

# 3.

Structure, prices  
and quality  
in the gas sector

---

# Natural gas supply and demand in 2009

---

In 2009, demand for gas saw a marked fall (of 8% with respect to 2008) as a result of the economic recession and its impact on economic activity and consequently on energy consumption.

According to the provisional figures published by the Ministry for Economic Development, the contraction in demand saw consumption fall to 76.7 G(m<sup>3</sup>) from the 83.4 G(m<sup>3</sup>) recorded in 2008, when the first effects of the economic crisis were already beginning to be felt. This was in spite of a fairly cold autumn and winter (especially at the start of the season, and therefore in the months falling in 2008). For the third year in a row, therefore, demand for gas did not increase, after years when the sector had become used to very positive growth rates that remained stable over time.

The industrial and thermoelectric segments saw a collapse in consumption (of 14.4% and 16.8%) respectively. The cold winter drove demand in the residential and service sectors, which rose by 5.4%, just as the growth in the numbers of methane-fuelled cars (encouraged by government trade-in incentives) produced an increase in consumption for transport purposes of 9.6% with respect to 2008. As a result of these variations, the share of industrial consumption decreased to just over 20%, while that of thermoelectric is

now 36.8% and civil consumption has reached 41.5%.

As has been happening for many years, national production continued to fall, to 8 G(m<sup>3</sup>) from the 9.3 of 2008. Imports also declined, by 9.9%, from 76.9 to 69.3 G(m<sup>3</sup>). So too did exports, from 210 to 125 M(m<sup>3</sup>). About 0.9 G(m<sup>3</sup>) was withdrawn from storage. 10.3% of gross demand was therefore met from national production and 88.6% from net imports.

The Ministry for Economic Development's provisional data were partly confirmed by the gas sector operators' balance (Tab. 3.1) traditionally presented in these pages. The figures here (like all those that follow in later sections) were produced from an initial, provisional calculation based on the data declared by the 366 gas companies in the Authority for Electricity and Gas's annual survey of the activity carried out by operators the previous year.

As always, the balance was drawn up by re-aggregating the information provided by companies in the groups from the Authority's "Operators' register" to which they declared they belong. The criterion used to divide the groups into the categories shown in the table was the value of the gas used, i.e., the amount of sales (to other operators and to the consumer market) and of self-consumption.

As was the case last year, Eni, Enel and Edison were the leading groups. Another 7 groups were included in the first category, but not the same ones as in 2008: Sorgenia (CIR) and Axpo Group both moved to the 1-2 G(m<sup>3</sup>) category, to the advantage of Sinergie Italiane (a trading company whose share capital is owned by retail companies) and

Royal Dutch Shell. In this category, gas use fluctuates from just over 10 G(m<sup>3</sup>) for the A2A group, to just under 7 G(m<sup>3</sup>) for the E.On group, to just over 2 G(m<sup>3</sup>) for Royal Dutch Shell. The next categories contain 11, 50 and 190 groups respectively.

TAB. 3.1

**Natural gas balance in 2010**G(m<sup>3</sup>); Values refer to industry groups

	Eni	Enel	Edison	2-11 G(m <sup>3</sup> )	1-2 G(m <sup>3</sup> )	0.1-1 G(m <sup>3</sup> )	< 0.1 G(m <sup>3</sup> )	Total
<b>Net domestic product</b>	<b>6.5</b>	<b>-</b>	<b>0.6</b>	<b>0.4</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>7.6</b>
<b>Net imports<sup>(A)</sup></b>	<b>33.0</b>	<b>8.6</b>	<b>10.4</b>	<b>5.9</b>	<b>4.1</b>	<b>4.5</b>	<b>0.1</b>	<b>66.7</b>
– of which ENI sales outside Italy	–	–	1.3	2.4	0.0	0.0		3.8
<b>Change in stocks</b>	<b>1.4</b>	<b>-0.1</b>	<b>-0.1</b>	<b>0.1</b>	<b>-0.2</b>	<b>-0.2</b>	<b>0.0</b>	<b>0.9</b>
In storage at 31 December 2008	3.3	0.9	0.6	1.7	0.6	0.5	0.0	7.5
In storage at 31 December 2009	1.9	1.0	0.7	1.6	0.8	0.6	0.0	6.6
<b>Purchased on national territory</b>	<b>2.0</b>	<b>6.7</b>	<b>4.1</b>	<b>28.7</b>	<b>13.4</b>	<b>14.5</b>	<b>4.2</b>	<b>73.5</b>
from Eni	0.8	1.0	1.7	5.0	2.9	2.3	0.7	14.5
– of which <i>gas release</i> at the VTP	–	–	–	0.5	0.2	0.2	0.1	1.0
from Enel	–	5.3	0.0	0.0	0.1	0.0	0.0	5.5
from Edison	0.1	0.0	1.5	1.1	0.5	1.8	0.5	5.5
from other operators	1.0	0.4	0.9	22.6	9.9	10.3	2.9	48.0
<b>Sales to other national operators</b>	<b>16.3</b>	<b>5.6</b>	<b>5.1</b>	<b>19.8</b>	<b>11.1</b>	<b>7.7</b>	<b>0.1</b>	<b>65.7</b>
– of which sales to the VTP	4.9	0.2	0.5	4.5	5.6	3.2	0.0	18.8
<b>Net transfers</b>	<b>-0.4</b>	<b>0.3</b>	<b>0.1</b>	<b>-0.5</b>	<b>0.2</b>	<b>-1.9</b>	<b>-0.4</b>	<b>-2.6</b>
<b>Consumption and losses<sup>(B)</sup></b>	<b>0.4</b>	<b>0.1</b>	<b>0.1</b>	<b>0.3</b>	<b>0.2</b>	<b>0.2</b>	<b>0.0</b>	<b>1.4</b>
<b>Self-consumption</b>	<b>4.5</b>	<b>-</b>	<b>4.6</b>	<b>1.8</b>	<b>1.4</b>	<b>0.0</b>	<b>0.1</b>	<b>12.5</b>
<b>Final sales</b>	<b>21.2</b>	<b>9.9</b>	<b>5.2</b>	<b>12.6</b>	<b>5.0</b>	<b>9.0</b>	<b>3.7</b>	<b>66.6</b>
to free market	14.9	7.1	4.9	8.6	3.9	4.4	1.7	45.4
to protected market	6.3	2.9	0.2	4.0	1.0	4.6	2.0	21.1
<b>Final sales by sector</b>	<b>21.2</b>	<b>9.9</b>	<b>5.2</b>	<b>12.6</b>	<b>5.0</b>	<b>9.0</b>	<b>3.7</b>	<b>66.6</b>
Electricity generation	6.4	4.8	3.6	3.6	2.1	0.5	0.2	21.0
industry	7.9	1.5	1.2	3.8	1.3	2.7	0.7	19.1
commerce	1.4	0.5	0.1	1.3	0.4	1.5	0.8	5.8
domestic	5.6	3.2	0.3	4.0	1.2	4.3	2.0	20.7
– of which connected final	1.3	4.4	1.6	3.3	0.8	1.2	0.3	12.8

(A) Imports are shown net of exports.

(B) Consumption and losses estimated on the basis of production, imports, storage and domestic purchases.

Source: AEEG, from operators' declarations.

Production was nearly all in the hands of the ENI group, with the exception of some small shares held by Edison and other small extraction companies.

In the case of imports, the volume of gas imported by Edison increased by about 3 G(m<sup>3</sup>), partly as a result of the start of operations by the liquefied natural gas (LNG) terminal at Rovigo. Imports by groups belonging to the 2-11 G(m<sup>3</sup>) category fell, on the other hand, by about 2 G(m<sup>3</sup>).

One reason for this decline is that a portion of the gas imported by the E.on group was not classified at the Italian border as imports but as purchases (as the customs clearance operation was performed by other operators). Another is that some importers moved into a smaller category.

A large amount of imported gas can also be observed for the

third category, which contains groups with volumes of 0.1 to 1 G(m<sup>3</sup>): overall, they purchased 4.4 G(m<sup>3</sup>) of gas from abroad. This was thanks in part to the presence of companies belonging to foreign groups that are particularly active on the international gas market (for example Sonatrach, Essent, CEA, Worldenergy, BP). Imports via purchases made abroad from ENI are negligible or non-existent in the smaller groups. As far as purchases in Italy are concerned, in 2009 the share of gas supplied directly by the two main operators fell to 19.7% (from 35% in 2008) for ENI and 7.4% (from 8.5%) for ENEL. The share rose, however, from 5.8% to 7.5% in the case of the Edison group and from 50.5% to 65.4% for other operators, who sold 48 of the 73.5 G(m<sup>3</sup>) offered overall in Italy, testifying to the presence of a particularly lively wholesale market.

Some of the gas bought from ENI was purchased through the gas release scheme. This involves the sale of gas by ENI at the Virtual Trading Point (VTP) as a result of the Antitrust Authority's investigation of April 2006. Under Provision A371 (Management and use of regasification capacity) ENI undertook to release given amounts of gas, exclusively at the VTP, for 2 thermal years starting from October 2007. Although the provision envisaged gas releases of 2 G(m<sup>3</sup>)/year, in 2009 only 1G(m<sup>3</sup>) was actually released.

If we consider the volumes that each group purchases from ENI (both in Italy and abroad) we can see that large quantities of the gas available to each group can still be traced back to the incumbent. The amounts are, however, significantly smaller than the previous year. For ENEL, this portion has fallen to 6.5% (from 14.9% in 2008) and for Edison to 20% (from 38.6%). For the other groups, the share was between 12% and 21% of the available gas (compared with 13% and 35% in 2008).

The only case of an increase in the proportion purchased from ENI is the 1-2 G(m<sup>3</sup>) category, which saw a rise from 13% in 2008 to nearly 17% in 2009.

On the usage front, the share of gas allocated on average by all groups for sale to other operators, out of the total of gas sold and/or used for self-consumption within the group itself, grew by about one percentage point, from 44.3% in 2008 to 45.4%. This average value is, however, the result of diverse trends. For ENI, the share fell to 39% (compared with nearly 42% in 2008); for Edison, it remained more or less unchanged (34.4% against 35.8% last year); for the groups in the 2-11 G(m<sup>3</sup>) category it grew strongly (from 49% to 58%); and for the remaining categories of operators it declined.

Most notably, the share of gas destined by the smaller groups for other operators collapsed – they channelled barely 2% of the gas sold and/or self-consumed to the wholesale market, compared with over 14% in 2008. Self-consumption remains a particularly significant factor for the major groups which, in general, have their own electricity generating plants.

If to self-consumption we add sales to affiliated customers (which are usually electricity producers also), we can see that a significant share of the gas available to each group is

intended to meet the group's own requirements. This situation, while less prevalent than in 2008, seems particularly significant for ENEL and Edison, at 8.5% and 42% respectively.

In 2009, sales to the protected market corresponded to 31.7% of the total consumer market, slightly up on the 28.6% share seen in 2008. This is probably because of the contraction in overall consumption and in particular of non-domestic consumption, typically more accustomed to purchasing its supplies on the free market.

As we shall see later in this Chapter, the free market remains a prerogative of large customers: domestic consumption accounted for little more than 10% on this market in 2009 (compared with 9.1% in 2008). As in previous years, suppliers' tendency to specialise in the protected market as overall volumes sold to the retail market diminish was confirmed. Indeed, 54% of small operators' sales are to the protected market, with 76% of sales going to domestic customers and to the commercial and service sectors. More generally, on the basis of these data we can once again state, as we have done in previous Annual Reports, that the smaller the group, the more likely it is that its market will be limited to its "historic" pre-liberalisation catchment area.

The quantities of gas sold in the civil market (domestic users, commerce and services) in 2009 were 33% for Eni and 37% for ENEL. In terms of electricity generation, however, their shares were 30% and 48% respectively of the total, in view of the different corporate structure of the two groups. In fact, ENEL has no self-consumption, since the gas intended for its power plants is sold, as in an ordinary sales transaction, to electricity generating companies within the group.

By contrast, 63% of sales to ENI group affiliates are for the industrial sector, with nearly all self-consumption intended for electricity generation. As in 2008, it is the Edison group that sells less gas to the civil sector, with 69% going to companies – a large proportion of which from its own group – engaged in electricity production. This limits the amount of gas destined for other categories of customer, except for large industrial users.

# Market and Competition

## Gas supply structure

### National production

The progressive reduction in natural gas production in Italy continued in 2009. According to the provisional data published by the Ministry for Economic Development, production did not exceed 8,016 M(m<sup>3</sup>). This represents a fall of 13.4% on 2008, the biggest drop seen so far. Between 1993 and 1995 gas production in Italy reached its peak level, at just over 20 G(m<sup>3</sup>)/year, which at that time covered about one third of national consumption.

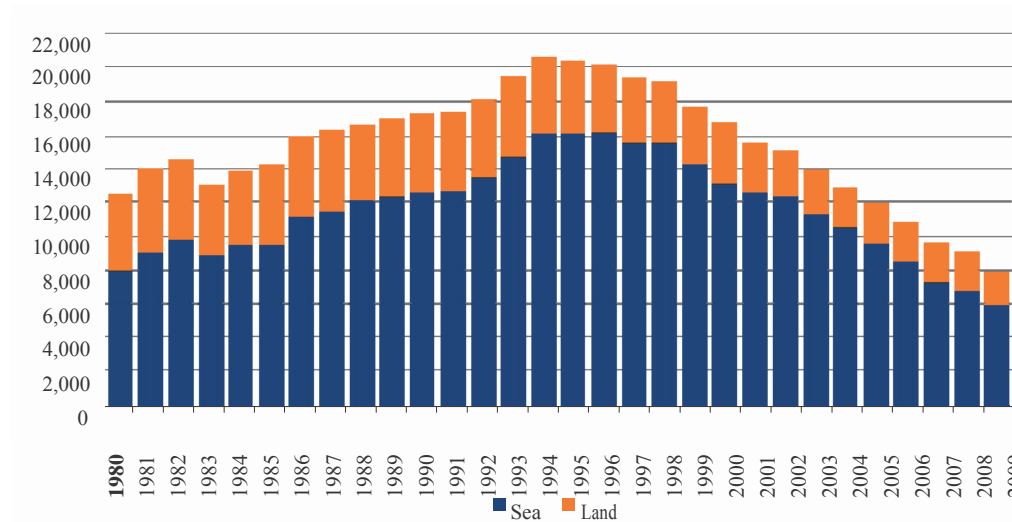
Since then the decline has been constant, at about 7% a year (slightly less in 2008). Indeed, while at the end of the 1990s national production met 30% of internal demand, by 2008 it covered just a tenth of this amount.

According to the figures published by the Ministry for Economic Development's National Mining Office for Hydrocarbons and Geothermal Resources, production in 2009 amounted to 7,909 M(m<sup>3</sup>) (this figure differs from the one just cited since it was calculated using a different calorific value of gas). A quarter of this (1,990 M(m<sup>3</sup>)) was obtained from gas fields on *terra firma* and three-quarters from offshore fields. The former, at 1,990 M(m<sup>3</sup>), diminished less than the previous year (down 11.8%), while offshore production, at 5,919 M(m<sup>3</sup>), saw a fall of 13.1%.

FIG. 3.1

### Trend in natural gas production since 1980

M(m<sup>3</sup>)



Source: Ministry for Economic Development, National Mining Office for Hydrocarbons and Geothermal Resources.

TAB. 3.2

---

**Production of natural gas in Italy, 2009**


---

GROUP	M(m <sup>3</sup> )	% SHARE
Eni	6,460	84.5%
Edison	605	7.9%
Royal Dutch Shell	364	4.8%
Gas Plus	208	2.7%
Others	5	0.1%
TOTAL	7,642	100.0%
TOTAL (Ministry for Economic Development)	8,016	–

Source: AEEG, from operators' declarations.

According to the data collected by the Authority in its annual survey on the regulated sectors, 8 operators declared they had extracted natural gas, totalling 7,642 M(m<sup>3</sup>), on Italian territory. The segment continues to be dominated by ENI, which, at 84.5%, well above its competitors, holds the highest production share. Next come Edison and Royal Dutch Shell. The latter's share of production, at 7.7%, saw a marked reduction on 2008, while the shares held by Edison and Gas Plus remained stable.

In 2009, ENI began to reorganise its gas production activities. More precisely, it set up three new companies to which it transferred the group's exploration and production activities, divided by geographical area. Padana Energia acquired the assets for northern Italy (Pianura Padana and Emilia Romagna), Adriatica Idrocarburi those for central Italy (Marche, Abruzzo and Molise) and Ionica Gas those for the south of the country (in the Crotona and Val d'Agri areas).

Negotiations are at an advanced stage for the sale of two of these new companies, Padana Energia and Adriatica Idrocarburi. In spite of these divestments, ENI expects its production to remain stable in the medium term, thanks to the growth envisaged for the Val d'Agri fields and the development projects under way in the group.

---

**Imports**


---

In net terms, gas imports to Italy decreased by 7.5 G(m<sup>3</sup>) in 2009. According to the provisional figures published by the Ministry for Economic Development (Fig. 3.2), gross imports fell from the 76,657 M(m<sup>3</sup>) recorded in 2008 to 69,275 M(m<sup>3</sup>). Exports too fell, from 210 to 125 M(m<sup>3</sup>).

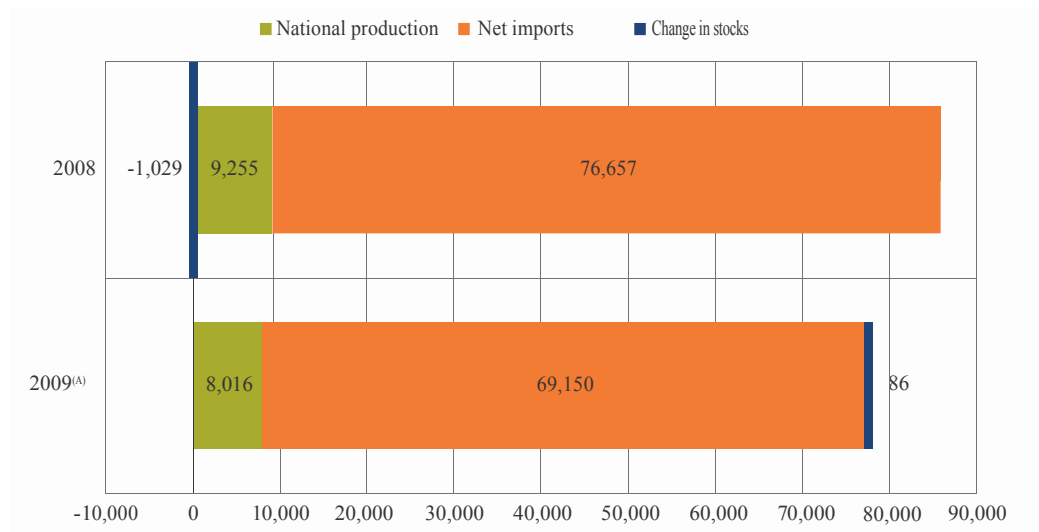
Given that 886 M(m<sup>3</sup>) were withdrawn from stock – unlike the situation in 2008, when 1,029 M(m<sup>3</sup>) were injected to storage – and network losses and consumption can be estimated at 1,357 M(m<sup>3</sup>), national consumption can be calculated as 76,695 M(m<sup>3</sup>).

The degree to which Italy depends on supplies from abroad therefore fell from 91.8% in 2008 to 90.2% in 2009.

Figure 3.3 shows a breakdown of imported gas volumes by country of physical (i.e. non-contractual) origin. About 80% of Italy's gas imports originate in non-EU Countries. Most imported gas reaches the country by pipeline, with only 4% being transported by ship. In 2009 this last segment doubled with respect to previous years as the new Rovigo terminal, where LNG from Qatar arrives, began operating. The share reaching Italy by sea is expected to grow further in coming years.

FIG. 3.2

**Injections to network in 2008 and 2009**  
M(m<sup>3</sup>)

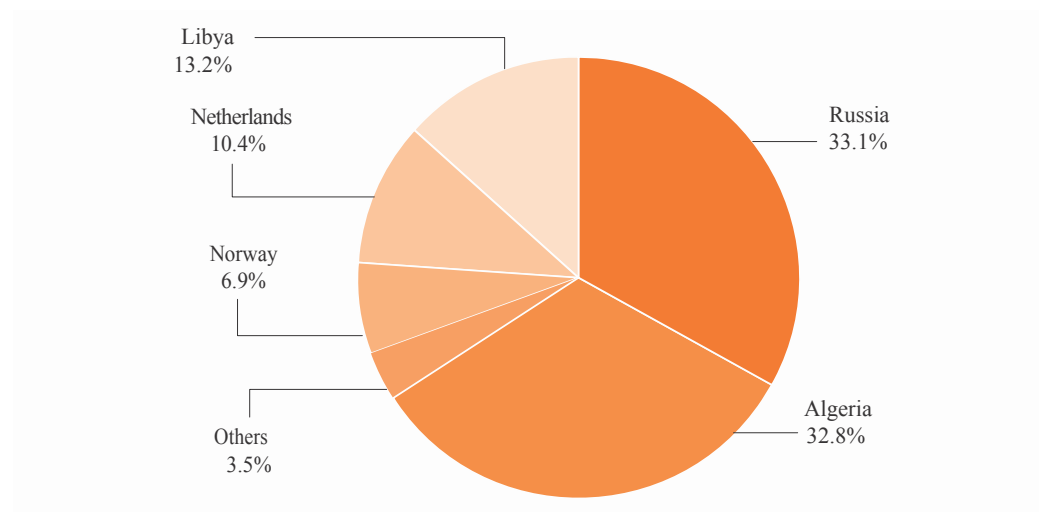


(A) Preliminary data for 2009.

Source: Ministry for Economic Development.

FIG. 3.3

**Gross gas imports in 2009, by country of origin**  
Percentage values; provisional figures



Source: Ministry for Economic Development.

