, thanks to the further boost in production of shale gas from fracking. Also noteworthy was the increase in production in Asia Oceania, with Australia recording an increase of 14.8%, for 22 billion m<sup>3</sup>, thanks to the start-up of new LNG export trains. In contrast, OECD Europe suffered a 6.8% drop in natural gas production. As far as **LNG** is concerned, for the sixth consecutive year, trade has set a new record, reaching 354.7 million tonnes, an increase of 40.9 Mt from 2018 (+13%), despite the slowdown in the growth of Asian demand, which was affected by the weakening of the transition from coal to gas, the increase in renewables in the energy mix and the more general weakness of economies. The new record in world demand for LNG is linked to the strong increase in European imports, which almost doubled to a total of 86 million tonnes in 2019. The combination of the strong growth in world supply and the slowdown in Asian demand has in fact allowed Europe to benefit from abundant arrivals at very low prices. Other key markets in global LNG growth were South Korea, India, Pakistan and Bangladesh.

#### **GAS: 95.4% FROM IMPORTS, OF WHICH 46% FROM RUSSIA**

IN 2019 CONSUMPTION AT 71.9 BILLION CUBIC METERS (+ 2.2%) IN ITALY

**In 2019, net natural gas consumption in Italy increased by 1.6 billion m<sup>3</sup> to 71.9 billion m<sup>3</sup> from 70.3 billion m<sup>3</sup> in 2018. In percentage terms, consumption grew by 2.2%, thus recovering part of the previous year's loss (-3.2%).** The growth was driven by electricity generation consumption, which rose sharply (+11%). On the other hand, consumption for other uses was stable (+0.2%), particularly for motor vehicles, while civil consumption (residential and tertiary) decreased by -3.1% compared to 2018, mainly due to an unfavourable climate trend for heating: 2019 was once again a very hot year. Finally, industrial consumption also fell (-1.7%).

**In 2019, domestic production fell again sharply (-10.9%) compared with 2018, reaching 4.85 billion cubic meters**, mainly due to a reduction in production at sea (-13%), while production on land grew by 5%.

The degree of foreign dependence has increased again and reached an all-time high of 95.4% (93.4% in 2018).

**In 2019 imports reached 70.9 billion cubic meters, an increase of 4.5% compared to 2018. With the exception of volumes from Algeria, which decreased by 25.6% compared to 2018, imports increased from all other countries from which Italy imports gas.**

The gas that was not imported from Algeria (4.6 billion m<sup>3</sup>) was more than offset by the higher volumes from other traditional countries from which Italy imports gas. In fact, in 2019 we imported: 3 billion m<sup>3</sup> more from Norway, 1.2 billion m<sup>3</sup> more from Libya, 0.5 billion m<sup>3</sup> more from the Netherlands and 0.2 billion m<sup>3</sup> more from Russia; volumes from other areas also increased by about 2.7 billion m<sup>3</sup> (i.e. by 125%) (significant LNG shipments from Trinidad & Tobago, for 1.4 billion m<sup>3</sup>, and 1.6 billion m<sup>3</sup> from the United States, delivered to the Livorno terminal).

In 2019, therefore, **the weight of Russia among the countries exporting to Italy fell slightly to 46% (it was 47.7% in 2018)**, while Algeria's share fell from 26.5% to 18.8%. The third most important country is Qatar, which accounts for 9.2% of the total gas imported into Italy (9.6% in 2018), followed by Norway, whose share is 8.7%, and Libya, 8%. In 2019, 6.8% of Italian imports came from all the other countries together. Thanks to the significant increase in the Norwegian share, the incidence of imports from Northern Europe (i.e. from Norway and the Netherlands together) rose to 11.1% from 6.5% in 2018.

6% of the gas provisioned abroad is purchased at the European Exchanges. Eni's imports represent a decreasing share of 47.1% (52.3% in 2018). This share remains well above the low point reached in 2010, when, due to the antitrust ceilings established by Legislative Decree 164/2000, the portion of foreign gas supplied by Eni had fallen to 39.2%. The top three importers account for 71.6% (83.5% in 2018) of imported gas.

#### **GAS: 56% OF HOUSEHOLDS ARE ON THE FREE MARKET + MARKET CONCENTRATION INCREASING DESPITE 446 ACTIVE COMPANIES.**

**In the sales sector, out of a total of 446 active companies (+29 compared to 2018) only 30 (6.7%, down from 7.5% in 2018) sold more than 300 million m<sup>3</sup>.** Overall, the 30 companies that sold more than 300 M(m<sup>3</sup>) account for 82% of all gas purchased in the retail market.