The main sources of pipeline imports are non-EU countries, with Algeria, Russia and Libya together covering nearly 80% of imports in 2009. The first two each supply one third of Italy's total requirement, with Libya supplying 13%. The 22.9 G(m<sup>3</sup>) of gas supplied by Russia arrived in Italy through the entry points of Tarvisio and Gorizia. Imports from Algeria amounted to 22.7 G(m<sup>3</sup>) by pipeline, at the entry point of Mazara del Vallo, and 1.3 by ship, at the Panigaglia regasification plant. Gas from Libya, which last year

amounted to 9.2 G(m<sup>3</sup>), enters the Italian network at Gela. Imports from the Netherlands, at 7.2 G(m<sup>3</sup>), and Norway, 4.8 G(m<sup>3</sup>), enter the national network through the Passo Gries entry point at the Swiss border.

The remaining 3.5% of imports in 2009 came from other countries: Croatia, with 1.2%, and Qatar, with 2.2%. The last-named, as mentioned above, is destined to grow in coming years once the Rovigo terminal is fully up and running.

TAB. 3.3

**First 20 gas importers in Italy in 2009**

Gross imports

COMPANY	M(m <sup>3</sup> )	QUOTA %
Eni	33,156	49.9%
Edison	10,410	15.7%
Enel Trade	8,648	13.0%
Plurigas	2,111	3.2%
Gaz de France secondary HQ	1,789	2.7%
Sorgenia	1,376	2.1%
Enoi	1,370	2.1%
Sinergie Italiane	881	1.3%
Sonatrach Gas Italia	757	1.1%
Speia	580	0.9%
Essent Trading International	572	0.9%
E.On Energy Trading	550	0.8%
Hera Trading	488	0.7%
CEA Centrex Italia	485	0.7%
Begas Energy International (ex Bidas Energy)	404	0.6%
Egl Italia	349	0.5%
Gas Plus Italiana	308	0.5%
Energetic Source	303	0.5%
Spigas	231	0.3%
Italtrading	228	0.3%
Others	1,417	2.1%
<b>TOTAL</b>	<b>66,410</b>	<b>100.0%</b>
IMPORTS (Ministry for Economic Development)	69,275	–

Source: AEEG, from operators' declarations.

With 33 G(m<sup>3</sup>) of imported gas, ENI is the dominant operator in the import segment (Tab. 3.3), as it is for national production. Although its share has fallen over time through compliance with the antitrust ceilings established by Legislative Decree 164 of 23 May 2000, ceilings no longer in force with effect from 2010, ENI continues to hold by far the largest slice compared with its competitors.

The Edison group, with imports of 10.4 G(m<sup>3</sup>), has moved into second place; it has overtaken ENEL, which in 2009 imported 8.6 G(m<sup>3</sup>). Edison's rise can be explained by the notable increase in its imports (of 43%), while those of ENEL fell by 12% on their 2008 level (a smaller decline than ENI's 28%).

The first three importers purchase 78.6% (75.4% of total gas imports, according to Ministry sources) of the gas procured abroad by Italian operators. This is down from 84% in 2008.

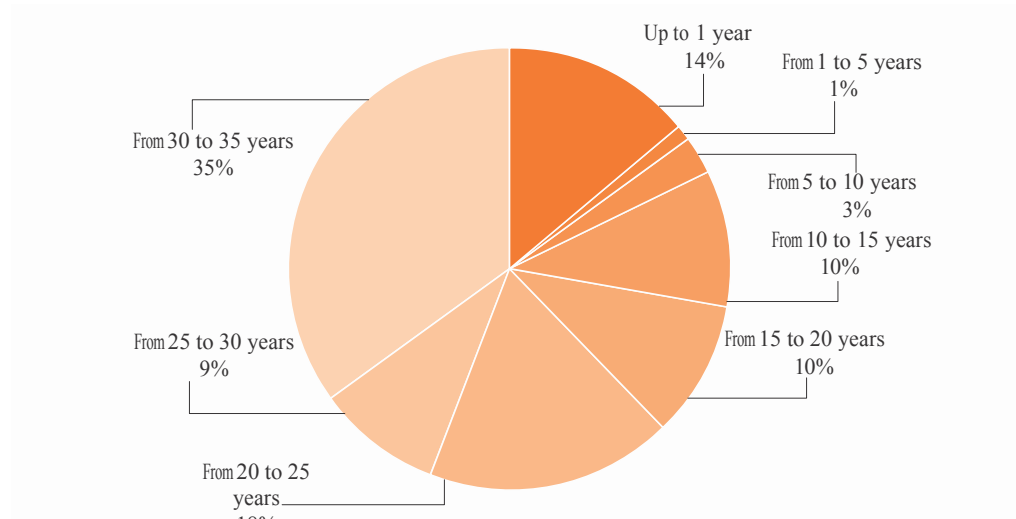
An analysis of active import contracts in 2009 by total duration (Fig. 3.4) shows that import activity is based, as in previous years, on long-term contracts. Over 60% are for a duration of more than 20 years and a further 20% are for at least 10 years. With respect to 2008, the weight of spot imports – based on agreements of at most one year's duration – has greatly increased, and in 2009 reached 14% of the total.

This is because some operators, in replying to the questions in the Authority's survey, included data referring to the entire contract, even when some of the gas was not imported to Italy but sold abroad directly. Others recorded the entire quantity that the seller made available to the buyer, in other words the *Term Contract Quantity* instead of the *Annual Contract Quantity*, as requested. The figures for spot contracts are therefore entirely provisional, like the others cited in this Annual Report.



FIG. 3.4

**Structure of contracts (annual and long-term) active in 2009, by full duration**



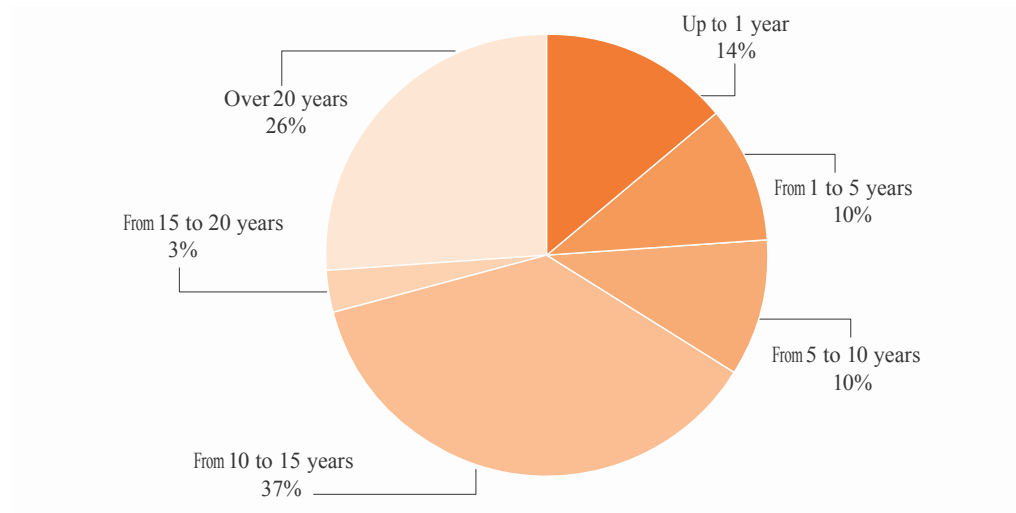
Source: AEEG, from operators' declarations.

As for residual duration, contracts in force in 2009 (Fig. 3.5) still have many years to go. About one third will expire in 15 or more years, and more than two-thirds in 10 or more years. One third of existing contracts will expire in the next

10 years. However, in interpreting these figures, the above warning regarding possible over-estimates of very short-term contracts should be borne in mind.

FIG. 3.5

**Structure of (annual and long-term) contracts active in 2009, by residual duration**



Source: AEEG, from operators' declarations.

**Development of import infrastructure**

Changes in the infrastructure for gas imports by pipeline included up-grades to existing pipelines and progress on new ones.

With respect to up-grades, the second expansion of the TAG pipeline linking Italy with Austria was completed on 1 October 2009, as was the entry point to the national network at Tarvisio. This saw transit capacity increase to

37.4 G(m<sup>3</sup>)/year. ENI thus completed two expansions (the first of which began operating in February 2009) that were a consequence of commitments entered into in 2003 with the European Commission. These commitments in turn were the result of an enquiry into the territorial restrictions on sales envisaged in gas supply contracts between Gazprom and ENI.

It should be pointed out, however, that in February 2010 ENI reached a further agreement with the Commission, formalised in early March. ENI has undertaken to surrender its 89% share in Trans Austria Gasleitung GmbH (which holds 100% of the transport capacity rights on the TAG) to the *Cassa depositi e prestiti* or another public body controlled by the Italian Government. ENI entered into this commitment as part of the infringement procedure opened by the Commission into a number of important natural gas companies (Gaz de France and E.On, as well as Eni), following an investigation into the sector published in January 2007 (and described in detail in Chapter 1, Volume 2).

The agreement with the EU also envisages the divestment by ENI of its shares in the two pipelines carrying gas from Holland to Italy through Germany and Switzerland (Tenp and Transitgas).

By the end of 2011 an expansion of the Greenstream pipeline linking Libya with the entry point at Gela is planned, bringing capacity up to 11.53 billion m<sup>3</sup>/year. In September 2009, Greenstream (controlled by ENI and Libya's National Oil Corporation (NOC), which owns and operates the pipeline) published a tender for reconnaissance work to survey and maintain the offshore stretch running from Mellitah to Gela. The seabed survey will provide the necessary information for planning the position of the new pipeline and monitoring the state of the one already in operation.

Also important is the approval in late April 2010 of the transfer from ENI to NOC of a further 25% of its shares in Greenstream. Following this transaction, ENI and NOC now own equal holdings (50% each) in the pipeline.

Progress with respect to 2008 on the new import pipelines currently being planned and of possible interest to Italy is summarised in Table 3.4.

New progress has been made on the *Trans Adriatic Pipeline*

(TAP) connecting Greece with Italy, through Albania, for gas imports from production areas in Eastern Europe and the Middle East. Worthy of note is the entry of E.On Ruhrgas, with a holding of 15%, while the stakes held by Egl and Statoil Hydro both fell to 42.5%. After the sea-bed survey that began in January 2009, in July survey work was started on Albanian soil to decide which of the 5 possible routes was the optimal one. Again with a view to selecting the future route of the pipeline, in October 2009 representatives of TAP opened a series of meetings with the regional and local authorities in Puglia. It also held meetings with representatives of the Albanian Government.

In addition to its meetings with the Pugliese and Albanian authorities, in February 2010 TAP met the Minister for Infrastructure to illustrate to the Italian Government the state of progress of the project and the work carried out thus far in Puglia. In mid-March, TAP submitted an application to the Authority for Electricity and Gas for inclusion of the 15-km stretch on *terra firma* in the national transport network, to enable the company to complete all the application procedures for the necessary permits. Finally, an intergovernmental agreement is being drawn up between Greece, Albania and Italy to open a procedure to obtain exemption from third-party access requirements.

June 2008 saw the creation of IGI Poseidon, a company established to develop, build and operate the IGI pipeline linking Greece and Italy. IGI Poseidon is a joint venture between Edison International Holding (100% Edison) and the Greek state-owned company, Depa. The IGI pipeline is part of the ITGI, the energy corridor for gas imports from the Caspian Sea through Turkey and Greece, countries which have been linked since November 2007. The European Union has included the IGI project, which has obtained exemption from third-party access requirements for 25 years, as one of the 5 priority axes. In April 2009 the tender for project and planning verification and certification was opened.

The Ministry for Economic Development and the Turkish Energy Minister signed a joint declaration in November 2009 confirming the strategic importance of the Poseidon project, which is seen as an instrument to develop a southern corridor for gas supplies to Europe. Both Ministers confirmed their commitment to support the initiative and,

in the case of the Turkish Minister in particular, to ensure guaranteed transit conditions to safeguard competitiveness. In March 2010 IGI Poseidon signed an agreement with Bulgarian Energy Holding to construct the Bulgarian arm of the ITGI (of which IGI is a part) pipeline, which will have a capacity of 3-5 G(m<sup>3</sup>)/year. In the same period, the European pipeline was allocated 100 million euros plus 45 million for

Commission approved funding for energy measures as part of the anti-crisis package, under which the ITGI-Poseidon the Bulgaria-Greece interconnection. In early April 2010, the operational stage started with the opening of the tender for the supply of the pipes themselves.

TAB. 3.4

### Planned new pipelines

COMPANY	ENTRY TO ITALY	NOMINAL CAPACITY G(m <sup>3</sup> )/year	LENGTH Km	FEASIBILITY STUDY COMPLETED	SCHEDULED START OF OPERATIONS	SITUATION
<b>TAP Trans Adriatic Pipeline (Greece-Albania-Italy)</b>						
TAP AG (Egl 42.5%, Statoil Hydro 42.5%, E.On 15%)	Brindisi	10/20	520	2006	2015	Contract of supply drawn up with Iran for 5.5 G(m <sup>3</sup> )/year for 25 years. Surveys of seabed and Albanian territory started; application for inclusion of onshore stretch in Puglia in national gas network submitted to Ministry for Economic Development.
<b>IGI Interconnector Italy-Greece</b>						
IGI Poseidon SA (Depa 50%, Edison 50%)	Otranto	8.8	212	2005	2015	Project included by EU in the 5 priority supply axes; full exemption from third-party access granted and ratified for 25 years; Italian-Turkish declaration on strategic value of project signed in March 2010; public competition for supply of pipes opened in April 2010; European funding of 100+45 M€ allocated in March 2010.
<b>GALSI (Algeria-Italy)</b>						
GALSI (Sonatrach 41.6%, Edison 20.8%, Enel 15.6%, Sfers 11.6%, Hera Trading 10.4%)	Porto Botte (Carbonia-Iglesias)	8/10	840	2005	2014	Inter-governmental agreement signed by Italy and Algeria; final investment decision expected by mid-2010; start of works expected by second half 2010 and laying of pipeline by 2011; European funding of 120 M€ allocated in March 2010.
<b>TGL Tauern Gas Leitung (Germany-Austria-Italy)</b>						
Consorzio Tauerngas-Leitung Studien und Planungsgesellschaft Mbh (E.On Ruhrgas 45%, various companies 55%)	Malborghetto (Udine)	11.4	260	At planning stage	2015	Application for exemption from third-party access temporarily withdrawn pending implementation of 3 <sup>rd</sup> European Package.

Source: Ministry for Economic Development.

A final decision on the GALSI pipeline, connecting Algeria and Italy via Sardinia, was originally expected by mid-2009 but has been postponed to 2010. During a conference on this infrastructure which took place in Cagliari in November 2009, the President of the GALSI consortium (made up of Sonatrach (41.6%), Edison (20.8%), Enel (15.6%), Sifis (11.6%) and Hera Trading, with 10.4%), set out a new timescale for the initiative. This provides for work to begin in the second half of 2010, the first stretches of pipeline to be laid in 2011 and the first gas from Algeria to arrive in 2014.

The delays with respect to the initial starting date of 2012 were caused mainly by changes in the route made necessary by risky geological situations found in the stretch linking Sardinia and Tuscany. A further delaying factor was the discovery of archaeological remains during the excavations.

In November 2009 the application for priority access on this pipeline was submitted. In January 2010, GALSI also delivered to the Ministry for the Environment new environmental studies on the route the pipeline should follow on Italian territory. These studies supplement the documentation already submitted on 31 July 2008 when the authorisation process was opened. Lastly, in March 2010 this project too received European funding of 120 million euros as part of the anti-crisis package.

The Tauerngasleitung Studien und Planungsgesellschaft

Mbh consortium is 45% controlled by E.On and 55% by 5 Austrian companies. At the end of June 2009 the consortium submitted to the Austrian regulator, E-Control Kommission, its applications for exemption from third-party access obligations relative to the *Tauern Gas Leitung* (TGL) pipeline, and for the tariff method to be established.

In March 2010, however, the exemption request was temporarily suspended pending the implementation in Austrian law of the European Union's energy package. At the same time, the consortium announced that its feasibility study demonstrating that it is technically possible to build the pipeline through the Alpine passes is nearly complete. The consortium also announced that it has obtained about 90% of the easements required from the land-owners concerned.

As regards the envisaged timescale, the final decision on the investment is still expected by the end of 2010, with the pipeline coming on-stream in 2015. The TGL will link the Haiming node (in Bavaria) with Malborghetto (Udine), passing through the Austrian regions of Inn and Carinthia, where it will be interconnected with the Salzburg storage system and with the TAG. The project is part of the EU's *Trans-European Networks* (TEN) and was conceived to transport gas in both directions and connect the markets of central-northern Europe with those of Italy and the Balkan countries. The plan is for the pipeline also to be used to carry LNG from the Adriatic terminals to Germany.

## Gas Infrastructure

---

### Transport

---

The national gas transport system is operated by 10 companies: 3 for the national network and, with some overlap, 9 for the regional (Table 3.5). One change since

2008 is the entry of Italcogim Trasporto at the regional level, replacing Arcalgas Progetti as operator for the Marches Region section of the network. 2008 saw the entry of Edison Stoccaggio as operator of the Cavarzere-Minerbio pipeline linking the new regasification facility at Rovigo with the national network.

In terms of ownership structure and management, the gas transmission system has not changed significantly. The main transmission operator, Snam Rete Gas, owns 31,531 km of the total 33,584 km network constituting the Italian gas transmission system. The second operator is the Edison group, which runs a total of 1,380 km of pipeline, of which 203 km in the national network.

The Edison Group operates both the network owned by Società Gasdotti Italia (1,297 km) and the pipeline linking the

LNG terminal at Rovigo to the network, through its Edison Stoccaggio subsidiary. Completing the transport network are 7 smaller operators which own small sections of the regional system. Carbotrade, which sold its gas transmission business to Metan Alpi Energia on 1 January 2009, is no longer shown in Table 3.5.

TAB. 3.5

**Transport companies' networks in 2009**  
km

COMPANY	NATIONAL NETWORK	REGIONAL NETWORK	TOTAL
Snam Rete Gas	8,871	22,660	31,531
Società Gasdotti Italia	120	1,177	1,297
Edison Stoccaggio	83		83
Consorzio della Media Valtellina per il trasporto del gas	0	35	35
Gas Plus Trasporto	0	42	42
Italcogim Trasporto	0	15	15
Metan Alpi Energia	0	67	67
Metanodotto Alpino	0	76	76
Netenergy Service	0	36	36
Retragas	0	402	402
<b>TOTAL</b>	<b>9,074</b>	<b>24,510</b>	<b>33,584</b>

Source: AEEG, from operators' declarations.

The provisional figures in Table 3.6 show a break-down of transport activity by region. The first and second columns show the length of the networks, while the last five illustrate both the volumes of gas that have transited the networks for redelivery to various types of customer, and the number of redelivery points (customers) served overall. As can be seen from the table, in 2009 just under 90 G(m<sup>3</sup>) were carried on the network to 7,600 redelivery points. Transport activity therefore declined by 3.9% with respect to 2008, when volumes reached 93.7 G(m<sup>3</sup>). This fall,

however, did not affect the different types of customer equally: deliveries to thermoelectric customers decreased by 15.1% and those to industrial customers by 14.1%, while volumes of gas injected to distribution plants increased by 1.7% on 2008.

The differences in consumption include redeliveries to storage facilities and other transport companies, and to non-industrial, non-thermoelectric final customers directly connected to the transport network.

TAB. 3.6

REGION	NATIONAL NETWORK	REGIONAL NETWORK	VOLUMES REDELIVERED				TOTAL	NUMBER OF REDELIVERY POINTS
			TO DISTRIBUTION NETWORKS	TO INDUSTRIAL CUSTOMERS	TO POWER PLANTS	OTHERS		
Val d'Aosta	0	56	46	42	0	0	87	12
Piedmont	503	2,149	4,055	1,328	2,793	82	8,258	504
Liguria	22	458	961	139	601	0	1,700	62
Lombardy	552	4,415	9,183	2,294	6,052	480	18,009	2,381
Trentino Alto Adige	108	370	634	244	59	0	937	84
Veneto	800	2,048	4,052	1,150	906	661	6,769	553
Friuli Venezia	491	563	871	495	1,065	342	2,772	169
Emilia Romagna	1,121	2,665	4,624	2,350	3,730	1,534	12,238	717
Tuscany	443	1,560	2,316	931	1,777	0	5,024	330
Lazio	393	1,482	2,230	627	1,561	167	4,586	446
Marche	301	641	952	349	207	1	1,509	209
Umbria	179	451	553	270	359	0	1,181	95
Abruzzo	476	980	759	270	1,135	62	2,227	305
Molise	209	565	138	67	717	1,409	2,332	136
Campania	555	1,375	1,063	476	1,566	0	3,105	612
Puglia	521	1,348	1,134	659	2,334	1	4,127	279
Basilicata	367	905	207	139	195	0	541	209
Calabria	986	964	289	57	1,590	0	1,936	231
Sicily	1,047	1,515	699	851	2,546	4	4,099	247
Sardinia	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>9,074</b>	<b>24,510</b>	<b>34,764</b>	<b>12,739</b>	<b>29,191</b>	<b>13,287</b>	<b>89,980</b>	<b>7,581</b>

**Transport activity by region in 2009**Network length in km;  
volumes redelivered in M(m<sup>3</sup>)

(A) Includes redeliveries at export points, exit points to storage and other transport operators, and redelivery to non-industrial or thermoelectricity customers directly connected to the transport network (for example, hospitals)

Source: AEEG, from operators' data.

Table 3.7 shows the results of the firm transport capacity allocation carried out at the start of thermal year 2009-10.

Compared with the capacity<sup>1</sup> made available the previous thermal year, the Tarvisio entry point saw an increase of 6 M(m<sup>3</sup>)/day in allocable capacity. This was the result of the entry into operation of ENI's upgrades to the TAG pipeline (see above) and of the 800,000 m<sup>3</sup>/day available at Gela with effect from April 2010. The latter is the result of upgrade programmes currently under way on the pipeline from Libya.

Total allocable capacity rose from 289.8 M(m<sup>3</sup>)/day in the previous thermal year to 296.2 M(m<sup>3</sup>)/day, an increase of 2.2%.

The results of the allocation for thermal year 2009-2010 show that, at the start of the thermal year, 90.9% of firm transport capacity at pipeline connections to neighbouring countries had been allocated to 67 operators. Considering, however, the additional capacity allocated later in the thermal year, at 1 January 2010 pipeline saturation had risen to 99%.

<sup>1</sup> It should be noted that transport capacity is calculated using hydraulic simulations of the transport network. These take into account the projected withdrawal scenarios for the year under consideration. Capacity at each entry point is determined using the "heaviest" transport scenario (the summer one for the Mazara del Vallo, Tarvisio and Gorizia entry points and the winter one for Passo Gries). Snam Rete Gas evaluates the maximum amounts that can be injected to the network from each entry point without exceeding the minimum pressure constraints at the various points of the system or the maximum performance levels of the plants concerned. The aim here is to ensure that the transport service is available at the required level throughout the thermal year.

TAB. 3.7

**Firm transport capacity in Italy**M(m<sup>3</sup>) standard per day, unless otherwise indicated; thermal year 2009-2010

ENTRY POINT TO NATIONAL NETWORK	ALLOCATABLE	ALLOCATED	AVAILABLE	SATURATION (%)
Passo Gries	59.0	56.6	2.4	96.0
Tarvisio	107.0	96.9	10.1	90.6
Mazara del Vallo	99.0	91.3	7.7	92.2
Gorizia <sup>(A)</sup>	2.0	0.0	2.0	0.0
Gela <sup>(B)</sup>	29.2	24.4	4.8	83.4
<b>TOTAL</b>	<b>296.2</b>	<b>269.2</b>	<b>27.0</b>	<b>90.9</b>
<b>LNG terminals</b>				
Panigaglia	13.0	7.2	5.8	55.4
Cavarzere	26.4	21.0	5.4	79.5

(A) It should be noted that imports at the Gorizia entry point are a “virtual” operation, given the lower physical volumes being exported

(B) Capacity available from April 2010.

Source: AEEG, from Snam Rete Gas data.

For comparison, Table 3.7 also shows the entry points corresponding to the two LNG regasification terminals currently operating in Italy. Daily allocable capacity at Panigaglia, of 13.0 M(m<sup>3</sup>)/day, is allocated to the terminal operator, GNL Italia (ENI group). GNL Italia injects gas into the system on behalf of its regasification customers to enable transport capacity to be used as efficiently as possible at the terminal interconnection.

However, for both the current thermal year (2009-10) and the next, maximum daily regasification capacity at Panigaglia will be reduced once maintenance work starts on one of the four vaporisers.

Daily allocable capacity at the Rovigo terminal (connected with the network at Cavarzere) is 26.4 M(m<sup>3</sup>)/day. As the operator, Terminale GNL Adriatico, has been exempted from third-party access obligations for 25 years under Law 239 of 23 August 2004 and European Directive 55/03/EC, capacity actually allocable at this point will be limited to 5.4 M(m<sup>3</sup>)/day until thermal year 2032-33. Moreover, in accordance with resolution 168/06 of 31 July 2006 this

capacity too will be reserved for the regasification company for the first 5 thermal years.

---

### Long-term allocations

---

Table 3.8 summarises long-term allocated capacity (at October 2009) at entry points with pipeline connections to neighbouring countries. As envisaged by the Authority’s provisions, capacity for the next five thermal years (i.e., starting from 2011-12) was allocated this year to a total of 23 operators with long-term import contracts.

The table also includes thermal year 2010-11, with the long-term capacity allocated last year. Worthy of note is the considerable increase in available medium-term capacity at Passo Gries, probably as a result of the expiry of supply contracts from Holland and the North Sea which are currently still in force.

TAB. 3.8

THERMAL YEAR	ENTRY POINTS					
	TARVISIO	MAZARA DEL VALLO	PASSO GRIES	GELA	GORIZIA	CAVARZERE
<b>2010-2011</b>						
Allocable capacity	107.0	99.0	59.0	29.2	2.0	26.4
Allocated capacity	90.4	87.8	52.2	21.9	0.0	26.4
Available capacity	16.6	11.2	6.8	7.3	2.0	0.0
<b>2011-2012</b>						
Allocable capacity	107.0	99.0	59.0	31.6	2.0	26.4
Allocated capacity	91.0	87.8	50.8	21.9	0.0	26.4
Available capacity	16.0	11.2	8.2	9.7	2.0	0.0
<b>2012-2013</b>						
Allocable capacity	107.0	99.0	59.0	31.6	2.0	26.4
Allocated capacity	90.8	86.7	48.8	21.9	0.0	26.4
Available capacity	16.2	12.3	10.2	9.7	2.0	0.0
<b>2013-2014</b>						
Allocable capacity	107.0	99.0	59.0	31.6	2.0	26.4
Allocated capacity	82.0	86.6	45.1	21.9	0.0	26.4
Available capacity	25.0	12.4	13.9	9.7	2.0	0.0
<b>2014-2015</b>						
Allocable capacity	107.0	99.0	59.0	31.6	2.0	26.4
Allocated capacity	81.7	86.5	21.2	21.9	0.0	21.0
Available capacity	25.3	12.5	37.8	9.7	2.0	5.4
<b>2015-2016</b>						
Allocable capacity	107.0	99.0	59.4	31.6	2.0	26.4
Allocated capacity	80.8	86.5	7.3	21.9	0.0	21.0
Available capacity	26.2	12.5	51.7	9.7	2.0	5.4

**Allocation at entry points to the national network interconnected by pipeline with neighbouring countries for thermal years 2010-2011 to 2015-2016**

M(m<sup>3</sup>) standard per day

Source: Snam Rete Gas.

### Storage

In thermal year 2009-10 the Italian storage system had a working gas capacity of about 14.3 G(m<sup>3</sup>) (Tab. 3.9).

Of this, the capacity allocated to strategic storage amounts to around 5.1 G(m<sup>3</sup>). This figure is established by the Ministry for Economic Development (in application of art. 3.4 of the decree published by the Ministry for Industry, Trade and Crafts (as the Ministry was formerly known) on 8 May 2001 and art. 2 of the decree published by the Ministry for Productive Activities (as the Ministry was later known) on 26 September 2001). It is based on: import programmes

from non-EU Countries as notified by storage users; the status of import infrastructure; and injections into and withdrawals from storage facilities in previous winters.

The capacity available for upstream production and for the modulation and balancing of the transmission network amounted to 9.2 G(m<sup>3</sup>). Peak daily availability of gas for upstream production and modulation services, calculated at the end of the delivery season for upstream production and modulation gas, as envisaged by the provisions introduced by Resolution 50/06 of 3 March 2006, was about 153 M(m<sup>3</sup>) standard.



TAB. 3.9

**Storage capacity  
in Italy in thermal  
year  
2009-2010**

	M(GJ)	M(m <sup>3</sup> ) STANDARD <sup>(A)</sup>
Space for strategic storage	200.9	5,100
Space for modulation, upstream storage and operational balancing of transport network	363.4	9,235
<b>TOTAL</b>	<b>564.3</b>	<b>14,336</b>
Daily peak capacity for upstream storage, modulation and balancing services on the transport network at the end of the delivery season	6.0 M(GJ)/day	152.3 M(m <sup>3</sup> )/day

(A) Calculated from the gross calorific value (GCV) benchmark values of the Edison Stoccaggio and Stogit systems, corresponding to 38.1 e 39.4 MJ/m<sup>3</sup> respectively

Source: AEEG, from Edison Stoccaggio and Stogit data.

The results of the allocation by storage companies for thermal year 2009-2010 are shown in Table 3.10. In terms of space for working gas, Stogit allocated 13.9 G(m<sup>3</sup>) for the thermal year, the equivalent of about 547.7 million GJ, considering a gross calorific value (GCV) of 39.4 MJ/ m<sup>3</sup> standard. With respect to thermal year 2008-2009, and taking into account the capacity increases during the same year, the available space increased by about 0.4 G(m<sup>3</sup>).

Of that 13.9 G(m<sup>3</sup>), the following amounts were reserved: 8.8 (about 346 million GJ) for modulation and upstream production; 0.11 (about 4 million GJ) for transport network balancing; and 5.0 for the strategic reserve.

Overall, in thermal year 2009-2010 Stogit entered into storage service contracts with 62 operators: 51 users of the modulation service (of which 5 also used the upstream production service and 23 the strategic service) and 3 users of transmission network balancing. Seven users entered into contracts for the strategic storage service without signing contracts for the modulation service.

22 operators, of which 21 were already users of the modulation service, purchased capacity offered as part of the users' balancing service (in accordance with Resolution ARG/gas 146/09 of 9 October 2009) provided by Stogit with effect from December 2009. The volumes moved (physical movement) from all Stogit storage facilities at March 2008 amounted to about 15.4 G(m<sup>3</sup>), of which 7.4 withdrawn and 8.0 injected.

Edison Stoccaggio made about 0.4 G(m<sup>3</sup>) available for working gas in thermal year 2009-2010. A total of 15 operators used Edison's storage system: 14 for the modulation service (one of which also used the strategic storage service) and 1 for the transmission network balancing service for transport companies.

TAB. 3.10

**Allocation of space in  
storage**

Space for transport companies' upstream storage, modulation and balancing services

STORAGE COMPANIES	THERMAL YEAR 2007-2008		THERMAL YEAR 2008-2009	
	NUMBER OF OPERATORS	CAPACITY (GJ) <sup>(A)</sup>	NUMBER OF OPERATORS	CAPACITY (GJ) <sup>(A)</sup>
Stogit	43	332,615,000	54	350,345,000
Edison Stoccaggio	15	14,322,968	15	13,067,179

(A The benchmark HCV is 39.4 MJ/m<sup>3</sup> standard) for the Stogit system and 38.1 MJ/m<sup>3</sup> standard for the Edison system.

Source: AEEG, from Edison Stoccaggio and Stogit data.

### Applications for new storage concessions: state of progress

Table 3.11 shows the current state of progress of applications to the Ministry for Economic Development for concessions for new storage sites to be created in depleted gas fields. The exception is the Rivara site, where deep rock aquifer storage is planned.

The authorisation procedure for the San Potito–Cotignola project in Ravenna province was completed in late April 2009. The project is managed by Edison Stoccaggio (90%) along with Blugas Infrastrutture (with the remaining 10%). Once the Ministry for Economic Development granted the concession, work began on converting the two reservoirs, with the facilities expected to begin operating in 2013. Once up and running, they will enable an increase of about 900 M(m<sup>3</sup>) in capacity for modulation, upstream production and transmission network balancing and of 8 M(m<sup>3</sup>)/day in peak deliverable capacity.

The Cornegliano (LO), Cugno Le Macine–Serra Pizzuta (MT), Sinarca (CB), Bagnolo Mella (BS), Palazzo Moroni (AP) and Rivara (MO) projects have also moved forward with respect to last year.

The decree confirming the positive outcome of the Environmental Impact Assessment (EIA) for the Cornegliano project developed by Ital Gas Storage was issued in January 2009. This enabled the preliminary procedures to obtain the “public utility” declaration and the concession to be opened. The shareholders in Ital Gas Storage are Gestione Partecipazioni (51%), Ascopiave (17%), Speia (10%) and another four companies (the remaining 22%). In November 2009 a session of the “Conferenza dei servizi” was held, another vital step in obtaining the concession from the Ministry for Economic Development.

TAB. 3.11

### Applications for storage capacity at March 2010

PROJECT	COMPANY	WORKING GAS M(m <sup>3</sup> )	PEAK M(m <sup>3</sup> )/day	SITUATION
Alfonsine (RA)	Stogit	1,550	10.0	Authorised; technical and environmental problems with start of works; use of field for strategic reserve being evaluated; new works programme being drawn up.
Bordolano (CR-BG)	Stogit	1,440	20	Authorised; positive EIA with conditions (November 2009); possible start of operations in thermal year 2010-11.
Cornegliano (LO)	Ital Gas Storage (Gestione Partecipazioni 51%, Ascopiave 17%, Speia 10%, Italian Utilities 9%, Aim Vendite 5%, Az. Energetica Trading 5%, Petren 3%)	1,010	16.5	Authorisation process still in progress; positive EIA with conditions; started July 2009; expropriation procedure, public utility declaration and granting of concession; Utilities and Services Committee (November 2009).
Cugno Le Macine – Serra Pizzuta (MT)	Geogastock (Avelar Energy 100%)	742	6.6	Authorisation still in progress; positive EIA with conditions (February 2009); public notification of start of proceeding (August 2009); Utilities and Services Committee (November 2009).
Sinarca (CB)	Gas Plus Storage (60%), Edison Stoccaggio (40%)	324	3.3	Authorisation still in progress; positive EIA with conditions (November 2009); public notification of start of proceeding (July 2009); awaiting summons from Utilities and Services Committee

TAB. 3.11 SEGUE

**Applications for  
storage concessions at  
March 2010**

PROJECT	COMPANY	WORKING GAS M(m <sup>3</sup> )	PEAK M(m <sup>3</sup> )/day	SITUATION
Bagnolo Mella (BS)	Edison Stoccaggio, Retragas	n.a.	n.a.	Authorisation in progress; favourable opinion received from Hydrocarbons and Mineral Resources Commission (April 2009); EIA application submitted May 2009.
Palazzo Moroni (AP)	Edison Stoccaggio	70	0.8	Under study; favourable opinion received from Hydrocarbons and Mineral Resources Commission (December 2009)
Poggiofiorito (TE)	Gas Plus Italiana	160	1.7	Under study by Hydrocarbons and Mineral Resources Commission.
Voltino (CR)	Blugas Infrastrutture	n.a.	n.a.	Under study; favourable opinion received from Hydrocarbons and Mineral Resources Commission (June 2008).
Romanengo (CR)	Enel Trade	n.a.	n.a.	Under study; favourable opinion received from Hydrocarbons and Mineral Resources Commission (June 2008). EIA submitted (October 2008).
San Benedetto (AP)	Gas Plus Storage (51%), Gaz de France/Acea	n.a.	n.a.	Under study; favourable opinion received from Hydrocarbons and Mineral Resources Commission (June 2008).
Rivara (MO) (deep aquifer)	Erg Rivara Storage (85%), Independent Gas Management, 15%	3,000	32	Negative opinion on EIA– not approved, owing to incomplete project details and paperwork; project opposed by municipalities concerned and further documentation requested for EIA to be issued (September 2009).

Source: Ministry for Economic Development.

The specific evaluations and authorisations which come under the Environment Ministry's remit in terms of the EIA are not a substitute for the authorisations, licences, permits and all the other forms of assent required at the local level (Region, Province and/or municipality) to build a storage facility. It is in order to obtain these forms of assent that, once a favourable EIA has been issued, the "Conferenza dei servizi" (a Committee in which a formal agreement amongst the national and local competent agencies is reached) needs to meet.

Normally, there is an interval of several months between the approval of the EIA decree and the final decision by the Committee. However, the process may take longer if, before giving whichever "green light" falls within its remit, the local authority asks for further checks and/or technical evaluations to be carried out. These checks may also serve when – and if – negotiations need to be held on the environmental and economic compensation for the territory on which the facility is to be built.

Progress has also been made on the Cugno Le Macine–Serra Pizzuta project developed by Geogastock (since early 2010

100% controlled by Avelar Energy, a Swiss company that is in turn controlled by the Russian Renova Industries). Once fully up and running this project would enable an increase of about 700 G(m<sup>3</sup>) in storage space and 6.6 M(m<sup>3</sup>)/day in peak delivery capacity. The EIA was approved in February 2009, with the public notice of the start of proceedings being published in August. The Utilities and Services Committee met at the end of 2009.

In 2009 the Bordolano project also obtained its EIA decree (with additional mandatory requirements). The Bagnolo Mella and Palazzo Moroni projects (the latter of which was formerly known as "Verdicchio") obtained a favourable opinion from the Hydrocarbons and Mineral Resources Commission. Lastly, in July 2009 the public notice on the start of proceedings for the Sinarca project was issued.

In the case of Rivara, the only aquifer project, opposition continues to be expressed at the local level, even though the initiative has been judged to be of major national interest. In October 2009, as part of the checks carried out prior to awarding an EIA, the Environment Ministry asked Emilia Romagna Region for its opinion. The Region drew, in

turn, on the negative opinion expressed by the Province of Modena.

At the end of January 2010, the Regional Councillor for the Environment and Sustainable Development submitted a negative opinion on the project to Emilia Romagna Regional Government. This was based on the technical-administrative inquiry conducted by the regional offices and supported by the provincial and municipal administrations concerned. During the EIA proceeding, the Regional Government's opinion has a consultative, not binding force.

In June 2009 the authorisation procedure was opened for a pilot scheme for the injection of CO<sub>2</sub> into reservoirs to assess the partial replacement of cushion gas in Stogit's "Cortemaggiore stoccaggio" concession.

---

#### Liquefied natural gas terminals

Table 3.12 summarises the state of progress of the projects to build new liquefied natural gas (LNG) regasification terminals on the Italian coast.

Considerable advances were made with respect to 2009, first among which the start of commercial operations, in November 2009, at Terminale GNL Adriatico's offshore terminal at Porto Levante (Rovigo).

Other projects seeing important progress in the course of 2009 were the Porto Empedocle (Agrigento), Livorno and Gioia Tauro (Reggio Calabria) terminals. Problems were encountered, however, with the terminals at Rosignano (Livorno), Taranto and Zaule (Trieste). The planned terminal at Brindisi also made some headway, although the long story of this piece of Italy's energy infrastructure mosaic is not yet finished.

The first terminal project taken forward by Brindisi LNG (a company owned by British Gas Italia) was authorised in 2003. In 2005 it obtained exemption from the third party access obligations for 80% of its regasification capacity. In recent years, however, the project has encountered countless obstacles, starting with opposition from local people and the local authorities, and going as far as a legal enquiry.

In January 2008 Brindisi LNG opened a proceeding with the Ministries for the Environment and Cultural Assets to obtain an environmental compatibility ruling for the regasification project in the Capo Bianco area. This reached its successful conclusion in December 2009.

The need for an EIA arose when the Ministry for Economic

Development, in conjunction with the Ministry for the Environment, issued a decree in autumn 2007 suspending the authorisation issued in 2003. After the positive EIA was obtained at the end of the year, Brindisi LNG said it was ready to reopen the construction site before the end of 2010, with a view to completing the works in the subsequent 24-30 months. Added to all of which, the terminal has already received a gas supply contract.

The Gioia Tauro (RC) terminal project submitted by LNG MedGas Terminal saw positive developments. LNG MedGas Terminal is 69.8%-owned by Fingas (Sorgenia and Iride), with the remaining 30.2% held by Medgas Italia (Belleli group) and Azienda Energetica Etschewerke from Bolzano. In June 2008 LNG MedGas Terminal obtained non-repayable funding of 1.6 million euros from the European Commission under the TENE project. And in September 2008 it obtained a positive assessment from the Environment Ministry. In May 2009 the evaluation stage of the environmental and social compensation was completed, making it possible to draw up a Protocol of Understanding with local authorities. In December the "Conferenza dei servizi" gave its definitive approval. The project, the definition of which began in early 2005, is now awaiting final authorisation by the Ministry for Economic Development.

OLT Offshore LNG Toscana (E.On 46.79%, Iride Group 46.79%, OLT Energy Toscana 3.73% and Golar LNG 2.69%) is working on an offshore project in Tuscany, for which in 2009 it applied for 20-year-long total exemption from the third party access rules. In August, the Ministry for Economic Development informed the company of its decision to grant the exemption, but the European Commission has asked for further information.

In September 2009 the initiative obtained EIA exemption on the change of route for the pipeline link to the national network, a change requested by the local authorities. In summer 2009 Golar Frost delivered the ship to the port in Dubai where Saipem is converting it to a terminal. It is scheduled to arrive off Livorno in early 2011. Work began onshore in December 2009 on the pipeline link to the national network and in January 2010 on the links via sea.

The situation is still suspended for the other Tuscan project, the one taken forward by Edison and British Petroleum at Rosignano Marittima and for which the authorisation procedure is still under way. In December 2009 Tuscany

Region failed to approve the EIA, in spite of the positive view (with conditions) previously expressed by the regional EIA evaluation unit.

The Region explained its adverse decision by reiterating the value and importance of the regional energy plan – which

envisages just one regasification plant on Tuscan territory – as a governance and strategic planning instrument. In January 2010 the Region opened a consultation process on the infrastructure with all interested parties.

TAB. 3.12

**State of progress for new LNG terminals**

Regasification capacity in G(m<sup>3</sup>)/year

PROJECT	COMPANY	CAPACITY	EXPECTED	STATE OF PROGRESS
			START OF OPERATION	
Brindisi	Brindisi LNG (100% British Gas Italia)	8	n.a.	Brindisi LNG opened new environmental impact assessment with Ministry for Environment and Cultural Heritage in January 2008, to obtain environmental compatibility approval for a regasification facility at Capo Bianco. Positive outcome December 2009.
Gioia Tauro (RC)	LNG MedGas Terminal (Fingas – Sorgenia e Iride 69,8%, Medgas Italia – gruppo Belleli 25%, Azienda Energetica Etschewerke di Bolzano)	12	2004	Favourable EIA in September 2008; Funding (1.6M€) obtained from European Commission under TEN-E project (June 2008); protocol of understanding with local authorities in May 2009; Utilities and Services Committee approval, December 2009.
Toscana offshore (LI)	OLT Offshore LNG Toscana (E.On 46,79%, Gruppo Iride 46,79%, OLT Energy Toscana 3,73%, Golar LNG 2,69%)	3,75	2011	Application submitted for total exemption from TPA for 20 years; notification received from Ministry for Economic Development that exemption granted but European Commission requested further information; in September 2009 exemption obtained from EIA on amended route of pipeline linking terminal to national network
Rosignano (LI)	Edison – BP – Solway	8	n.a.	Authorisation process still in progress. Unfavourable EIA opinion delivered by Tuscany Region in December 2009, in spite of previous positive opinion (with conditions) from regional EIA evaluation body. Region opened table for discussion with all stakeholders in January 2010.
Porto Empedocle (AG)	Nuove Energie (Enel 90%)	8	2013	Authorisation procedure under responsibility of Sicily Region; environmental compatibility decree, with conditions, obtained in September 2008. Favourable opinion from Utilities and Services Committee, January 2009. Region authorised construction work in October 2009 after agreement reached on environmental, economic and social compensatory measures for the Province of Agrigento and Municipality of Porto Empedocle. Bid selection for construction of terminal nearing completion.
Rada di Augusta/Melilli/Priolo (SR)	Ionio Gas (ERG Power&Gas 50%, Shell Energy Italia 50%)	8	2014	Authorisation procedure under responsibility of Sicily Region; favourable opinion with conditions September 2008; project opposed by municipalities concerned; appraisal by Utilities and Services Committee opened in July 2009.
Taranto	Gas Natural Internacional	8	n.a.	Agreement with Snam Rete Gas for construction of pipeline linking terminal to national network once project authorised. Unfavourable opinion delivered by Puglia Region's EIA Committee in July 2008 and by the Regional Cabinet (Giunta Regionale) in August 2008.