**2018 saw a slight increase in concentration on the end market with the share controlled by the top 3 groups rising to 44.3% from 43.5% in 2018,** while for the top five groups it rose from 51.7% to 54.4%. There was no change in the top three positions in the end market, where Eni, Edison and Enel remain strong. Compared with 2018, the shares of all three groups were substantially stable or increased slightly, with Eni Group's share rising from 19.2% to 19.4%, Enel Group's share rising from 13.2% to 13.3% and Edison's share rising from 11% to 11.7%.

**In terms of the number of domestic customers, 44% turned to the standard offer market, while 56% bought on the free market.** Consistent with sales, compared to 2018, the number of customers who purchased gas in the standard offer service decreased by 11.2%, (taking into account the default and last resort services, the decrease is reduced slightly to -11%); conversely, customers in the free market increased by 10.4% overall.

Changes in domestic consumers' supplier in 2019 rose by two percentage points, confirming and indeed increasing the growth recorded in 2018. Last year, in fact, at least 1.6 million customers changed supplier, equivalent to a share of 8.8% of the total (and corresponding to a 10.9% share of volumes).

The fraction of domestic use central heating that switched to another supplier was higher and equal to 10.1%, for volumes corresponding to 12.4% of the related consumption sector.

The latter share is slightly lower than in 2018, while the switching rate in terms of customers is higher than in 2018, which means that central heating users with smaller annual consumption are starting to move.

This phenomenon has probably been triggered by the end of the standard offer service, originally scheduled for 1 July 2019 and now postponed to 1 January 2022.

#### **GAS: HIGHER PRICES FOR DOMESTIC CUSTOMERS COMPARED TO THE EU AVERAGE**

##### **BUT LOWER DIFFERENCES FOR SOME CONSUMER CLASSES**

In 2019 **natural gas prices for Italian domestic consumers, including charges and taxes, were higher than the average for all consumer classes in the Eurozone.** For the first time, in fact, the first consumption class (less than 525.36 m<sup>3</sup>/a) also experienced a positive differential, going from -1% in 2018 to +7%. In the past, this had always been cheaper both before and after tax, although due to low negative differentials.

For the other two classes with the highest consumption, however, **the gaps with the average gross prices in the Eurozone have decreased slightly compared to the previous year:** for the consumption class 525-5,254 m<sup>3</sup>/a, which is also the one with the highest share of total domestic consumption (72%) the differential was in fact +15%, compared to +17% recorded in 2017; for the class over 5,254 m<sup>3</sup> /a (mostly central heating) the value was instead +18%, compared to +22% the previous year.

Also in net terms, the differential with the Eurozone fell for the higher consumption classes, particularly for the latter (from +10% to +4%). However, it recorded strong growth for the first class (+16%, while it was zero in 2018). The Eurozone, on the other hand, recorded substantially stable net prices, with the exception of the intermediate class (+2.8%).

After the differences between Italian prices and those of the Eurozone had widened again in 2017 and 2018, which had previously experienced a period of progressive reduction, **in 2019 there was a relative improvement** for the last two classes, with final prices growing less (by a few percentage points) in Italy compared to the Eurozone; for the first class (from 0 to 525 m<sup>3</sup>/a), the greater increase in the final price compared to the Eurozone (+6.4% compared to -0.9%) determines a positive differential with the Eurozone for the first time.

## **GAS: HIGHER PRICES FOR INDUSTRIAL CUSTOMERS.**

### **POSITIVE TREND OF PREVIOUS YEARS INTERRUPTED**

For gas prices for industrial consumers in 2019, the trend, outlined in recent years, whereby industrial companies belonging to the three classes with the highest gas consumption benefited from lower gross prices than the average prices in the Eurozone, with falling differentials, while prices for the first classes were higher, with substantially stable differentials, was interrupted. In fact, for the highest consumption class (i.e. with annual consumption between 26 and 105 million m<sup>3</sup>) the differential has become positive, albeit with a modest + 1% (it was -5% in 2018). For the two lowest consumption classes (up to 263,000 m<sup>3</sup>/year) the differential shows an increase, rising to +18% (it was +15%) and +6% (it was +4%).