PROJECT	COMPANY	CAPACITY	EXPECTED START OF OPERATION	STATE OF PROGRESS
Zaule (TS)	Gas Natural Internacional	8	2013	Positive EIA (with conditions) in July 2009; project opposed by municipalities concerned and most notably by Slovenian Government, which appealed to the European Commission against the project. It said, however, it was willing to meet the Italian authorities to reach an agreement.
Trieste <i>offshore</i> (TS)	Terminale Alpi Adriatico (E.On 100%)	8	n.a.	New location proposed and environmental impact study up-dated in March 2008. Company applied for land-use authorisation for new location. Proposed new location subjected to study by Environment Ministry's Technical Committee in September 2008.
Porto Recanati (AN)	Tritone GNL (Gaz de France –Suez)	5	n.a.	Offshore facility consisting of floating regasification unit anchored 30km from coast. In November 2009 feasibility study approved by Regional Technical Committee and favourable opinion on EIA obtained from Utilities and Services Committee. Positive opinion with conditions from EIA and VAS Technical Committee.
Portovenere (SP)	GNL Italia (Eni 100%)	8	n.a.	Up-grade of ENI's Panigaglia terminal, to increase capacity from current 3.5 to 8 G(m3); EIA procedure opened in July 2007. Opposed by Portovenere Municipality; in April 2009 Liguria regional cabinet confirmed its negative position in the EIA Committee; favourable opinion from regional Utilities and Services Committee in November 2009.

TAB. 3.12 cont.

### State of progress for new LNG terminals at March 2010

Regasification capacity in G(m<sup>3</sup>)/ear

Source: Ministry for Economic Development.

2009 was a positive year for the initiative being promoted by Nuove Energie (90% controlled by ENEL), which plans to build a terminal at Porto Empedocle (AG). The authorisation procedure – as with the project at Rada di Augusta/Melilli/Priolo – is the responsibility of Sicily Region, given its Special Statute status.

The “Conferenza dei servizi” gave its positive opinion in January 2009 and agreement was reached with the proposing company on environmental, economic and social compensation for Agrigento Province and the Municipality of Porto Empedocle. Sicily Region then authorised the construction work in October 2009.

The selection of the bids for the construction of the regasification plant is at its final stages and the proposing company aims to begin work before the end of 2010. Lastly, it should be noted that in January 2010 Nuove Energie signed a document with the local police to safeguard the works from any influence or infiltration by the mafia.

For the other terminal project in Sicilian territory, a project conceived by Ionio Gas, a joint venture with ERG Power&Gas and Shell Energy Italia, in the area of Rada di Augusta/Melilli/Priolo, the authorisation procedure is more complicated. The initiative, which in September 2008 obtained an environmental compatibility decree (subject to conditions) is, however, meeting with opposition from the municipalities concerned.

Authorisation to build the terminal – and the signing of the decree – are subject to a long list of conditions concerning the protection of the environment and a commitment to carry out compensatory works for the territory concerned. In April 2010 the Sicilian regional assembly's Economic Affairs Committee asked for a fact-finding inquiry to be opened on the project. The aim is to assess the environmental risks that would arise if the Augusta/Melilli/Priolo regasification facility were to be built in an area where industrial plants already exist.

For the project promoted by Gas Natural Internacional in the Zaule (TS) area the situation is also uncertain. The initiative obtained an EIA decree (subject to conditions) in July 2009 but is opposed by some of the municipalities concerned and most notably by the Slovenian government. The latter has threatened to appeal against the project to the European Commission. This notwithstanding, the Slovenian authorities have declared their willingness to meet their Italian counterparts to reach an agreement.

The positive decision on up-grading ENI's Panigaglia terminal, for which the EIA procedure began in July 2007, arrived at the end of 2009. This would increase capacity from the current level of 3.5 to 8 G(m<sup>3</sup>). In November 2009 the "Conferenza dei servizi" approved the project, even though in the springtime both Portovenere Municipal Council and Liguria's Regional Government had expressed their opposition in the EIA commission.

---

#### Distribution

---

As in previous years, natural gas distribution operators were asked in the Authority's annual survey on developments in the regulated sectors to provide preliminary data regarding their activities in 2009. They were also asked to confirm or correct the provisional information for 2008 that they submitted in 2009. In the following tables the figures for 2009 should therefore be viewed as provisional.

The summary figures for this segment of the gas supply chain are illustrated in Table 3.13. The reconfiguration of the industry framework that for some time now has been a key feature of natural gas distribution, and which leads each year to numerous mergers and acquisitions and thus to a reduction in the number of companies operating in the sector, continued last year. By the end of 2009 the number of distributors had fallen from 295 at 31 December 2008 to about 270. The figure for 2009 is subject to change as a result of delays by some companies in submitting data on changes in company structures last year.

269 operators responded to the 2010 edition of the Survey.

Of these, 5 were inactive in 2008 and began operating in 2009; 25 had been operating in 2008 but suspended their activity in 2009 following a merger/incorporation or because they had sold their business to other operators.

The most significant operations were:

- the incorporation of 4 companies from the E.On group in another company from the same group, which now has just one distribution company. Which, since it has acquired the customers of the 5 previously existing companies, now belongs to the "very large" category;
- The incorporation of Asm Reti, a distribution company for the Brescia segment of A2A, in A2A Reti Gas, as a result of which A2A Reti Gas passed the 1-million-customer mark in 2009;
- Gas Natural Distribuzione Italia's acquisition of 7 companies (Normanna Gas, Smedigas, Gasdotti Azienda Siciliana, Agragas, Italmeco, Calgas and Pitta Costruzioni). Through these operations, Gas Natural Distribuzione Italia has almost reached the upper threshold of the "Large" category, to which it already belonged in 2008, and has tripled the volumes of gas it distributes.

E.On Reti's move into the "very large" category (i.e., companies with over half a million customers) increased the number in that category by one unit and reduced by one unit the "large" companies category (i.e., with between 100,000 and 500,000 customers). The number of medium-sized companies – those serving 50,000 to 100,000 customers – fell from 26 to 21. Only 35 operators (14% of the companies active in the sector) therefore exceeded the 100,000-customer threshold, at which point, as envisaged by the Authority's provisions, functional unbundling becomes obligatory.

Overall, these companies cover 81% of the volumes distributed in Italy (compared with 78% in 2008). The remaining 209 companies active in 2009 distribute one-fifth of total volumes (Tab. 3.13).

TAB. 3.13

OPERATORS <sup>(A)</sup>	2006	2007	2008	2009
<b>NUMBER</b>	287	270	264	244
Very large	7	8	8	9
Large	22	24	27	26
Medium	31	33	26	21
Small	133	124	120	115
Very small	94	81	83	73
<b>VOLUME DISTRIBUTED – M(m<sup>3</sup>)</b>	<b>34,917</b>	<b>31,388</b>	<b>33,735</b>	<b>33,466</b>
Very large	18,194	15,921	17,286	18,695
Large	7,841	7,394	8,954	8,373
Medium	3,843	3,978	3,285	2,425
Small	4,584	3,746	3,881	3,690
Very small	455	343	329	284

---

**Distribution activity, 2006-2009**


---

(A) Very large: distributors with more than 500,000 customers.  
 Large: distributors with 100,000 to 500,000 customers.  
 Medium: distributors with 50,000 to 100,000 customers.  
 Small: distributors with 5,000 to 50,000 customers.  
 Very small: distributors with fewer than 5,000 customers.  
 Source: AEEG, from operators' declarations.

Table 3.14 provides a detailed picture of distribution activity in 2009. It gives a regional breakdown of number of operators, customers (metering units), municipalities served, volumes delivered and percentage shares of the national total. Overall, nearly 33.5 G(m<sup>3</sup>) were distributed to just under 22 million customers living in 6,689 municipalities.

As in the past, the figures point to a high degree of regional variation, which however is stable over time. This reflects the varying degrees of methanisation and climatic differences between the regions, as well as the geographical distribution of small- and medium-sized enterprises, which are traditionally served by secondary networks. Four regions – Piedmont, Lombardy, Veneto and Emilia Romagna – absorb more than 10% each, and around 64% of all gas distributed.

Tuscany and Lazio each have over 5%, 9 regions have between 1.5% and 3%, and the remaining 4 have less than 1%. Sardinia, which is not methanised, is not included in the list. Once again this year, the traditional geographical breakdown between North, Centre, South and Islands shows the clear predominance of northern Italy. Here, 71% of all gas is distributed to just under 12.5 million customers. Next comes central Italy, with 19.7% of the gas delivered to 5.3 million customers, followed by southern Italy and the Islands, with 9.3% of the total gas delivered to 3.9 million customers.



TAB. 3.14

**Distribution activity by Region in 2009**Customers (thousands);  
volumes delivered M(m<sup>3</sup>)

REGION	OPERATORS PRESENT	CUSTOMERS	MUNICIPALITIES SERVED	VOL. DELIVERED	% SHARE
Val d'Aosta	1	19	21	43	0.1%
Piedmont	36	1,985	1,058	3,926	11.7%
Liguria	10	847	150	900	2.7%
Lombardy	70	4,638	1,498	8,935	26.7%
Trentino Alto Adige	14	247	185	617	1.8%
Veneto	33	2,007	594	3,949	11.8%
Friuli Venezia Giulia	10	513	189	885	2.6%
Emilia Romagna	33	2,259	370	4,496	13.4%
Tuscany	15	1,532	241	2,214	6.6%
Lazio	16	2,153	311	2,145	6.4%
Marche	28	634	229	887	2.7%
Umbria	11	332	90	527	1.6%
Abruzzo	31	572	286	689	2.1%
Molise	11	107	100	129	0.4%
Campania	27	1,249	402	967	2.9%
Puglia	14	1,202	249	1,117	3.3%
Basilicata	13	183	127	190	0.6%
Calabria	9	369	274	255	0.8%
Sicily	12	917	315	596	1.8%
<b>Total</b>	<b>–</b>	<b>21,767</b>	<b>6,689</b>	<b>33,466</b>	<b>100.0%</b>

Source: AEEG, from operators' declarations.

Table 3.15 shows an initial calculation of the ownership structure of distribution companies, in terms of share capital, at 31 December 2009. This is limited, however, to direct forms of participation (i.e. first-level shareholding), as assessed in the annual survey.

A first observation is that only 4 of the companies are listed on the Stock Exchange: Hera, Ascopiave, Enia and Lario Reti Holding. Moreover, these companies' listed share capital

amounts to barely 1% of the total share capital of all companies engaged in distribution activity.

As was the case last year, around 43% of the shares were held by public bodies. 21.9% were held by energy companies – 10.5% of them local, 9.7% national and 1.6% foreign (with parent company in Spain). 13.3% of the share capital is owned by natural persons.

TAB. 3.15

**Distributors – ownership composition in 2009**

LEGAL STATUS OF SHAREHOLDERS	%
Public bodies	42.6
Miscellaneous companies	21.0
Natural persons	13.3
Local energy companies	10.5
National energy companies	9.7
Foreign energy companies	1.6
National financial institutions	0.2
Floating stocks	1.0
Foreign financial institutions	0.0
<b>TOTAL</b>	<b>100.0</b>

Source: AEEG, from operators' declarations.

TAB. 3.16

REGION	SUB-STATIONS PRESSURE-LIMITING		LENGTH OF NETWORK			% SHARE OF NETWORK	
	TERMINAL UNITS	HIGH PRESSURE	MEDIUM PRESSURE	LOW PRESSURE	OPERATOR	MUNICIPAL	
Val d'Aosta	5	51	0.3	165.8	194.9	98.6	0.8
Piedmont	745	32,278	80.7	11,501.4	11,883.2	87.7	5.1
Liguria	62	3092	57.4	1,945.4	4,125.6	72.3	0.1
Lombardy	1,669	15,716	112.5	14,346.2	31,414.9	69.6	18.3
Trentino Alto Adige	211	18,567	181.9	2,015.4	1,955.5	90.5	6.6
Veneto	657	10,266	290.0	10,444.7	17,970.4	80.3	12.4
Friuli Venezia Giulia	151	1,153	5.1	2,084.0	5,053.5	71.4	28.0
Emilia Romagna	378	85,057	305.9	16,771.1	12,808.3	70.3	12.5
Tuscany	398	6,580	248.9	6,068.8	9,361.3	66.2	8.1
Lazio	295	2,108	198.6	6,139.5	8,155.7	94.3	5.6
Marche	418	2,107	19.1	4,259.0	4,539.6	46.4	30.8
Umbria	101	1,350	105.5	1,810.1	3,172.7	60.9	38.5
Abruzzo	190	2,130	1.4	4,335.6	4,657.5	73.8	23.1
Molise	65	440	5.6	978.3	872.7	81.5	18.2
Campania	327	3,762	17.6	3,857.4	7,449.5	80.5	16.3
Puglia	154	1,567	96.3	5,206.9	6,260.7	92.9	6.9
Basilicata	108	415	0.8	819.2	1,508.4	74.8	24.8
Calabria	184	787	34.7	2,289.6	3,403.8	90.6	9.4
Sicily	192	1,674	60.3	4,082.3	7,804.8	95.8	1.7
Not operational	–	–	0.0	439.4	1,056.8	–	–
<b>TOTAL</b>	<b>6,310</b>	<b>189,100</b>	<b>1,822.7</b>	<b>99,560.2</b>	<b>143,649.8</b>	<b>77.1</b>	<b>13.3</b>

Source: AEEG, from operators' data.

### Distribution infrastructure and ownership in 2009

No. Of sub-stations and gate-stations; length of networks in km

Distribution infrastructure includes about 6,300 sub-stations, 189,000 pressure-limiting terminal units, and approximately 245,000 km of networks (of which 1,500 not in use). 41% is medium pressure and 59% low (Tab. 3.16). The networks are mainly located in northern Italy (145,700 km against 54,900 km in central Italy and 42,900 in the South and Islands). In 2009, 77% of the networks were owned by distributors themselves and 13% by municipal councils.

Networks can be owned by distributors, by municipal councils or by other actors, which explains why the percentages in the table do not add up to 100. In any case, ownership varies considerably between one region and another.

Table 3.17 shows the preliminary figures for 2009. These illustrate the breakdown of customers and distributed volumes for the usage categories defined by Resolution 17/07 of 2 February 2007 and corresponding to standard

withdrawal profiles. By far the biggest category in Italy is that using gas for three purposes: heating of individual properties, cooking and hot water (for hygiene purposes).

This category accounts for 63.2% of customers and 43.6% of consumption, which for the customers in question averages 1,000 m<sup>3</sup>/year. Significant numbers of customers, nearly 11% of the total, use gas for cooking and heating water, and 10.8% for cooking only. 6.5% of customers on the networks use gas to heat individual premises and for cooking.

In terms of volumes delivered, gas use for individual or centralised heating (e.g. for apartment blocks with common heating), was significant, at 15.7% of the total, while technological-craft-industrial uses accounted for 13.6% of the total, with average consumption in excess of 20,000 m<sup>3</sup>/year.

TAB. 3.17

**Customers by usage category, 2009**

Percentages of customers connected to distribution networks at 31/12/2009 and volumes distributed to them; average consumption in m<sup>3</sup>

USAGE CATEGORY	% CUSTOMERS	% VOLUMES	AVERAGE CONSUMPTION
Cooking	10.8%	1.4%	205
Hot water for hygiene purposes	0.6%	0.2%	526
Cooking + Hot water for hygiene purposes	10.7%	2.2%	322
Technology (craft-industry)	1.0%	13.6%	20,257
Air conditioning	0.1%	0.1%	2,081
Individual/centralised heating	3.8%	15.7%	6,322
Individual heating + Cooking + Hot water for hygiene purposes	63.2%	43.6%	1,060
Individual heating + Cooking	6.5%	4.2%	992
Individual heating + Hot water for hygiene purposes	1.5%	3.7%	3,663
Centralised heating + Cooking + Hot water for hygiene purposes	0.3%	1.2%	5,474
Centralised heating + Hot water for hygiene purposes	0.5%	4.5%	13,913
Technology + heating	0.9%	9.4%	16,615
Air conditioning + heating	0.0%	0.2%	20,075
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>	<b>1,537</b>

Source: AEEG, from operators' declarations.

The breakdown of users of the distribution service by volumes consumable can also be assessed from the figures shown in Tab. 3.18 for the breakdown of customers and volumes by withdrawal category, expressed in GJ/year.

The first two categories (0-4 and 4-20 GJ/year) most probably include households using gas for cooking and/or to heat water. Together, they account for 44% of total numbers and 5.6% of volumes withdrawn. In terms both of number of metering units and of volumes, the biggest category, with annual consumption of 20 to 200 GJ (about 520 to 5,200 m<sup>3</sup>), encompasses households and small commercial businesses which also use gas to heat their premises.

The last four, relatively smaller, categories represent customers with more intensive gas use who absorb half of the gas distributed.

Lastly, table 3.19 illustrates the first 20 groups operating in natural gas distribution in 2009 and their market shares both in 2009 and in 2008. As in other stages of the supply chain, the ENI group predominates. Its share is smaller, and falling (22.6% in 2009, compared with 23.2% in 2008), but is still more than double that of the main companies coming after it.

TAB. 3.18

**Breakdown of distribution customers and withdrawals by withdrawal band**

Customers at 31/12/2009 in thousands; volumes withdrawn in M(m<sup>3</sup>)

WITHDRAWAL BAND (GJ/YEAR)	CUSTOMERS	VOLUMES	% CUSTOMERS	% VOLUMES
0-4	4,215	190	19.4%	0.6%
4-20	5,390	1,667	24.8%	5.0%
20-200	11,291	15,225	51.9%	45.5%
200-3,000	759	7,545	3.5%	22.5%
3,000-8,000	47	2,004	0.2%	6.0%
8,000-40,000	31	2,860	0.1%	8.5%
Over 40,000	34	3,975	0.2%	11.9%
<b>TOTAL</b>	<b>21,767</b>	<b>33,466</b>	<b>100.0%</b>	<b>100.0%</b>

Source: AEEG, from operators' declarations.

A comparison with 2008 shows that both the incumbent and its main competitor, the ENEL group (which sold its network to F2i Reti Italia, an infrastructure fund, but retained the operational side), lost some of their lead over Hera, A2A and Italcogim (AFIN). In spite of the increase in customer numbers resulting from the incorporation of

another 4 companies (see above), the overall fall in volumes distributed in 2009 compared with 2008 prevented the E.On group from increasing its market share in terms of volumes delivered. Overall, the first 20 groups covered 76% of the market.

GROUP	2008	% SHARE	2009	% SHARE
Eni	7,818	23.2%	7,554	22.6%
F2i Reti Italia	3,636	10.8%	3,304	9.9%
Hera	2,129	6.3%	2,184	6.5%
A2A	1,937	5.7%	2,048	6.1%
Italcogim (AFIN)	1,307	3.9%	1,533	4.6%
Iride	1,151	3.4%	1,131	3.4%
E.On	1,181	3.5%	1,106	3.3%
Toscana Energia	1,079	3.2%	1,052	3.1%
Enia	1,070	3.2%	1,048	3.1%
Asco Holding	802	2.4%	759	2.3%
Linea Group Holding	537	1.6%	564	1.7%
Acegas-Aps	463	1.4%	477	1.4%
AMGA Azienda	443	1.3%	451	1.3%
Erogasmet	351	1.0%	387	1.2%
Energei	311	0.9%	329	1.0%
Consiag	315	0.9%	324	1.0%
Gelsia	320	0.9%	321	1.0%
Gas Natural SDG	293	0.9%	319	1.0%
ACSM-AGAM	186	0.6%	301	0.9%
Aimag	302	0.9%	298	0.9%
Others	8,102	24.0%	7,975	23.8%
<b>Total</b>	<b>33,735</b>	<b>100.0%</b>	<b>33,466</b>	<b>100.0%</b>

TAB. 3.19

### First 20 groups operating in natural gas distribution, 2009

Volumes of natural gas distributed, M(m<sup>3</sup>)

Source: AEEG, from operators' declarations.

## Wholesale market

The data for the wholesale gas market are taken from the first, provisional calculations based on the data collected in the Authority's annual survey on the state of the electricity

and gas markets the previous year. For the gas sales sector, the survey was addressed to the 404 companies with accreditation from the Operators Register (set up in July

2008 with Resolution GOP 35/08 of 23 June 2008) who declared that they were engaged in wholesale or retail gas sales in 2009. 336 of the 404 responded; of these, 25 declared that they had not been active during the year.

Under Legislative Decree 164/00, operators selling gas to consumers must be authorised to do so by the Ministry for Economic Development. Such authorisation is not required for companies engaged solely in trading. Of the operators included in the Authority's survey, those making less than 95% of their sales to consumers were classed as wholesalers; these operators also include all companies producing their own natural gas which they offer on the wholesale market.

In 2009 the number of wholesalers grew to 93, compared with 79 the previous year (Tab. 3.20). This was the result of the growth in the category of "medium" operators, which includes 7 more units than in 2008. The class of "very small" operators grew even more, by 8 units. Since the complete opening of the gas market in 2003, the number of operators selling gas on the wholesale market has more than doubled. It should also be noted that the category of "large" operators, i.e. with sales of over 10 G(m<sup>3</sup>), is now empty, since the only operator previously included in the category has fallen below that sales threshold.

TAB. 3.20

**Wholesalers' activity  
2002-2009**

OPERATORS <sup>(A)</sup>	2002	2003	2004	2005	2006	2007	2008	2009
<b>NUMBER</b>	<b>55</b>	<b>40</b>	<b>41</b>	<b>60</b>	<b>72</b>	<b>74</b>	<b>79</b>	<b>93</b>
Eni	1	1	1	1	1	1	1	1
Large	1	1	1	2	1	1	1	0
Medium	4	4	6	8	9	11	14	21
Small	17	20	19	29	29	31	33	33
Very small	32	14	14	20	32	30	30	38
<b>VOLUME SOLD – G(m<sup>3</sup>)</b>	<b>85.2</b>	<b>90.6</b>	<b>95.9</b>	<b>110.5</b>	<b>103.2</b>	<b>101.3</b>	<b>111.0</b>	<b>110.9</b>
Eni	52.3	51.3	53.6	58.0	57.3	51.6	48.7	36.3
Large	12.9	17.8	16.3	27.0	13.5	13.1	12.7	0.0
Medium	15.8	15.6	18.4	14.0	20.1	22.8	32.9	59.3
Small	4.0	5.6	7.6	10.8	11.3	12.7	15.6	14.3
Very small	0.2	0.2	0.1	0.7	1.0	1.1	1.1	1.1
<b>AVERAGE UNIT VOLUME – M(m<sup>3</sup>)</b>	<b>1,550</b>	<b>2,264</b>	<b>2,340</b>	<b>1,842</b>	<b>1,433</b>	<b>1,369</b>	<b>1,405</b>	<b>1,192</b>
Eni	52,349	51,320	53,632	58,027	57,292	51,643	48,656	36,301
Large	12,865	17,808	16,268	13,486	13,451	13,131	12,709	0
Medium	3,954	3,902	3,061	1,748	2,233	2,074	2,353	2,823
Small	234	279	399	372	391	410	472	432
Very small	7	17	7	37	31	35	37	28

(A) Large: operators with sales of over 10 G(m<sup>3</sup>).

Medium: operators with sales of between 1 and 10 G(m<sup>3</sup>).

Small: operators with sales of between 0.1 and 1 G(m<sup>3</sup>).

Very small: operators with sales of less than 0.1 G(m<sup>3</sup>).

Source: AEEG, from operators' declarations.

Overall, wholesalers sold 110.9 G(m<sup>3</sup>) of gas, of which 43.5 G(m<sup>3</sup>) on the retail market and 67.4 on the wholesale market (Tab. 3.23). With respect to 2008, the total volume traded remained essentially unchanged. As a percentage of that total, however, sales on the wholesale market increased by 0.7% from the 66.9 G(m<sup>3</sup>) reached in 2008. Sales by these

operators to consumers, on the other hand, fell by 1.0% from the 43.9 G(m<sup>3</sup>) seen in 2008. Reductions in the volumes sold on the final market and increases in those sold on the wholesale market by the same operators have been seen for some years now.

The latest data also confirm, therefore, that a specialisation process is under way on the wholesale market. This appears significant in a year of economic crisis such as 2009, characterised by a market that did not grow in overall terms and by a broader platform of companies operating in that market.

On average, the unit volume of sales diminished by 15%, from 1.4 to 1.2 G(m<sup>3</sup>). This was a consequence of the stability in the volumes handled and the contemporaneous increase in the number of operators, and of the reduction in the volumes sold by the bigger operators. The only operators to sell more gas than in 2008 (20% more) were those in the medium category, i.e. with sales of between 1 and 10 G(m<sup>3</sup>). At the same time, the total volumes of gas sold by ENI fell by 25%, those sold by “large” operators fell to zero, sales by small operators decreased by 8% and those by very small operators by 3%.

Direct imports account for 54% of wholesalers’ gas procurement (Tab. 3.21). Some 23% of the gas procured on the wholesale market is purchased from other traders on Italian territory (at the border or at the city gate), 6% is produced directly and 15% is purchased at the Virtual Trading Point (VTP). Since in 2008 it accounted for just 10% of the wholesale market, the VTP is increasing in importance.

Imports are the main source of supply, particularly for large companies, while purchases on the wholesale market and at the VTP increase in importance with decreasing company size. Purchases at the VTP are concentrated with very small wholesalers, who accounted for 35% of transactions.

TAB. 3.21

**Procurement by wholesalers, 2009**  
Percentages

PROCUREMENT	WHOLESALERS <sup>(A)</sup>					Total
	Eni	Large	Medium	Small	Very small	
National production	15.2%	–	1.2%	4.5%	2.2%	6.2%
Imports	82.1%	–	42.9%	32.1%	8.3%	54.1%
Purchased from operators in Italy	2.2%	–	32.8%	35.1%	54.8%	23.2%
Purchases from storage	0.1%	–	1.5%	2.3%	0.0%	1.1%
Purchases at VTP	0.4%	–	21.6%	26.1%	34.6%	15.3%
<b>TOTAL</b>	<b>100.0%</b>	<b>–</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

(A) Large: operators with sales of over 10 G(m<sup>3</sup>).

Medium: operators with sales of between 1 and 10 G(m<sup>3</sup>).

Small: operators with sales of between 0.1 and 1 G(m<sup>3</sup>).

Very small: operators with sales of less than 0.1 G(m<sup>3</sup>).

Source: AEEG, from operators’ declarations.

The resources just described enable us to carry out a detailed analysis of the use of gas by wholesale companies (Tab. 3.22). Overall, 55.2% of the gas procured is then resold on the wholesale market while 35.7% goes to final users (25% of the latter is sold to affiliated final customers). The remaining 9.2% is used for self-consumption, i.e., it is used directly by wholesalers in electricity power stations. Wholesale trading is mainly conducted by small- to medium-sized companies, who channel 60% or more of the

gas they procure to this market.

ENI consumes about 11% of the gas procured in its own power stations and sells on 40% of the remainder to the wholesale market and 50% to the retail market. In addition to their sales on the wholesale market, on the other hand, medium-sized operators seem to use gas for their own needs. Indeed, about half the gas sold to the retail market by companies in this category goes to affiliated customers, while 10% is intended for self-consumption.

TAB. 3.22

**Use of gas by wholesalers in 2009**

Percentage shares

SALES	WHOLESALERS <sup>(A)</sup>					Total
	Eni	Large	Medium	Small	Very small	
To other re-sellers in Italy	39.1%	–	60.7%	75.9%	56.3%	55.2%
– of which sales in storage	0.1%	–	1.2%	2.3%	1.9%	1.1%
– of which sales at VTP	28.7%	–	25.2%	47.1%	33.8%	29.6%
To final customers	49.8%	–	29.4%	23.7%	41.8%	35.7%
– of which affiliates	6.2%	–	45.0%	21.0%	1.3%	24.5%
Self-consumption	11.1%	–	10.0%	0.4%	2.0%	9.2%
<b>TOTAL</b>	<b>100.0%</b>	<b>–</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

(A) Large: operators with sales of over 10 G(m<sup>3</sup>).Medium: operators with sales of between 1 and 10 G(m<sup>3</sup>).Small: operators with sales of between 0.1 and 1 G(m<sup>3</sup>). Verysmall: operators with sales of less than 0.1 G(m<sup>3</sup>).

Source: AEEG, from operators' declarations.

Table 3.23 gives a breakdown of the activity of the 37 companies (in 2008 they numbered 33) whose sales reached at least 300 M(m<sup>3</sup>) on the wholesale market. Together, these operators cover 96.1% of total sales on that market, which remains concentrated, albeit less so than in the past. The share held by the first 3 companies, Eni, Enel Trade and Edison, fell to 39.6% (compared with 50.2% the year before); that of the first five companies, which also include Plurigas and Gaz de France, declined to 50.6%, against 59% in 2008.

The last line in the table shows the average price applied by companies classified as wholesalers, which in 2009 was 31.52 c€/m<sup>3</sup>. Consumers obviously paid a higher price than other gas suppliers. The differential between the two customer groups can be estimated at 4.6 c€/m<sup>3</sup>, since the price paid by consumers is 34.30 c€/m<sup>3</sup> and that paid by other wholesalers and by retailers is 29.72 c€/m<sup>3</sup>. This difference has widened since 2008, when it was 3 c€/m<sup>3</sup>.

TAB. 3.23

**Sales by main wholesalers in 2009**M(m<sup>3</sup>)

COMPANY	TO WHOLESALERS & SELLERS	TO FINAL CUSTOMERS	TOTAL
Eni	0.4	20,340	36,301
Enel Trade	5,582	4,357	9,939
Edison	5,125	3,572	8,697
Gaz De France (Secondary)	3,871	0	3,871
Plurigas	3,535	803	4,339
Sinergie Italiane	2,928	0	2,928
Hera Trading	2,531	215	2,746
A2A Trading	2,119	67	2,186
E.On Energy Trading	1,974	435	2,410
Enoi	1,887	18	1,904
Aceaelectrabel Trading	1,325	481	1,807
E.On Ruhrgas	1,133	290	1,423
Gas Plus Italiana	1,126	0	1,126
Spigas	1,109	90	1,199
Shell Italia	1,100	709	1,810
Elettrogas	1,063	0	1,063
Premiumgas	1,048	304	1,352
Sonatrach Gas Italia	974	0	974
Sorgenia	876	1,069	1,946

TAB. 3.23 cont.

SOCIETÀ	TO WHOLESALE AND SELLERS	TO FINAL CUSTOMERS	TOTAL
Italtrading	828	11	840
Ascotrade	811	789	1,600
Blugas	753	19	772
Begas Energy International (ex Bidas Energy)	696	12	709
Worldenergy	685	0	685
Speia	667	159	826
Energetic Source	535	27	562
Essent Trading International	534	0	534
Egl Italia	520	18	537
Energy Trade	505	13	518
Cea Centrex Italia	486	0	486
Iride Mercato	467	1,201	1,668
Enova	380	11	391
Hb Trading	371	0	371
Econgas Italia	332	33	364
Libera Energia	324	131	455
Shell Italia E&P	314	0	314
Eni Mediterranea Idrocarburi	309	0	309
Others	2,611	8,330	10,942
<b>TOTAL</b>	<b>67,396</b>	<b>43,506</b>	<b>110,902</b>
<i>Average price (c€/m<sup>3</sup>)</i>	<i>29.72</i>	<i>34.30</i>	<i>31.52</i>

Source: AEEG, from operators' declarations.

Sales by main wholesalers  
in 2009  
M(m<sup>3</sup>)

### Virtual trading point

Under the current legislation, gas operators can trade gas injected to the national network at a virtual point located, conceptually speaking, between entry and exit points on the network: the Virtual Trading Point (VTP). The VTP provides operators with a useful commercial balancing tool and the possibility of replicating the effects of daily capacity trading, for example in the event of interruptions or reductions in capacity from a given source of supply.

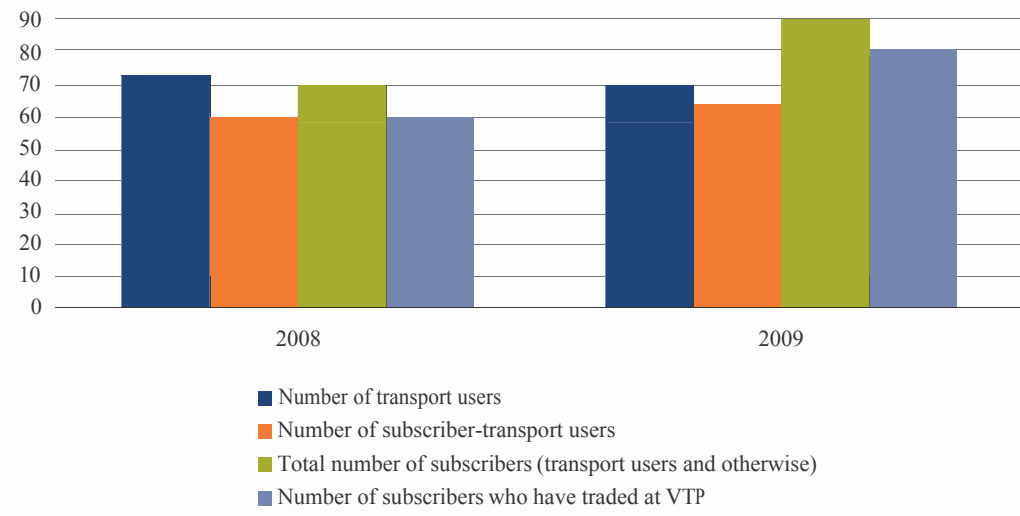
Transactions at the VTP are conducted through bilateral over-the-counter contracts. The VTP cannot, however, be equated with a gas exchange, which in Italy was only recently established under the GME.

In recent years the VTP has increased considerably in importance, in terms both of volumes traded and number of transactions. This is partly because, under the provisions issued by the Authority, traders have since November 2006 been able to conduct transactions at the national hub without at the same time being users of the transport system.

In 2009, 82 operators exchanged, sold and purchased gas at the VTP. Of these, 22 were pure traders, in that they were not users of the transport system (Fig. 3.6). The number of traders grew considerably over the year, if we consider that the same figures for 2008 give 61 operators engaging in trading, only 7 of which not users of the transport system.



FIG. 3.6

VTP users  
In 2009

Source: AEEG, from operators' declarations.

Figures 3.7 and 3.8 provide a historical overview of gas transactions at entry points to the national system and at the VTP up to March 2010, in terms of volumes and numbers of transactions<sup>2</sup>. For transactions at the VTP, gas redeliveries (in terms of volumes sold and the number of daily transactions) taking place at the two Italian regasification facilities are recorded separately as "VTP GNL". Although recorded as VTP operations, these redeliveries are not the result of transactions between operators on the secondary market.

In more detail, the "VTP GNL" category has since November 2005 included redeliveries by GNL Italia at the Panigaglia terminal and, since October 2009, those made by Terminale GNL Adriatico at the Porto Viro (Rovigo) terminal. A comparison of thermal years 2007-2008 and 2008-2009 (Fig. 3.9) shows that – as in previous years – the VTP is growing, to the detriment of the other entry points to the national network. While Passo Gries and Tarvisio continue to hold a significant share, that of the VTP has been growing constantly over time. Indeed, between the two thermal

years under consideration, it increased by 21%.

Once again, in the early months of thermal year 2009-2010, up to March 2010, gas transactions at the VTP accounted for 73% of the total in volume terms. In the thermal year that has just ended, the entry points at Gorizia, Panigaglia, Mazara and Gela also had a small but significant share, something that had not occurred since 2005.

More in general, it should be underlined that the decline seen in recent years in volumes at entry points is certainly a result of the growth and standardisation of the VTP. In part, however, it can be explained by the fact that in the calculations on which the charts are based only commercial transactions are considered (i.e., those conducted on the Italian side of the border). Many transactions, however, while taking place at the entry points, are classified as customs operations as they occur on the "foreign" side of the border.

<sup>2</sup> To ensure that the transactions at the VTP are comparable with those at the entry points indicated, for the VTP the average number of daily transactions for each month is considered along with the total volumes traded.

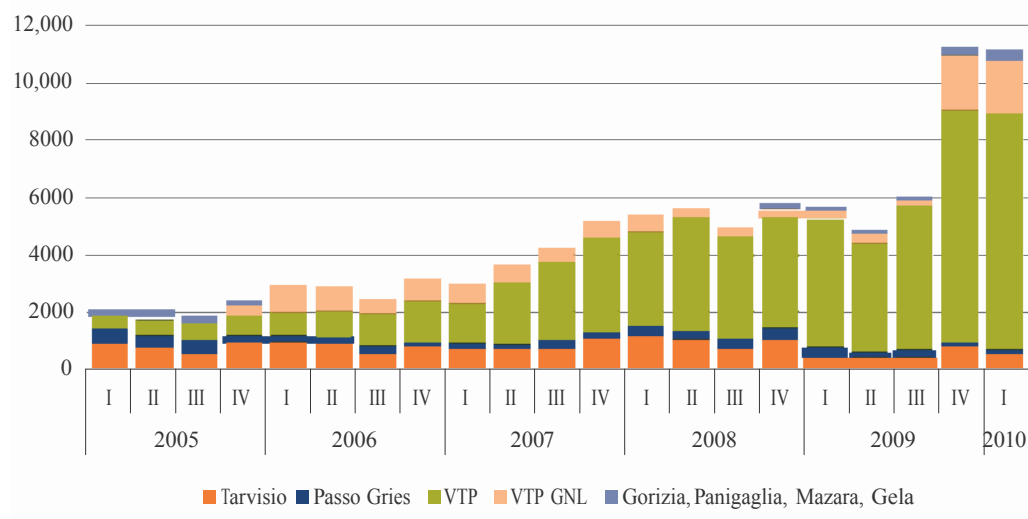


FIG. 3.7

**Volumes of transactions at entry points to the national network**

M(m³) standard from 38.1 MJ; completed transactions refer to gas injected to the network by the user making the sale

Source: AEEG, from data provided by Snam Rete Gas.

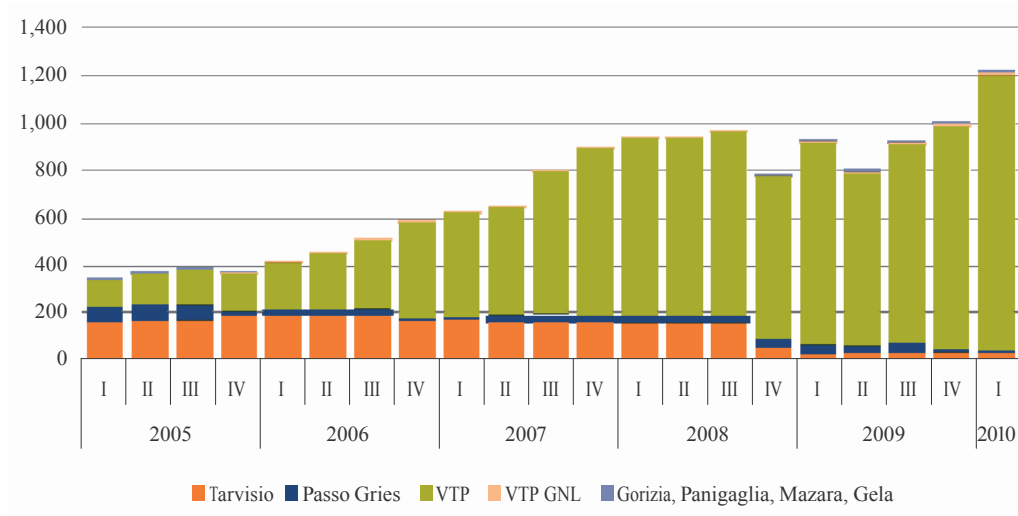


FIG. 3.8

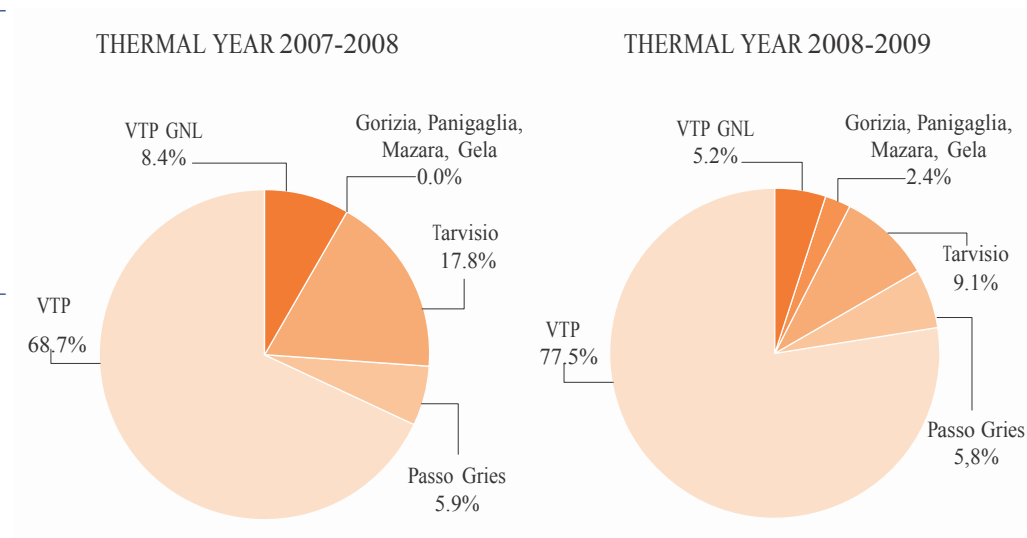
**Number of transactions at entry points to the national network**

Source: AEEG, from data provided by Snam Rete Gas.

FIG. 3.9

**Breakdown of volumes traded/sold at entry points to the national network interconnected with neighbouring countries and VTP**

Comparison of thermal years 2007-2008 and 2008-2009



Source: AEEG, from data provided by Snam Rete Gas.

## Retail Market

As this Report went to press, the respondents to the Authority's annual survey on the electricity and gas sectors included 295 operators who had declared in its register of operators that they engaged in gas sales in 2009 and who were also included in the Ministry for Economic Development's list of authorised retailers.

At 14 July 2009, the Ministry's list included 396 companies; the discrepancy in numbers can be explained by the fact that some of the companies who apply to the Ministry for authorisation to sell gas then remain inactive. The total volume of gas sold to final customers, calculated from the responses to the Authority's survey, appears to be in line with (indeed is higher than) the provisional data published by the Ministry.

Based on the initial, preliminary survey results, sales to the retail market in 2009 totalled 66.55 G(m<sup>3</sup>). Of these, 43.51 G(m<sup>3</sup>) were supplied by wholesalers and 23.05 G(m<sup>3</sup>) by "pure sellers". If we add 12.49 G(m<sup>3</sup>) of self-consumption (gas consumed directly in operators' electricity power stations), then overall consumption in Italy was 79.04 G(m<sup>3</sup>). This figure is higher than, but not too dissimilar to, the 78.05 G(m<sup>3</sup>) published by the Ministry for Economic Development.