As far as net prices are concerned, differentials are all positive, ranging from +3% in the third class to +14% in the first and last class. They are also slightly up on the previous year for almost all classes.

## **WATER**

### **WATER: 12 BILLION IN INVESTMENTS ACTIVATED.**

#### **85% OF PLANNED INTERVENTIONS PERFORMED**

The approvals of the proposals for the two-yearly updating of tariffs for the years 2018 and 2019 approved by the Authority, as at 31 December 2019, concern 98 operators serving 34,097,585 inhabitants (59% of the national population).

**Compared to the previous year, the average change in tariffs approved was +1.1% in 2019 (with, in particular, an average increase in tariffs of 2.1% for about 24.51 million inhabitants and a reduction of -1.3% for 9.58 million inhabitants).** The tariffs to users are therefore confirmed to be substantially stable, even though the process of improving the quality of the integrated water service has begun.

With reference to the second regulatory period (considering the update of the investment needs planned by the competent bodies for the two-year period 2018-2019), the programmes of interventions sent to the Authority<sup>1</sup> **result in the quantification, for the four-year period 2016-2019, of an expenditure for investments to be financed through tariff of €9 billion; in per capita terms, 178 €/inhabitant at national level, with higher values in the Centre, 225 €/inhabitant. Considering also the forecasts regarding the availability of public funding** for the construction of water infrastructures, the investments planned for the **four-year period 2016-2019** are, in per capita terms, **235 €/inhabitant at national level**, with the highest value in the South and Islands (281 €/inhabitant).

**Investment expenditure, in absolute terms, including the availability of public funds, thus amounts to €11.9 billion for the four-year period (€2.2 billion in 2016; €2.8 billion in 2017; €3.5 billion and €3.4 billion in 2018 and 2019 respectively).** Moreover, **the transposition of the technical quality regulation has led sector governing bodies - in agreement with the relevant operators - to plan, for the years 2018 and 2019, further investments over and above those planned**

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<sup>1</sup> A sample of 148 operators (who provide the service to 50,626,331 inhabitants) is considered.

during the initial tariff preparation, effectively **recalculating the expenditure for investments (covered by tariff) initially planned for the two-year period 2018-2019 by about 14%**.

The checks carried out by the Authority with reference to the costs of fixed assets included in the tariff for the two-year period 2016-2017 showed a **rate of implementation of the planned interventions of 82.8% for 2016 and 85.0% for 2017**, respectively, showing an increase compared to the implementation rates for previous years (**81.9% for 2014 and 77.6% for 2015**).

## **WATER: AVERAGE EXPENDITURE FOR THE TYPICAL 3-PERSON HOUSEHOLD 312 €/YEAR**

AQUEDUCT LEAKAGES AT 43.7% (HIGHEST EXPENDITURE ITEM FOR INVESTMENTS). With reference to a sample of 103 operators (providing the service to over 40 million inhabitants), for 2019 **the average annual expenditure incurred by a typical resident domestic user ( 3-person household, with annual consumption equal to 150 m<sup>3</sup> ), amounts to 312 €/year at national level (2.08 €/m<sup>3</sup>), with a lower value in the Northwest (244 €/year); 1.62 €/m<sup>3</sup>) and higher in the Centre (389 €/m<sup>3</sup> per year; 2.59 €/m<sup>3</sup>)**, the latter area where the competent bodies have planned a higher per capita expenditure for investments to be financed by tariff for the period 2016-2019. **This expenditure is made up, on average, of fees for the aqueduct service for 40%, sewerage and water treatment services for 12% and 29%**, the fixed portion for 10% and taxes (VAT) for 9%.

With regard to one of the main indicators of technical quality, that of "**Water Leakage**"<sup>2</sup>, in 2016 (the latest technical data available) there was a **linear water leakage** value (calculated as a ratio of total leakage to the length of the network) averaging **24 m<sup>3</sup>/km/day**, as well as an average starting value of **percentage water leakage** (calculated as a ratio of total leakage to the total volume entering the aqueduct system) of **43.7%**. There are lower leakage values in the North and higher average values in the Centre and South and Islands, the latter area where about half of the water resource introduced into the aqueduct systems is dispersed.

In this country there is still a *water service divide*, with technical parameter values that generally tend to represent more **critical situations in the South and Islands**.