TAB. 3.24

OPERATORS <sup>(A)</sup>	2002	2003	2004	2005	2006	2007	2008	2009
<b>NUMERO</b>	<b>504</b>	<b>432</b>	<b>353</b>	<b>258</b>	<b>226</b>	<b>238</b>	<b>216</b>	<b>215</b>
Large	2	5	4	4	4	4	6	4
Medium	42	40	37	38	39	33	29	29
Small	222	176	149	100	107	105	98	101
Very small	237	211	163	116	76	96	83	81
<b>VOLUME SOLD G(m<sup>3</sup>)</b>	<b>26.6</b>	<b>33.0</b>	<b>31.4</b>	<b>24.5</b>	<b>24.1</b>	<b>21.9</b>	<b>27.1</b>	<b>23.1</b>
Large	7.5	15.8	14.6	8.5	8.3	9.1	15.3	10.2
Large	11.2	11.1	11.6	11.5	11.3	8.4	7.5	8.7
Small	6.8	5.2	4.6	4.2	4.2	4.0	4.0	3.9
Very small	1.0	0.8	0.7	0.3	0.3	0.4	0.3	0.3
<b>AVERAGE UNIT VOLUME M(m<sup>3</sup>)</b>	<b>53</b>	<b>76</b>	<b>89</b>	<b>95</b>	<b>107</b>	<b>90</b>	<b>124</b>	<b>108</b>
Large	3,756	3,169	3,640	2,135	2,076	2,287	2,542	2,557
Large	267	279	313	301	290	254	260	299
Small	31	30	31	42	39	38	41	39
Very small	4	4	4	3	4	4	4	4

Retailers' activity,  
2002-2009

(A) Large: operators with sales of over 1.000 M(m<sup>3</sup>).

Medium: operators with sales of between 100 and 1.000 M(m<sup>3</sup>).

Small: operators with sales of between 10 and 100 M(m<sup>3</sup>).

Very small: operators with sales of less than 10 M(m<sup>3</sup>).

Source: AEEG, from operators' declarations.

In 2009 the number of operators that could be classified as "pure sellers" (i.e., for which at least 95% of sales (in volume terms) were to final customers) remained essentially unchanged with respect to 2008 (Tab. 3.24). The total quantities sold decreased, however, from 27.1 to 23.1 G(m<sup>3</sup>), resulting in a fall in the average unit volume of sales by operators taken overall. This stability in the total number of operators conceals a redistribution within the categories considered. In the large and very small categories the number of operators declined (by 2 units each), in the medium-sized category it was unchanged and in the small-operator category it rose by 3 units.

The 15% reduction in total volumes sold was reflected pretty faithfully in sellers' categories. Those most affected were large (down 33%) and very small operators (down 9%). Sales by medium-sized operators, on the other hand, grew by 15%. The result was an increase in average unit volumes of +0.6% for large operators, an even higher increase for medium-sized operators (15%) and reductions (of 4% and 6.5% respectively) for small and very small operators.

Procurement by operators classed as sellers is based exclusively on purchases from other national retailers (from

which they obtain 96% of the gas they re-sell) and at the VTP (from which they purchase 3% of the gas available to them). More specifically, small and very small operators purchase, on average, 15% of the gas they re-sell at the VTP. As regards use, most of the gas is naturally sold to final customers; on average, however, 0.4% of the available gas is for self-consumption and 0.3% is re-sold on the wholesale market.

Table 3.25 shows detailed figures for the 19 "pure" sales companies (the same number as in 2008) whose sales to end-customers exceeded 200 M(m<sup>3</sup>) in 2009. This excludes the companies already listed in table 3.23 which, although selling higher quantities on the final market than the threshold indicated, were classified as wholesalers and as such are analysed in the section on the wholesale market.

As with the table containing wholesalers' data, the table for retailers shows the average price applied by these companies in the two markets.

The price charged in the wholesale market is 3.5 c€/m<sup>3</sup> higher than that charged by wholesalers (33.22 c€/m<sup>3</sup> compared with 29.72 c€/m<sup>3</sup>); the average price offered to end-customers is, as was to be expected, considerably

higher (41.12 c€/m<sup>3</sup> against 34.30 c€/m<sup>3</sup>), given the strong impact of customers connected to the distribution networks.

The price offered by “pure” sellers includes distribution costs, normally not included in the price applied by wholesalers since they mainly sell to customers directly connected to the transport network. Moreover, pure sellers focus more, in relative terms, on the mass market (in other words, they have higher numbers of customers whose consumption levels, however, tend to be low). In contrast,

wholesalers’ customers are mainly large industrial/thermoelectric consumers who are able to obtain lower prices.

To calculate market shares and the degree of concentration in the retail market correctly, however, we cannot ignore operations by wholesalers who, as we have seen, also offer gas to consumers. We therefore need to eliminate the distinction between wholesalers and pure retailers and analyse the amounts sold by all companies, taking corporate groups into consideration (Tab. 3.26).

TAB. 3.25

**Sales to final market  
by principal  
sellers in 2009**

M(m<sup>3</sup>)

COMPANY	SALES TO		
	TO WSALERS & SELLERS	FINAL CUSTOMERS	TOTAL
Enel Energia	0	5,549	5,549
Hera Comm	0	2,002	2,002
Edison Energia	0	1,512	1,512
E.On Italia Power & Fuel	0	1,164	1,164
Enia Energia	7	989	996
A2A Energia	11	959	969
Toscana Energia Clienti	0	809	810
Estra Energie	23	666	689
Estenergy	0	407	407
Gas Plus Vendite	5	377	383
Agsm Energia	0	360	360
Erogasmet Vendita – Vivigas	1	337	338
Gelsia Energia	1	299	300
Sgr Servizi	0	298	298
Enercom	0	262	262
Gas Natural Vendita Italia	0	262	262
Prometeo	1	227	228
Sinergas	0	225	225
Bluenergy Group	0	202	202
Others	24	6,141	6,165
<b>TOTAL</b>	<b>72</b>	<b>23,048</b>	<b>23,121</b>
<i>Average price (c€/m<sup>3</sup>)</i>	<i>33.22</i>	<i>41.12</i>	<i>41.09</i>

Source: AEEG, from operators’ declarations.

The retail market remains very concentrated, with the first 3 groups covering 54.5% (last year the figure was as high as 61.5%). While the degree of concentration has been lessening each year, it still remains high, even if we extend our observation to the first 5 groups: it fell from 70.7% in 2008 to 59.8% in 2009, as a result of the reduction in the incidence of large operators and the improved performance of small-medium ones. At 31.9%, ENI was again the dominant group, albeit with a share that has been decreasing over time. The second operator, the ENEL group, follows at some distance, with 14.9%. Retail sales by both

these groups fell considerably in 2009 (by 21% and 22% respectively).

Thanks to a notable increase in sales (up 50%), in 2009 the Edison group regained the third place it had lost in 2008. By contrast, the volumes sold by the E.On group, which in 2008 came third, fell by 10% in 2009. Following not too far behind the first five operators come Energie Investimenti, A2A and Hera. In general, another sign of market concentration is the increasingly small gap between the market shares held by the first two operators and those of the group of 4 or 5 companies following them.

TAB. 3.26

**First 20 groups for sales to final market in 2009**Volumes, M(m<sup>3</sup>)

GROUP	VOLUME	% SHARE
Eni	21,202	31.9%
Enel	9,916	14.9%
Edison	5,158	7.7%
E.On	3,534	5.3%
Energie Investimenti	3,455	5.2%
A2A	2,661	4.0%
Hera	2,281	3.4%
Iride	1,238	1.9%
Sorgenia	1,069	1.6%
Enia	989	1.5%
Ascopiave	966	1.5%
Royal Dutch Shell	709	1.1%
Estra Energie	666	1.0%
Electrabel/Acea	482	0.7%
Linea Group Holding	445	0.7%
Acegas-Aps	407	0.6%
Utilità Progetti e Sviluppo	378	0.6%
Gas Plus	377	0.6%
Erogasmet	360	0.5%
Agsm Verona	360	0.5%
Others	9,899	14.9%
<b>TOTAL</b>	<b>66,555</b>	<b>100.0%</b>

Source: AEEG, from operators' declarations.

An initial evaluation of the data collected in the annual survey shows that in 2009 the natural gas retail market included nearly 21 million customers. 93% are residential, 6% belong to the commercial and services sectors, 1% to industry and less than 1% to thermoelectric generation. In terms of volume (Tab. 3.27), the proportions naturally tend to reverse. Including self-consumption, the residential sector absorbed 26% of total gas consumption, or 20.7 G(m<sup>3</sup>); the commercial sector 7.5%, or 5.9 G(m<sup>3</sup>); industry 24.2%, or 19.1 G(m<sup>3</sup>); and power generation 42%, the equivalent of 33.3 G(m<sup>3</sup>).

As we move from the residential sector to gas-intensive sectors and those where gas provides an input to the production process, the proportion of volumes purchased on the free market increases: from 10.4% in the domestic sector to 63.6% in commerce and services, 97% in industry and 63% in thermoelectric (a figure influenced by self-consumption).

The share of consumption satisfied on the free market also appears to have grown in all sectors except for commerce and services. In 2008 the figures were 9% for residential, 65.6% for commerce, 96% for industry and 60.1% for power generation.

TAB. 3.27

**Final market by consumption sector in 2009**M(m<sup>3</sup>) and percentage values

	DOMESTIC	COMMERCE AND SERVICES	INDUSTRY	ELECTRICITY GENERATION	TOTAL
<b>VOLUMES</b>					
Self-consumption	60	76	51	12,299	12,486
Free market	2,160	3,749	18,525	20,999	45,434
Protected market	18,520	2,065	531	5	21,121
<b>TOTAL</b>	<b>20,740</b>	<b>5,890</b>	<b>19,107</b>	<b>33,303</b>	<b>79,041</b>
<b>% SHARE</b>					
Self-consumption	0.3%	1.3%	0.3%	36.9%	15.8%
Free market	10.4%	63.6%	97.0%	63.1%	57.5%
Protected market	89.3%	35.1%	2.8%	0.0%	26.7%
<b>TOTAL</b>	<b>26.2%</b>	<b>7.5%</b>	<b>24.2%</b>	<b>42.1%</b>	<b>100.0%</b>

Source: AEEG, from operators' declarations.

TAB. 3.28

**Final market by type and size of customer in 2009**M(m<sup>3</sup>)

SECTOR	BREAKDOWN OF CUSTOMERS BY ANNUAL CONSUMPTION BAND (m <sup>3</sup> )					TOTAL
	< 5,000	5,000-200,000	200,000-2,000,000	2,000,000-20,000,000	> 20,000,000	
Domestic	15,854	2,532	130	5	0	18,520
Commerce and	665	1,342	51	6	0	2,065
Industry	52	425	32	22	0	531
Electricity	0	1	4	0	0	5
<b>TOTAL VOLUMES SOLD AT PROTECTED</b>	<b>16,571</b>	<b>4,300</b>	<b>217</b>	<b>32</b>	<b>0</b>	<b>21,121</b>
Domestic	926	891	312	31	0	2,160
Commerce and	531	1,794	927	497	0	3,749
Industry	116	1,947	4,482	6,556	5,425	18,525
Electricity	0	10	131	1,004	19,854	20,999
<b>TOTAL VOLUMES SOLD AT MARKET PRICES</b>	<b>1,574</b>	<b>4,642</b>	<b>5,851</b>	<b>8,088</b>	<b>25,278</b>	<b>45,434</b>
<b>TOTAL</b>	<b>18,144</b>	<b>8,943</b>	<b>6,069</b>	<b>8,121</b>	<b>25,278</b>	<b>66,555</b>

Source: AEEG, from operators' declarations.

The data on retail sales by sector, consumption class and customer size (Tab. 3.28) confirm that as consumption grows customers tend to move to the free market.

Some customers with consumption greater than 200,000 m<sup>3</sup> are showing up in the protected consumption categories (as will be seen more clearly in the following section on prices in the free market). This is because these categories include consumption by customers who, although having the option of switching supplier, have not yet done so and have opted to stay with the contractual conditions protected by the Authority.

The number of such customers and the volumes of gas purchased by them are relatively low and shrinking over time. In 2009, 115 M(m<sup>3</sup>) were sold under such terms to non-residential customers with consumption above the 200,000 m<sup>3</sup> threshold. This compares with over 20 G(m<sup>3</sup>) sold under protected terms to customers with consumption of less than 200,000 m<sup>3</sup>.

As happened last year, the annual survey of natural gas transport system operators and distributors once again included questions on supplier switching, i.e. the number of

customers<sup>3</sup> changing supplier in the course of calendar year 2009. The questions were framed in such a way as to reflect the European Commission's definition.

The questionnaire on switching already submitted to operators in 2008 was repeated. Switching refers to the number of changes of supplier in a given period of time (one year) and includes:

- Re-switching: when a customer changes supplier for the second (or subsequent) time, including in the same time period
- Switch-backs: when a customer returns to his or her first or previous supplier
- Switching to a competitor of the incumbent and vice versa.

In cases where a customer changes area of residence the switch is recorded only if he or she chooses a supplier other than the incumbent in their new area. Moreover, a change in the economic terms applied by the same supplier is not the same as a switch. This applies even in cases where a new contractual formula is chosen or the customer changes from a protected to a non-protected price offered by the same supplier or one of its subsidiaries.

2009 saw the introduction of a distinction between customers, based on the consumption sectors envisaged by the Consolidated Text for the Gas Retail Sector (adopted through Resolution ARG/gas 64/09 of 28 May 2009). The

customer categories now applied are: residential, central heating with domestic use (which may be protected as long as they consume less than 200,000 m<sup>3</sup> per year) and other uses, including all those customers not included in the first two categories and who from October 2011 (at the latest) must transfer to the free market. It is important to note that the methodology now adopted means that the data presented in this section are not comparable with those published by the Authority on other occasions.

The survey revealed that 2% of customers changed their gas supplier in 2009, a figure that corresponds to 33.6% in terms of volumes of gas consumed by customers making the change. Table 3.29 shows this information in greater detail, with customers broken down by sector and annual consumption. Residential customers proved to be more prudent in switching to the free market: only 1.8% (2.4% in volume terms) chose a new supplier in 2009.

Customers using gas for central heating with domestic and other uses were more dynamic in their choices. The percentage of customers switching supplier clearly increases with customer size, because the bigger the volume of gas consumed, the higher the cost of buying the gas. This translated into first, an increased interest in saving, generally the first reason for changing supplier, and second, better knowledge of the sector by customers able to make informed choices.

CUSTOMERS BY SECTOR AND ANNUAL CONSUMPTION BAND	CUSTOM	VOLUMES
Domestic	1.8%	2.4%
Condominium, domestic	3.5%	7.2%
Other uses	4.1%	45.3%
of which:		
– over 5,000 m <sup>3</sup>	3.3%	5.0%
– 5,000-200,000 m <sup>3</sup>	7.3%	10.5%
– 200,000-2,000,000 m <sup>3</sup>	19.1%	22.2%
– 2,000,000-20,000,000 m <sup>3</sup>	34.4%	37.5%
– over 20,000,000 m <sup>3</sup>	52.6%	58.9%
<b>TOTAL</b>	<b>2.0%</b>	<b>33.6%</b>

Source: AEEG, from operators' declarations.

TAB. 3.29

#### Consumer switching rates in 2009

<sup>3</sup> For ease of writing, in this text we speak generically of customers. It should be noted, however, that the term refers to the number of redelivery points in the case of transport users and of metering units in the case of distribution users.



TAB. 3.30

**Final market by sector and region of consumption in 2009**  
M(m<sup>3</sup>)

REGION	OPERATORS	DOMESTIC	COMMERCE & SERVICES	INDUSTRY	ELECTRICITY GENERATION	TOTAL
Piedmont	97	2,362	659	2,553	2,630	8,203
Val d'Aosta	14	25	18	43	0	86
Lombardy	144	5,595	1,365	4,148	4,233	15,341
Trentino Alto Adige	43	309	168	377	65	919
Veneto	84	2,217	720	1,965	293	5,194
Friuli Venezia Giulia	47	490	177	640	159	1,466
Liguria	43	679	90	281	598	1,648
Emilia Romagna	82	2,338	1,022	3,185	2,985	9,530
Tuscany	59	1,372	443	1,265	1,292	4,373
Umbria	34	331	101	391	219	1,042
Marche	51	550	215	456	219	1,438
Lazio	64	1,507	276	788	1,629	4,200
Abruzzo	64	444	99	549	737	1,829
Molise	23	76	21	69	1,039	1,205
Campania	59	625	146	599	1,542	2,911
Puglia	39	889	140	608	201	1,839
Basilicata	29	162	29	139	148	478
Calabria	33	210	35	64	712	1,021
Sicily	36	492	88	948	2,303	3,830
<b>TOTAL</b>	–	<b>20,672</b>	<b>5,811</b>	<b>19,068</b>	<b>21,004</b>	<b>66,555</b>
NORTH	–	14,015	4,218	13,191	10,963	42,387
CENTRE	–	4,279	1,155	3,519	5,135	14,088
SOUTH & ISLANDS	–	2,378	438	2,358	4,906	10,080

Source: AEEG, from operators' declarations.

A regional breakdown of gas sales to the final market is illustrated in table 3.30. In view of its degree of methanisation, climatic conditions and more intensive industrial activity, northern Italy sees the highest consumption in all sectors considered. Indeed, it is in this area that nearly two-thirds of the total volumes sold in Italy, or 42.4 G(m<sup>3</sup>), are purchased. Just under a quarter of consumption, 14 G(m<sup>3</sup>), is located in the central regions and the remaining 15% is sold in the South and Islands (only Sicily, as Sardinia is not yet methanised).

As regards the domestic sector, in 2009 about 14 G(m<sup>3</sup>), or 68% of total Italian household consumption, were sold in northern Italy. The Centre absorbed 4.3 G(m<sup>3</sup>), or 21% of domestic consumption, while 2.4 G(m<sup>3</sup>) were sold in the South and Islands. The region seeing the highest consumption was Lombardy, which alone accounted for 27% of Italian household consumption. Another two important regions were Piedmont and Emilia Romagna: both purchased just over 11% of the gas sold nationally. Next in line come Veneto and Lazio.

A similar regional order of importance can be observed in

the various consumption sectors of the non-domestic market. Lombardy absorbed the highest quantities of gas: 23.5% in commerce and services, 21.8% in industry and 20.2% in electricity generation. Next come:

- in commerce: Emilia Romagna, Veneto and Piedmont, with 17.6%, 12.4% and 11.3% respectively
- in industry: Emilia Romagna, Piedmont and Veneto, with 16.7%, 13.4% and 10.3% respectively
- in electricity generation: Emilia Romagna, Piedmont and Sicily, with 14.2%, 12.5% and 11% respectively.

Not surprisingly, considering the high purchase levels, Lombardy is also the region with the highest number – 144 – of sales companies in operation. We should specify here that in the column in table 3.30 showing the number of sales operators, each company is counted once for each region in which it operates. The total for the column is therefore meaningless. A high number of retailers is also found in Piedmont, with 97, in Veneto (84), Emilia Romagna (82) and Lazio (64). Lastly, it should be noted that with respect to 2008 the number of operators increased in nearly all of the Italian regions.

## Supply of LPG and other types of gas over local networks

A specific section of the Authority's annual survey of the regulated sectors is devoted to the supply of gases other than natural gas (hereafter, GONG) distributed over secondary networks. As always, GONG distributors were asked to provide preliminary data on their activity in 2009 and to confirm or amend the provisional data provided in 2008 which, given these up-dates, can now be considered definitive. For this reason, the data for 2008, briefly illustrated in the tables below, may be different from those published in last year's *Annual Report*.

A total of 101 operators responded to the survey, 82 of which carrying out integrated distribution and sales activity (something still possible in this segment but not for natural gas).

Unlike natural gas, in 2009 GONG do not seem to have suffered greatly from the economic crisis. Overall, the 101 operators responding to the survey distributed 32 M(m<sup>3</sup>) in 2008 and 35 M(m<sup>3</sup>) in 2009.

The number of customers served (metering units) also rose:

from 129,095 units in 2008 to 141,412 in 2009 (Tab. 3.31). Over these two years average unit consumption remained essentially stable, at around 250 m<sup>3</sup>, although marked differences were seen between the different types of gas. Average unit consumption of LNG, at 200 m<sup>3</sup>, was the lowest, if compared with the 400 m<sup>3</sup> for propane air and the 1,600 m<sup>3</sup> for other types of gas.

Of the GONG distributed over the network, the most widespread is liquefied petroleum gas (LPG), which covers about 65% of total quantities delivered and 79% of customers served. The remaining customers are served through networks fed by propane air, which accounts for one third of the volumes distributed. A marginal share (2%) of the total gas distributed comes from other types of gas.

TYPE OF GAS	2008		2009		% CHANGE 2009-2008	
	VOLUME DELIVERED	CUSTOMERS	VOLUME DELIVERED	CUSTOMERS	VOLUME DELIVERED	CUSTOMERS
GPL	20.8	101,907	22.6	112,411	8.5	10.3
Propane air	10.6	26,789	12.1	28,598	13.2	6.8
Other gases	0.6	399	0.7	403	10.7	1.0
<b>TOTAL</b>	<b>32.1</b>	<b>129,095</b>	<b>35.3</b>	<b>141,412</b>	<b>10.1</b>	<b>9.5</b>

Source: AEEG, from operators' data.

TAB. 3.31

### Network distribution of gases other than natural gas

Volumes in M(m<sup>3</sup>) and number of customers

The regional breakdown of distribution (Tab. 3.32) shows that Sardinia, which is not yet methanised, is, as might be expected, the region with the highest distribution of gases other than natural gas, in terms both of quantities delivered and customers served. Sardinia alone accounts for over one third of the volumes distributed to satisfy demand from a similarly large share of total customers (28%). However, the service remains concentrated in a small number of municipalities: 77 out of 377 throughout the region

As in previous years, the second region where network distribution of GONG reaches significant levels is Tuscany, where it accounts for 15% of the volumes distributed and 17% of the customers served. The service reaches just over half of the municipalities in this region (152 out of 287).

The GONG distribution service is also important in Lombardy, where its share of total volumes distributed at the national level (8%) is higher than that for customers served (6%). This is because Lombardy has various business customers using the network distribution service for GONG and whose average consumption – unlike that of domestic customers – is high.

The same can be seen in other regions too, most notably Friuli Venezia Giulia, but also in Trentino Alto Adige. In these regions, much of the territory is mountainous, making it easier to reach with fuels like LPG, which is less difficult to transport than natural gas. Significant amounts of networked GONG are also used in Emilia Romagna, Liguria, Piedmont and Lazio.

TAB. 3.32

**Regional distribution by network of gas other than natural gas**

Volumes in M(m<sup>3</sup>) and number of operators, customers and municipalities served

REGION	2008				2009			
	VOLUMES DELIVERED	OPERATORS (A)	CUSTOMERS	MUNICIPALITIES SERVED	VOLUMES DELIVERED	OPERATORS (A)	CUSTOMERS	MUNICIPALITIES SERVED
Val d'Aosta	0.09	3	283	5	0.10	3	324	5
Piedmont	1.82	11	7,322	80	2.27	1	8,091	84
Liguria	2.19	15	10,912	67	2.40	1	11,795	67
Lombardy	2.70	17	7,629	57	2.86	1	8,147	58
Trentino Alto Adige	0.25	3	782	8	0.28	3	914	9
Veneto	0.15	4	774	11	0.18	4	930	12
Friuli Venezia Giulia	1.14	3	1,861	9	1.19	3	1,953	9
Emilia Romagna	2.38	16	9,674	45	2.55	14	10,444	45
Tuscany	5.23	22	23,704	148	5.22	2	24,655	152
Lazio	1.81	14	13,233	47	2.03	1	14,438	51
Marche	0.78	14	3,143	35	0.80	1	3,311	38
Umbria	0.52	10	3,500	31	0.70	1	4,166	36
Abruzzo	0.45	8	3,440	14	0.51	8	4,070	15
Molise	0.04	1	177	1	0.06	2	224	2
Campania	0.67	5	3,316	13	0.70	5	3,376	13
Puglia	0.11	2	389	2	0.22	3	728	3
Basilicata	0.33	3	1,311	5	0.37	3	1,394	5
Calabria	0.44	2	1,999	6	0.26	2	2,030	6
Sicily	0.05	3	227	4	0.06	3	237	4
Sardinia	10.93	8	35,419	74	12.56	8	40,185	77
<b>ITALY</b>	<b>32.09</b>	<b>164</b>	<b>129,095</b>	<b>662</b>	<b>35.32</b>	<b>164</b>	<b>141,412</b>	<b>691</b>

(A) In this column operators are counted once for each region in which they operate

Source: AEEG, from operators' data.

The extent of the networks and their ownership structure are illustrated in table 3.33, which shows that, overall, Italy has just over 4,000 km of currently active networks fuelled by gases other than natural gas. Of these, 3,500 km carry LPG.

A comparison with the data for 2008 highlights a growth of about 200 km. in the length of the network. Most of the

infrastructure belongs to operators. Municipalities hold minority shares, or no shares at all, in much of the country: the average for Italy is barely 5.1%. Ownership shares, however, do not add up to 100%, since in some regions other owners are present: this happens in Sardinia, Puglia and the Marche in particular.

TAB. 3.33

REGION	NETWORK LENGTH			OWNERSHIP (% SHARE)	
	HIGH PRESSURE	MEDIUM PRESSURE	LOW PRESSURE	OPERATOR	
Val d'Aosta	0	9.6	0.0	85.0	15.0
Piedmont	0	179.2	88.5	96.5	3.5
Liguria	0	158.6	80.4	99.4	0.0
Lombardy	0	89.1	107.9	96.9	1.5
Trentino Alto Adige	0	22.2	0.0	100.0	0.0
Veneto	0	25.2	2.6	100.0	0.0
Friuli Venezia Giulia	0	1.2	52.5	80.5	19.5
Emilia Romagna	0	121.3	145.5	98.1	0.0
Tuscany	0.7	258.2	319.9	99.5	0.0
Lazio	0	161.7	190.6	100.0	0.0
Marche	0	36.5	65.0	76.5	18.3
Umbria	0	64.6	80.4	90.5	9.5
Abruzzo	0	68.4	5.4	80.3	19.7
Molise	0	2.3	3.7	100.0	0.0
Campania	0	69.9	49.2	100.0	0.0
Puglia	0	38.4	0.0	58.8	0.0
Basilicata	0	3.6	36.3	100.0	0.0
Calabria	0	60.4	0.0	100.0	0.0
Sicily	0	8.8	0.0	100.0	0.0
Sardinia	7.5	981.2	468.6	62.7	9.3
<b>ITALY</b>	<b>8.3</b>	<b>2,360.4</b>	<b>1,696.5</b>	<b>84.1</b>	<b>5.1</b>

Source: AEEG, from operators' data.

### Length of distribution networks of gas other than natural gas and their ownership breakdown, 2009

Length in km and percentage breakdown of ownership

Taken overall, the distribution of GONG is not very concentrated. In 2009 the first three operators distributed 38.1% of the total volumes delivered, while the first five account for 49.7%. We would need to add up the shares held by the first 15 operators to exceed 70% of total volumes distributed.

As the same shares were also seen in 2008, over the two years market concentration for GONG remained essentially unchanged. In 2009, the first operator was ISGas, with 13.4% of the entire market. The second operator, with 12.4%, was ENI, and the third was Mediterranea Energia Ambiente (Medea), with 12.2%. In 2008 the first two positions were

reversed (Eni 13.7%, ISGas 12.9% and Medea 11.3%), but the relative proportions held by the first three did not change significantly.

Distribution of LPG was even less concentrated: in 2009 the first 3 operators (Liquigas, Eni and Sourcedenergia, in that order), distributed 30.1% of the total; the first five (obtained by adding Carbotrade and IntesaGpl) 39.3%, and the first fifteen, 62.8%. As before, the figures are fairly stable with respect to 2008. In this case, however, ENI lost its lead. In 2008 the first three operators were ENI, with 13.3%, Liquigas, with 12%, and Sourcedenergia with 5.4%.

# Prices and tariffs

## Tariffs for infrastructure use

### Transport and LNG

With resolution ARG/gas 184/09 of 1 December 2009 the Authority approved the criteria for the regulation of the natural gas transport and dispatching service for the third regulatory period, 2010-13. The tariff reform is described in detail in Chapter 3 of Volume 2. It might be useful here to underscore at least three important innovations introduced in the new regulatory period.

The first concerns the use of the calendar year rather than the thermal year as the reference period used to set and apply transport tariffs.

The second, with a view to promoting competition, envisages simplifying the structure of the "exit" tariff zones in order to bring them into line with the geographical areas in which the distribution tariffs apply; confirming the entry-exit tariff model drawn up in the past, therefore, the exit zones from the national network have been reduced from 17 to 6.

The third innovation concerns the definition of provisions governing the tariff criteria for the metering service for natural gas transport for the same regulatory period (2010-13).

The new tariff provisions will be applied in 2011, to enable operators to complete the necessary procedures for the reform of the service. Transitional regulations are to be introduced for 2010. These include a metering fee based on the allowed metering service costs for transport companies only; this would be applied to capacity delivered at redelivery points on the transport network.

The new transport (and metering) tariff levels on the national and regional networks (Tab. 3.34) in force for calendar year 2010 were determined (Resolution ARG/gas 198/09 of 21 December 2009) after the tariff proposals submitted to the Authority by transport companies had been verified in accordance with that same Resolution.

TAB. 3.34

#### Transport, dispatching and metering tariffs for 2010

Unit charges (*commodity*);  
€/S(m<sup>3</sup>)

VARIABLE UNIT CHARGES	
CV	0.003185
CV <sup>P</sup>	0.000397

Unit charges for capacity on the national network,  
€/year/Sm<sup>3</sup>/day

CP <sub>E</sub> – ENTRY POINT CHARGES			
6 interconnection points with foreign import pipelines			
Mazara del Vallo	2.608628	Tarvisio	0.800298
Gela	2.388977	Gorizia	0.580913
Passo Gries	0.398885		
2 interconnection points with regasification facilities			
GNL Panigaglia	0.570155	GNL Porto Viro located at Cavarzere	0.428308
Storage hub			
Stocaggi Stogit/Edison Stocaggio	0.164836		

TAB. 3.34 cont.

CP <sub>E</sub> – CHARGES BY ENTRY POINT				
60 points from main national production fields or from their collection and treatment centres				
Casteggio, Caviaga, Fornovo, Leno, Ovanengo, Piadena Est, Piadena Ovest, Pontetidone, Quarto, Rivolta d'Adda, Romanengo, Soresina, Trecate		0.063343	Casalborsetti, Collalto, Correggio, Medicina, Montenevoso, Muzza, Ravenna Mare, Ravenna Mare Lido Adriano, San Potito, Santerno, Spilamberto B.P., Vittorio V. (S. Antonio)	0.189197
Calderasi/Montevedese, Metaponto, Monte Alpi, Pisticci A.P./B.P., Sinni (Policoro)		0.994029	Fonte Filippo, Larino, Ortona, Poggiofiorito, Reggente, Santo Stefano Mare	0.378352
Rubicone		0.210298	Falconara, Fano	0.325001
Carassai, Cellino, Grottamare, Montecosaro, Pineto, Rapagnano, San Giorgio Mare, Settefinestre/Passatempo		0.334692	Candela, Masseria Spavento, Roseto/Torrente Vulgano, Torrente Tona	0.472553
Crotone, Hera Lacinia		1.436443	Bronte, Chiaramonte Gulfi, Comiso, Gagliano,	2.075234
CP <sub>T</sub> – CHARGES BY EXIT POINT				
5 interconnection points with exports				
Bizzarone		2.507868	Passo Gries	1.611922
Gorizia		1.125706	Tarvisio	0.367222
Rep. San Marino		1.691755		
Storage hub				
Stoccaggi Stogit/Edison Stoccaggio		0.358113		
6 withdrawal zones distributed countrywide				
North-West	A	1.133899	Centeo-South east	D 0.795980
North-East	B	0.897284	Centre-South west	E 0.660669
Central	C	0.897284	South	F 0.559365

**Transport, dispatching and metering charges for 2010**

 Unit charges (*commodity*);  
 €/S(m<sup>3</sup>)

 Unit charges for capacity on the national network;  
 €/year/Sm<sup>3</sup>/day

CR <sub>r</sub>	
Unit charge for capacity on the regional network	1.235253

CM <sup>T</sup>	
Transitional charge for metering service	0.057534

 Unit charge for capacity on the regional network;  
 €/year/Sm<sup>3</sup>/day

 Transitional charge for metering service  
 €/year/Sm<sup>3</sup>/day

For the LNG regasification service, the current thermal year (2009-10) is year two of the third regulatory period as defined by Resolution ARG/gas 92/08 of 7 July 2008. Under this provision, by 31 May each year regasification companies are required to send the Authority their tariff proposals for the following thermal year. After examining these proposals, in Resolution ARG/gas 102/09 of 28 July 2009 the Authority set the regasification service tariff for 2009-10 for GNL Italia and Terminale GNL Adriatico (Tab. 3.35).

With the start of operations at the new LNG terminal at Porto Viro (Rovigo) it became necessary to define a tariff for maritime towing and mooring services. Resolution ARG/gas 24/10 of 25 February 2010 set this at 151,175.44 €/mooring, until and unless the Ministry for Infrastructure and Transport decides otherwise.

TAB. 3.35

**Regasification tariff for the use of the Panigaglia and Rovigo terminals for thermal year 2009-2010**

CHARGE	PANIGAGLIA		ROVIGO	
	CONTINUOUS SERVICE <sup>(A)</sup>	SPOT SERVICE <sup>(B)</sup>	CONTINUOUS SERVICE (A)	SPOT SERVICE (B)
$C_{qs}$ – Unit usage charge linked to contractual quantities of LNG ((€/m <sup>3</sup> liquid)	4.897107	3.427975	27.893550	19.525485
$C_{na}$ – Unit per mooring (€/mooring)	32,251.967106	32,251.967106	498,603.995319	498,603.995319
Variable unit charges for the energy associated with the volumes regassified (€/GJ)				
CVL	0.027250	0.027250	0.159827	0.159827
CVLP	0.001291	0.001291	-	-
Share covering consumption and losses, paid by terminal users by cubic metre delivered	1.7%	1.7%	1.5%	1.5%

(A) The continuous regasification service envisages monthly LNG deliveries

(B) The spot regasification service refers to a single unloading operation; the service is delivered on a date set in advance by the regasification company in accordance with the monthly delivery schedule.

### Storage

The storage tariff criteria for the second regulatory period (1 April 2006 – 31 March 2010) were determined with resolution 50/06 of 3 March 2006. The regulatory period has therefore ended.

In June 2009 the Authority opened a procedure to reform the tariff criteria to be applied in the third regulatory period, 2010-14, and submitted it to Regulatory Impact Analysis (RIA) (for a detailed description, see Chapter 3 of Volume 2).

In the meantime, with resolution ARG/gas 21/10 of 23 February 2010 the Authority extended the tariff proposals approved for thermal year 2009-10 to 31 December 2010. The single national storage tariffs currently in force (Tab. 3.36) were established on 30 March 2009, with ARG/gas 30/09, after checking the data submitted by the two national companies operating in this stage of the supply chain (Stoccaggi Gas Italia (Stogit) and Edison Stoccaggio).

TAB. 3.36

**Single storage charges included in the tariff for thermal year 2008-2009, extended until 31 December 2010**

CHARGES	UNIT OF MEASUREMENT	VALUE
Unit charge – space $f_s$	€/GJ/year	0.182304
Unit charge – injection capacity $f_{pi}$	€/GJ/day	9.011258
Unit charge – delivery capacity $f_{pe}$	€/GJ/day	11.989093
Unit charge – movement of gas $C_{vs}$	€/GJ	0.105084
Unit charge – strategic storage $f_D$	€/GJ/year	0.169729
Component $\pi$	€/GJ	-0.019711

### Distribution

The rules on Tariff Regulation for the gas distribution and metering services for regulatory period 2009-12 (RTDG),

approved with Resolution ARG/gas 159/08 of 6 November 2008, entered into force on 1 January 2009. These provisions

apply for regulatory period 1 January 2009 – 31 December 2012.

In the course of 2009 the Authority approved the first provisions implementing the reform. More specifically, Resolution ARG/gas 79/09 of 30 June 2009 definitively confirmed the distribution tariffs originally approved for thermal year 2007-08. These had continued to be applied as a payment on account in the first half of 2009.

The Authority also approved the obligatory tariffs for the distribution, metering and marketing service for 1 July – 31 December 2009.

The tariff levels for 2010 were set through Resolution ARG/gas 206/09 of 29 December 2009.

Under the RTDG, distribution companies are obliged to offer counterparties an obligatory tariff, differentiated by tariff zone. The six tariff zones are:

- North-West zone, which includes Val d'Aosta, Piedmont and Liguria;
- North-East zone, which includes Lombardy, Trentino Alto Adige, Veneto, Friuli Venezia Giulia and Emilia Romagna;
- Central zone, which includes Tuscany, Umbria and Marche;
- Centre-South East, which includes Abruzzo, Molise, Puglia and Basilicata;

- Centre-South West, which includes Lazio and Campania;
- South, which includes Calabria and Sicily

The distribution and metering tariff consists of a fixed component  $\tau_1$  (Tab. 3.37) which can be broken down into three elements for distribution ( $\tau_1$  dis), metering ( $\tau_1$  mis) and marketing ( $\tau_1$  cot); and a variable component  $\tau_3$  (Tab. 3.38), differentiated by consumption band. The tariff also includes additional components which vary quarterly, such as:

- UG1, which covers any imbalance in the equalisation systems and any adjustment payments;
- UG2, which offsets retail sales marketing costs. This component is broken down into a fixed element and a variable element differentiated by the same consumption bands as the variable distribution component;
- GS, which covers the tariff compensation system for economically disadvantaged customers;
- RE, which covers the costs borne by the metering fund, energy saving initiatives and initiatives to develop renewable sources in the natural gas sector;
- RS, which covers the costs borne by the Gas Service Quality Account.

COMPONENTS	GEOGRAPHICAL AREA					
	NORTH-WEST	NORTH-EAST	CENTRAL	CENTRE-SOUTH EAST	CENTRE-SOUTH WEST	SOUTHERN
$\tau_1$ (dis)	44,00	38,00	38,00	34,00	41,00	48,00
$\tau_1$ (mis)	12,26	10,88	10,56	10,06	11,13	12,34
$\tau_1$ (cot)	0,78	0,78	0,78	0,78	0,78	0,78

TAB. 3.37

**Breakdown of fixed portion  $\tau_1$  of the obligatory distribution tariff for 2010**

€/redelivery point/year

CONSUMPTION BAND	GEOGRAPHICAL AREA					
	NORTH-WEST	NORTH-EAST	CENTRAL	CENTRE-SOUTH EAST	CENTRE-SOUTH WEST	SOUTHERN
0-120	0	0	0	0	0	0
121-480	7.6533	6.0846	8.0575	10.8495	13.5107	19.4747
481-1,560	7.0049	5.5691	7.3748	9.9303	12.3660	17.8247
1,561-5,000	7.0049	5.5691	7.3748	9.9303	12.3660	17.8247
5,001-80,000	5.2365	4.1632	5.5130	7.4233	9.2441	13.3248
80,001-200,000	2.6526	2.1089	2.7927	3.7604	4.6828	6.7499
200,000-1,000,000	1.3754	1.0935	1.4481	1.9498	2.4281	3.4999
Over 1,000,000	0.3832	0.3046	0.4034	0.5432	0.6764	0.9750

TAB. 3.38

**Breakdown of variable portion  $\tau_3$  of the obligatory distribution tariff for 2010**

c€/m<sup>3</sup>; consumption bands in m<sup>3</sup>/year



---

## Prices on the free market

---

A provisional analysis of the data collected in the Authority's 2009 survey shows that the average price of gas net of taxes and weighted by volumes sold, as applied by retailers or wholesalers operating in the final market, was 36.58 c€/m<sup>3</sup> (Tab. 3.39). This compares with 39.25 c€/m<sup>3</sup> in 2008.

Overall, therefore, gas prices in Italy fell by 6.8%, benefiting – with the usual indexation delays – from the collapse in the oil price in 2008.

Customers on the protected market paid an average of 48.85 c€/m<sup>3</sup> for their gas, compared with 30.88 c€/m<sup>3</sup> for free market customers, giving a price differential of just under 18 c€/m<sup>3</sup>. The price on the free market was lower than in 2008 (by 14%), while that on the free market was 3.1% higher. A comparison with the figures for 2008 shows, therefore, that the price gap between the two markets widened and returned to its 2007 levels.

The size of the price differential between the two markets and the different trends they follow over the period under consideration can be attributed to average customer size. Which, as seen in the section on the retail market (see above), increases in the free market.

This translates into a more flexible price system in which the indexation formulae respond more rapidly and more closely to changes in international fuel prices. The protection mechanism created by the Authority, on the other hand, is linked to variations in a very long moving average of a basket of prices. It is, therefore, able to exert some control on price increases in periods of strong growth in raw material prices but tends to respond more slowly in periods when these are falling.

An analysis of the results by customer size confirms that, as in recent years, customers in the protected market pay

higher prices than those in the liberalised market with similar consumption profiles. However, as customer size grows in terms of annual consumption, the tendency is once again for protected customers to see a more marked price reduction.

Smaller customers on the protected market, with consumption below 5,000 m<sup>3</sup>/year, paid on average 49.49 c€/m<sup>3</sup>. This is close to the average national price calculated for a residential customer consuming 2,700 m<sup>3</sup>/year, which in 2009 was 45.49c/m<sup>3</sup> (equal to 73.02 c€/m<sup>3</sup> including taxes).

Again, an analysis of customers in the protected market shows that prices there fall appreciably with increasing consumption. The price differential between small and large customers increased from a minimum of 2.89 cents to 14.88 cents for the 2,000,000-20,000,000 m<sup>3</sup> consumption band. The highest consumption category, with more than 20 M(m<sup>3</sup>), is of course not represented in the protected market.

Volumes and prices corresponding to consumption of over 200,000 m<sup>3</sup> can be found in the protected market. This is because some customers who are entitled to change supplier have not yet made the switch and have retained the contractual conditions protected by the Authority. However, as mentioned above (see retail market section), the number of such customers and the amount of gas they purchase are relatively low, and shrinking over time. Moreover, under the rules laid down by the Consolidated Text for

the Gas Retail Sector, non-residential customers (and those using gas for central heating with domestic use but which consume over 200,000 m<sup>3</sup> per year) are required, by October 2011 at the latest, to transfer to the free market. In the free market, customer size has a greater impact on price: smaller customers pay 15.91 c€/m<sup>3</sup> more than large ones, who obtain their gas at an average

27.89 c€/m<sup>3</sup>. However, as already recalled in last year's Annual Report, the incidence of distribution costs is much greater for smaller consumers. Indeed, this component explains much of the price differential between consumption classes. Small consumption volumes are also characterised by greater heating use, a factor entailing storage charges and higher transport costs.