The distribution of investment needs (gross of contributions) at a national level highlights the concentration of operators' efforts to contain the level of water leakage, which is a priority objective in the planning choices made by the governing bodies of the area. Overall, the **resources allocated to its improvement constitute about a quarter of the total needs of the sample for the two-year period 2018-2019**<sup>3</sup>, with peaks of 32% in the South and the Islands. This was followed by **investments to improve the quality of purified water and to upgrade the sewerage system** (particularly with a view to minimising flooding and sewer spills), which **amounted to 19.6% and 14.1% respectively**. With reference to the individual actions of the integrated water service, the national needs are substantially equally distributed between targets of the aqueduct phase (42.5%) and targets of the collection and treatment phases (46.2%), the latter aimed, in particular, to solve or prevent infringements with respect to European Directives.

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<sup>2</sup> The panel considered for the analysis of the M1 macro-indicator is composed of 122 operators, with a coverage of about 76.6% of the Italian resident population (46.5 million inhabitants).

<sup>3</sup> The reference sample is made up of 131 operators (providing the service to 48,197,590 inhabitants) for which the Authority has already approved the updating of the tariff provisions for 2018 and 2019, or for which the Authority's investigations are nearing completion in order to assess the consistency between the investments contained in the intervention programmes, the expected technical quality objectives and the economic-financial plans submitted by the competent parties.

## **WATER: WATER SYSTEMS IN EUROPE**

In the European Union, about half of the countries have an independent national or regional economic regulator of water services, although they have different competences and levels of autonomy.

As the **per capita fresh water withdrawals for the provision of public services**, at European level the average value in 2017 was 83 m<sup>3</sup>/inhabitant (116 m<sup>3</sup>/inhabitant in 2015), with values ranging from 31 in Malta to 179 in Greece (in 2015 the top country was Norway with 169 m<sup>3</sup>/inhabitant, 147 in 2017). Italy ranks immediately after Norway with 156.5 m<sup>3</sup>/inhabitant (159 in 2015). Ours is also the top country for **drinking water withdrawals** (428 m<sup>3</sup> per inhabitant).

With reference to consumption by sector, in 2017 agriculture was the sector to which the largest share of resources withdrawn in Europe was destined (58.3%, up from 40% in 2015), followed by electricity production (18.2%, 28% in 2015), industrial use and domestic and service use (9.6%, down from 12%), with an average water supply to European households of about 152 litres of water per person per day (144 in 2015).

The annual **per capita costs** of the integrated service are still very varied across countries. The average rates for Italy and Spain in 2014, the last year available for the Spanish figure, of just over 1.5 €/m<sup>3</sup> and almost 2 €/m<sup>3</sup> respectively, are significantly lower than those of Germany and France, which are over 4 €/m<sup>3</sup>.

## **WASTE**

**WASTE: OVER 6,550 OPERATORS. GOVERNANCE FRAGMENTED INTO 1334 BODIES. ARERA TARIFF METHOD ON EFFICIENT COSTS AND TRANSPARENCY OBLIGATIONS.**

After the **Authority approved the tariff method for the integrated waste management service and the transparency obligations towards users in October 2019**, during the year and the first few months of 2020, **work continued on reconnaissance and monitoring of the sector**, aimed at acquiring **data and information relating to urban waste treatment plants** - incinerators, landfills and mechanical biological treatment plants - and the **quality of the integrated urban waste management service and the individual services that comprise it**.

In just under a year from the start of the **Registry of Operators** (July 2019), **6,568 parties were registered, including 6,530 operators**. More specifically, in **88.2% of cases the operators are Public Bodies** (5,767) and in 11.8% of cases they are operators with different legal status (763). The Registry has also made it possible to start an initial mapping of the Territorial Competent Bodies which, according to the Authority's regulation, are the institutional bodies responsible for validating the Economic Financial Plan for the tariff area for which they are responsible. In particular, **to confirm the complex fragmentation of the sector's governance, there is a small number of Local Governing Bodies (45), compared to a very high number (1334) of Territorially Competent Bodies** (from the data it can be seen that 98% of these Bodies coincide with the Municipalities). Of interest is the large number of Territorially Competent Bodies that are also operators, directly managing tariffs and relations with users (1,270, equal to 19% of operators). With reference to the number and type of activities carried out, it should be noted that the **majority of operators (72.6%) are accredited for a single activity** (92.3% declared that they manage tariffs and relations with users), followed by those who declare that they carry out two or more activities (25%), while a much lower percentage (2.4%) carry out all cycle activities.

**WASTE: STRONG COST DIFFERENCES BY GEOGRAPHICAL AREA**

AVERAGE TARIFF OF €100/TONNE FOR INCINERATORS; AVERAGE PRICE AT 85 €/TONNE FOR LANDFILL

With regard to treatment plants, the data collection made it possible to analyse and monitor **the tariffs applied by treatment plants with reference to the year 2017. Data were collected from 35 incineration plants, 74 disposal plants (landfills), and 80 mechanical-biological treatment plants.**

**The analysis highlighted the heterogeneity of the tariffs applied**, also in relation to the application of specific additional components (such as environmental, extra-regional or local contributions, special landfill taxes, etc.) that do not make the delivery prices applied by the various plants directly comparable. More in detail:

**For incineration plants, it should be noted that in most of the national territory tariffs are established that are administered at a regional level or by the governing body of the plant's area of competence**, although in the North of the country, and in particular in Lombardy, where most incineration plants are located, the tariffs are not administered. **The average delivery price** declared by the Panel operators is **extremely variable** from plant to plant and is indicated **from a minimum of 66 €/tonne to a maximum of 193 €/tonne. The average delivery price of all the Panel's plants is 100 €/tonne.**

**With reference to landfills**, there is a highly uneven situation: **in some areas of the country, administered tariffs are applied** which are established at regional level or by the local governing body, **at the same time as the widespread application of non-administered tariffs, depending on the type of waste.** The delivery price declared by the operators shows **an extreme variability with a minimum value of 9 €/tonne at a maximum value of 187 €/tonne with an average delivery price** for all the Panel's plants of **around 85 €/tonne** (91 €/tonne in the North, 75 €/tonne in the Centre and 82 €/tonne in the South);

**The tariffs for access to mechanical-biological treatment plants vary significantly, ranging from a minimum value of 27 €/tonne to a maximum value of 169 €/tonne. The average delivery price** of the Panel's plants is around **126 €/tonne** (117 €/tonne in the North, 139 €/tonne in the Centre and 103 €/tonne in the South).

## **WASTE: SERVICE FRAGMENTATION, SEVERAL OPERATORS IN THE SAME MUNICIPALITY.**

### **UNEVEN SERVICES ACROSS THE COUNTRY**

**Data collection on the quality of the integrated urban waste management service was also closed, with the participation of more than 700 operators** who, as at 31 December 2018, **provided waste collection and transport and/or street sweeping services to 57% of the national population** (approximately 34 million inhabitants).

**The high management fragmentation of the service emerges.** Often the activities included in the municipal waste cycle, as identified in the Authority's tariff method, are carried out by different subjects. As a result, **several operators operate in the same municipality**, one, for example, collecting and transporting and the other sweeping the roads. In some cases, the individual activities are even split up. With regard to the area covered by the contract, most of the operators cover a single municipality.

The data acquired highlighted the **lack of consistency between the different areas of the country, in terms of the services guaranteed by the operator to the user.** More in detail, in the Northwest and Northeast areas there is a greater diffusion of service quality standards compared to the rest of Italy (diffusion of the Service Quality Charter, adoption of contractual quality standards, etc.). However, South Italy is compliant with the rest of the country as regards the activation of contact points with users (telephone service and physical help desk) and the adoption of procedures for handling complaints.

## **DISTRICT HEATING: GROWTH TREND CONFIRMED**

**The growth trend of district heating and cooling is confirmed**, in terms of volume connected and extension of the networks. **The spread of the service remains concentrated mainly in northern and**

**central Italy: Lombardy, Piedmont, Trentino-Alto Adige, Emilia-Romagna and Veneto alone represent over 95% of the thermal energy supplied.**

An analysis of the websites of the largest operators (the most representative of the market when considering the volumes supplied) showed that, in the last quarter of 2019, the net price (excluding VAT and tax credit) for a central heating user was between approximately €82 and €92 per MWh. In this regard, it should be noted, however, that the characteristics of district heating systems (in particular, the type of energy sources used and the user's thermal density level) can lead to significant variations in the cost of providing the service and that, therefore, this price range cannot be a reference point for all sector operators.

**Work continued in 2019 on defining the regulatory framework for the district heating and cooling service which, despite the recent assignment of the sector to the Authority, is almost complete.**

The activities focused on the following topics: exercise of the right of withdrawal; transparency obligations of operators, including price monitoring; regulation of commercial and technical quality, the latter in particular with regard to safety and continuity of service; regulation of the metering service.