TAB. 3.39

**Average sales prices net of taxes on final market**  
c€/m<sup>3</sup>

TYPE OF CONTRACT AND CUSTOMER	2004	2005	2006	2007	2008	2009
<b>PROTECTED MARKET</b>	<b>33.65</b>	<b>35.36</b>	<b>41.57</b>	<b>43.15</b>	<b>47.36</b>	<b>48.85</b>
Consumption lower than 5,000 m <sup>3</sup>	35.32	37.01	43.32	44.59	48.57	49.49
Consumption between 5,000 and 200,000 m <sup>3</sup>	30.44	32.12	37.94	39.16	43.56	46.60
Consumption between 200,000 and 2,000,000 m <sup>3</sup>	27.04 <sup>(A)</sup>	29.39 <sup>(A)</sup>	32.64 <sup>(A)</sup>	33.75	38.88	46.35
Consumption between 2,000,000 and 20,000,000 m <sup>3</sup>	27.04 <sup>(A)</sup>	29.39 <sup>(A)</sup>	32.64 <sup>(A)</sup>	33.28	38.89	34.61
Consumption over 20,000,000 m <sup>3</sup>	27.04 <sup>(A)</sup>	29.39 <sup>(A)</sup>	32.64 <sup>(A)</sup>	—	—	—
<b>FREE MARKET</b>	<b>18.76</b>	<b>23.23</b>	<b>28.53</b>	<b>28.13</b>	<b>36.01</b>	<b>30.88</b>
Consumption lower than 5,000 m <sup>3</sup>	32.99	31.95	41.99	41.01	44.62	43.81
Consumption between 5,000 and 200,000 m <sup>3</sup>	27.24	29.76	35.53	37.10	42.19	42.17
Consumption between 200,000 and 2,000,000 m <sup>3</sup>	18.46 <sup>(A)</sup>	23.00 <sup>(A)</sup>	28.07 <sup>(A)</sup>	30.86	37.39	32.97
Consumption between 2,000,000 and 20,000,000 m <sup>3</sup>	18.46 <sup>(A)</sup>	23.00 <sup>(A)</sup>	28.07 <sup>(A)</sup>	27.85	35.11	29.70
Consumption over 20,000,000 m <sup>3</sup>	18.46 <sup>(A)</sup>	23.00 <sup>(A)</sup>	28.07 <sup>(A)</sup>	26.39	34.90	27.89
<b>TOTAL</b>	<b>23.13</b>	<b>26.89</b>	<b>32.61</b>	<b>32.29</b>	<b>39.25</b>	<b>36.58</b>

(A) Until 2006 the price was recorded for customer categories with consumption over 200,000 m<sup>3</sup>. The figures are not therefore comparable with later values.

Source: AEEG, from operators' declarations.

It is also interesting to observe the gap in average prices not just by type of contract and customer size but also by consumption sector, as shown in Table 3.41.

An analysis of these figures (provisional, like the previous ones) again confirms our expectations as to trends and consumption volumes. Customers in the protected market tend to pay much more than those in the free market in the same consumption sector and with similar consumption profiles. Within the different consumption sectors, as customer size grows in terms of volumes consumed each year, prices tend to fall, to a higher degree in the case of free customers.

If we consider all consumption categories, the price

differentials between protected and free customers within a given consumption sector tend to widen as we move from residential consumers to thermoelectricity producers, given the underlying, and parallel, increase in their average consumption. Indeed, a protected residential customer pays on average 6.3 c€/m<sup>3</sup> more than a free residential customer; a protected commercial customer 6.8 c€/m<sup>3</sup> more than a free one; a protected industrial customer 14.4 c€/m<sup>3</sup> more than their free counterpart; and lastly, a protected thermoelectricity producer (a small number of small- to medium-sized customers) pays 12.9 c€/m<sup>3</sup> more than their counterpart on the free market.

TAB. 3.40

Final retail prices  
by market,  
consumption  
sector and  
customer size in  
2009

c€/m<sup>3</sup>

TYPE OF CONTRACT AND SECTOR	CUSTOMERS BY ANNUAL CONSUMPTION BAND (m <sup>3</sup> )					TOTAL
	< 5,000	5,000-200,000	200,000-2,000,000	2,000,000-20,000,000	> 20,000,000	
Domestic	49.49	46.76	49.76	–	–	49.11
Commerce and services	50.02	46.33	42.95	40.62	–	47.42
Industry	42.65	46.44	38.79	34.73	–	45.14
Electricity generation	48.84	44.43	39.88	–	–	40.95
AVERAGE PRICE IN PROTECTED MARKET	49.49	46.60	46.35	34.61	–	48.85
Domestic	41.04	44.77	42.85	36.63	–	42.78
Commerce and services	48.30	43.66	35.12	31.50	–	40.60
Industry	45.28	39.65	31.77	29.40	27.99	30.74
Electricity generation	42.48	34.63	34.99	30.55	27.86	28.04
AVERAGE PRICE IN FREE MARKET	43.81	42.17	32.97	29.70	27.89	30.88
AVERAGE PRICE TOTAL	49.00	44.30	33.45	29.72	27.89	36.58

Source: AEEG, from operators' declarations.

## Benchmark prices

### Gas price and inflation

As described in full in Chapter 1 of this Volume, at the start of 2009 international oil and oil-product prices began to grow again, breaking the steep descent seen in the second half of 2008. From 40\$/barrel in December 2008, the price of Brent crude returned to around 75\$/barrel at the end of 2009, or in other words to the values seen in October of the previous year. At the same time the appreciation of the euro against the US dollar (by 8.7% in the period under consideration) made it possible to limit the increase in the oil price in euros to 68.6%, against 84% in dollar prices (measured using the December 2009/December 2008 change).

The price of natural gas for households is surveyed by the National Statistics Institute (ISTAT) as part of the national

basket of consumer prices for the entire community (NIC)<sup>4</sup>.

In spite of the renewed growth in international crude prices, the trend was for this price to fall without interruption throughout 2009. This is because the indexing mechanisms make it possible to smooth out the peaks in fuel prices and apply them with a reasonable time-delay.

The constant fall in the price in 2009, not least when compared with the opposite trend in 2008, a period during which the gas price rose without interruption, meant that the oil-price inflation rate fell dramatically. This rate is measured each month by calculating the rate of change with respect to the same month of the previous year, and went from the relative peak of 17.4% as measured in December 2008 to minus 14.9% in December 2009 (Fig. 3.9).

<sup>4</sup> More precisely, in the national consumer price basket, ISTAT records the gas price (including for gas used for heating, cooking and water-heating, distributed over urban networks or in canisters) as part of the "housing costs" category. The weight of the elementary gas index in the basket net of tobacco rose from 2.0% in 2008 to 2.3% in 2009. In 2010 it fell back to 2.0%.

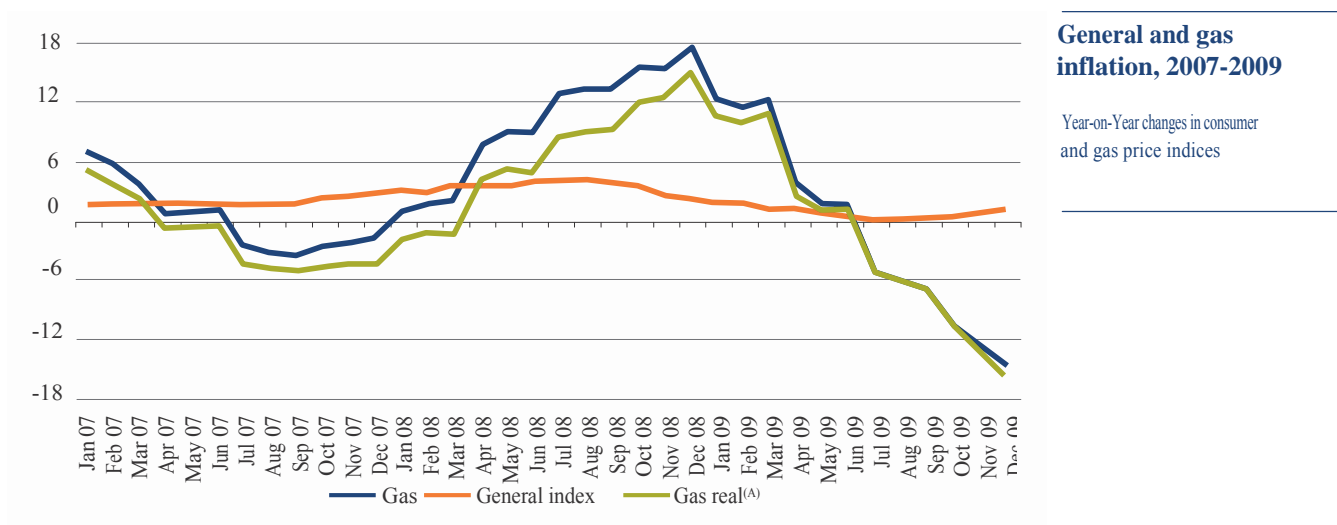


FIG. 3.10

(A) Gas price index compared with general price index (percentage values, tobacco products excluded).

Source: AEEG, from ISTAT data – indices for entire collectivity, national indices

On an annual basis, the price of gas for Italian households grew by 9.7% in 2008 and fell by 1.5% in 2009. Taken over these two years, however, the general price level rose (by 3.3% in 2008 and 0.7% in 2009). This means that the rise in the gas price ends up lower, i.e. 6.1%, if calculated in real terms, while the fall in 2009 proves to be greater, at 2.2%.

Figure 3.11 illustrates the trend in the gas price for Italian households in comparison with the major European countries, using the harmonised consumer price indices collected by Eurostat.

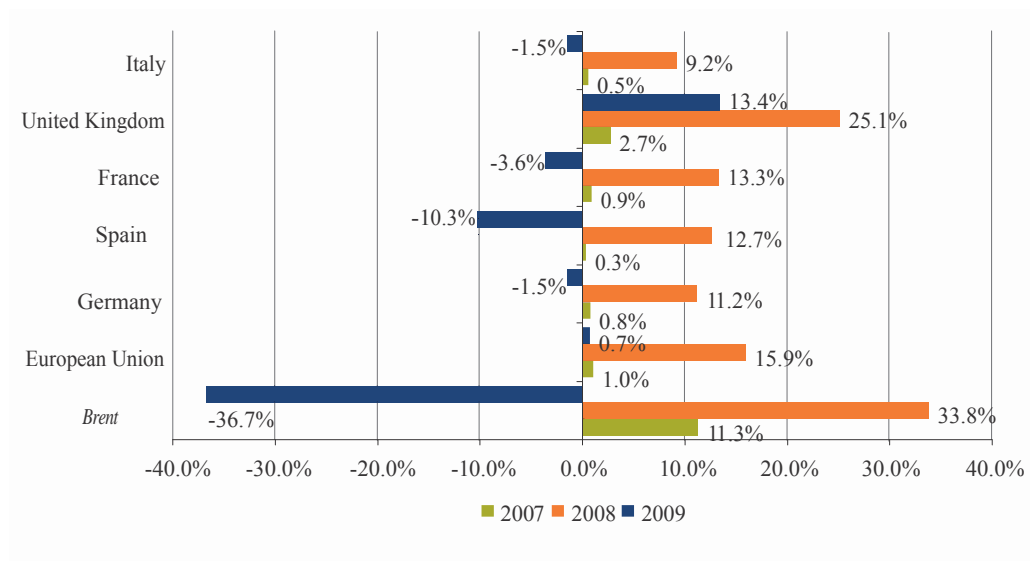


FIG. 3.11

Source: Eurostat, harmonised consumer price indices

This analysis shows that for 2009, in the presence of a 36.7% fall in the oil price, the gas price also fell, to varying but substantial degrees, in 4 of the 5 countries considered. The decline in the Italian price, of 1.5%, was fully in line with that of the German price, while a larger reduction was seen in France (3.6%) and an even larger one in Spain (10.3%). The United Kingdom went the opposite way, with an increase of 13.4%. On average, in the 27 countries of the European Union the price of gas saw a slight rise, of 0.7%. In 2008 the Italian price experienced a much smaller variation than that of the other European countries under consideration. The 9.2% Italian increase compares with 11.2% in Germany, 12.7% in Spain, 13.3% in France and 25.1% in the United Kingdom. The average Europe-27 figure of 15.9% for 2008 – almost double the figure for Italy – was equivalent to about half the rise in the oil price the same year. The European comparative data seem to show, therefore, that the indexation mechanisms make it possible to keep prices more stable over time and prevent them from closely following (and responding with the same intensity to) the sharp fluctuations in international fuel prices.

in the case of the average national price for standard domestic consumers with an annual consumption of 1,400 m<sup>3</sup> and an independent heating system (Fig.3.12). Until the third quarter of 2009 the Authority calculated this price (for the consumer-category indicated) as the national average of the supply prices, differentiated at the local level, it had defined through Resolution 138/03 of 4 December 2003. This is the price that retail companies are obliged to offer households, alongside their own offerings.

The historic series usually shown in these pages was interrupted in Q3 2009 when the new four-year regulatory period for distribution tariffs (described in detail in Chapter 3 of Volume 2) entered into force. On that occasion the Authority revised the criteria for the formulation of the distribution tariffs and envisaged, *inter alia*, a revision of the tariff bands from which they are calculated. Since then, the tariff bands have been radically simplified: from over 2,000, within which there was a marked degree of tariff variation, to just six (see above).

As a consequence, the standard user was redefined. From Q3 2009, in the calculation of the price of supply for the standard customer, all the locally variable components are calculated as a national average, except in the case of distribution. For this component, the value for the North-West zone is used, it being considered the most representative for a user consuming 1,400 m<sup>3</sup>/year and using gas to heat their home.

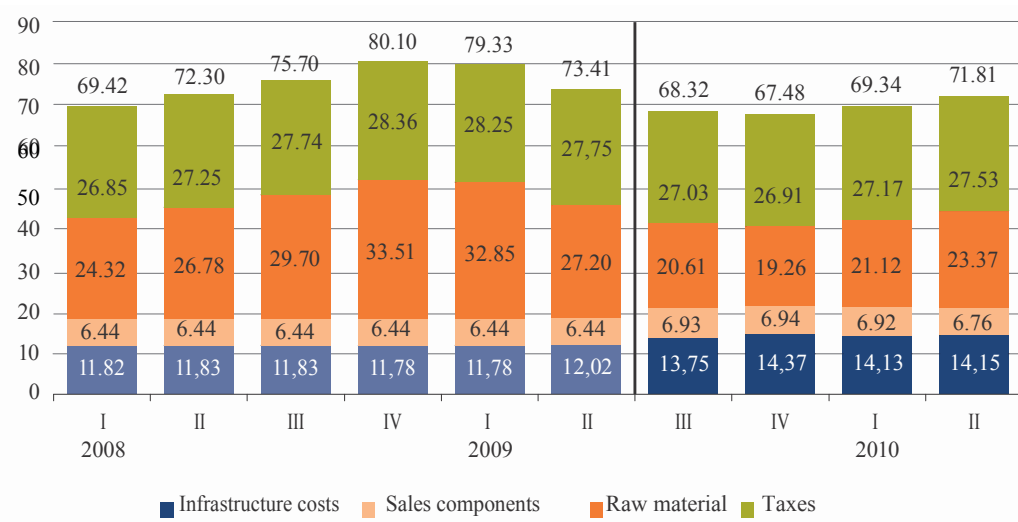
**Price for standard domestic consumers**

The price trends recorded by ISTAT are essentially reflected

FIG. 3.12

**Natural gas price for a standard domestic consumer**

c€/m<sup>3</sup>; household with individual heating and annual consumption of 1,400 m<sup>3</sup>



For the reasons just illustrated, it is not correct to compare the overall trend in the prices of supply for the standard user identified by the Authority, far less the component covering the cost of distribution (in the figure, included amongst infrastructure costs). It is possible, however, to continue to compare the values of the other components regarding cost of sales, raw materials and taxes, since they are still calculated as a national average for the same consumer.

The marked reductions seen in 2008 in the international prices of crude and oil products continued, until the end of 2009, to reflect on the component covering raw material purchases (QE component). This is because of an adjustment mechanism applied every three months and based on an indexation system (established by the Authority). This is linked, albeit with a certain timelag, to the international oil and derivatives prices.

The reduction of 2% in January 2009 was followed by a further three consecutive falls: of 17.2% in April, 24.2% in October and 6.6% in December. At the beginning of 2010 the QE component began to rise again as a result of the

recovery, initially moderate and then more substantial, seen in fuel prices since early 2009. As the QE, along with taxes, is the most significant component in terms of incidence on the total price, the notable reductions in its value led to an overall fall in supply prices for the standard consumer throughout 2009.

The 9.6% rise in the component covering raw material costs in Q1 2010 was in part offset by the concurrent reduction (of 1.2%) in the components covering distribution costs and the review of the transport cost (the latter fell by 3.9%). This review took place as a result of the entry into force of the new regulatory period for this stage in the supply chain. Once again, it brought a simplification in the tariff zones at exit points from the national network to bring them into line with the geographical areas for the application of distribution tariffs (see above).

Apart from the increase in the QE component, no other components covering the prices of supply for Q2 2010 were reviewed. Overall, from 67.48 c€/ m<sup>3</sup> in Q4 2009, the average price for the “new” standard domestic customer had by April 2010 reached 71.81 c€/ m<sup>3</sup>.

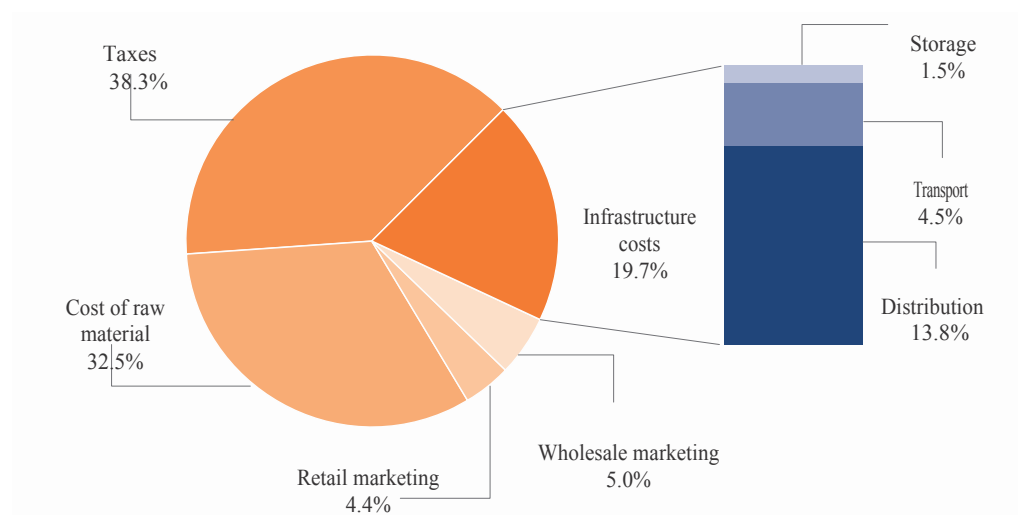


FIG. 3.13

**Percentage breakdown of natural gas price for a standard domestic consumer (at 1 April 2010)**

Percentage values; household with individual heating and annual consumption of 1,400 m<sup>3</sup>

At 1 April 2010 the price for an Italian household consuming 1,400 m<sup>3</sup> and owning an individual heating system (Fig. 3.13) was made up as follows: about 62% in components covering costs and the remaining 38% in taxes applicable to the natural gas sector (excise, regional surcharge and VAT). Raw material costs make up 32.5% of the total price, marketing costs 9.4% and infrastructure use and maintenance costs the remaining 19.7%.

Under infrastructure costs, the most significant component is the one covering distribution, at 13.8% of the total; transport represents 4.5% of the total and storage 1.5%.

TAB. 3.41

**Taxes on gas**  
1 January – 31 December  
2010; c€/m<sup>3</sup> for excise and  
percentage bands for VAT

TAXES Consumption band	CIVIL USES				INDUSTRIAL USES	
	< 120 m <sup>3</sup>	120-480 m <sup>3</sup>	480-1.560 m <sup>3</sup>	< 1.560 m <sup>3</sup>	< 1.2 M(m <sup>3</sup> )	> 1.2
EXCISE						
Normal	4.40	17.50	17.00	18.60	1.2498	0.7499
Fomer Cassa del Mezzogiorno	3.80	13.50	12.00	15.00	1.2498	0.7499
REGIONAL SURCHARGE <sup>(B)</sup>						
Piedmont	2.20000	2.58000	2.58000	2.58000	0.62490	0.52000
Veneto	0.77470	2.32410	2.58230	3.09870	0.62490	0.51650
Liguria						
– climatic zones C and D	2.20000	2.58000	2.58000	2.58000	0.62490	0.52000
– climatic zone E	1.55000	1.55000	1.55000	1.55000	0.62490	0.52000
– climatic zone F	1.03000	1.03000	1.03000	1.03000	0.62490	0.52000
Emilia Romagna	2.20000	3.09874	3.09874	3.09874	0.62490	0.51646
Tuscany	1.50000	2.60000	3.00000	3.00000	0.60000	0.52000
Umbria	0.51650	0.51650	0.51650	0.51650	0.51650	0.51650
Marche	1.55000	1.81000	2.07000	2.58000	0.62490	0.52000
Lazio	2.20000	3.09900	3.09900	3.09900	0.62490	0.51600
Abruzzo						
– climatic zones E and F	1.03300	1.03300	1.03300	1.03300	0.62490	0.51600
– other zones	1.90000	2.32410	2.58230	2.58230	0.62490	0.51600
Molise	1.90000	3.09870	3.09870	3.09870	0.62000	0.52000
Campania	1.90000	3.10000	3.10000	3.10000	0.62490	0.52000
Puglia	1.90000	3.09800	3.09800	3.09800	0.62490	0.51646
Calabria	1.90000	2.58228	2.58228	2.58228	0.62490	0.51646
VAT RATE (%)	10	10	20	20	10 <sup>(C)</sup>	10 <sup>(C)</sup>

(A) Regions set out in the President of the Republic's decree no. 218 of 6 March 1978

(B) Special statute regions set the regional surcharge at 0; in Lombardy and Basilicata too, the tax is no longer applied (Regional Laws no. 27 of 18 December 2001 and no. 28 of 18 December 2007 respectively).

(C) Rate for mining, agriculture and manufacturing enterprises; for other businesses the rate rises to 20%.

Table 3.41 provides a detailed breakdown of the tax burden on natural gas. The ordinary excise figures shown in the table for the different annual consumption bands are the ones in force in 2010. These rates, which have not changed since last year, were established by Legislative Decree 26 of 2 February

2007 which, in transposing European Directive 2003/96/EC, completely reformed the taxation of energy products in Italy.

# Service quality

## Security and continuity of the gas distribution service

A breakdown of the security and continuity data collected in accordance with the rules governing the *Regulation of the quality of the gas distribution and metering services* (Italian initials RQDG) approved with Resolution ARG/gas 120/08 of 7 August 2008 is shown below.

The illustration applies to the entire gas distribution sector and for some aspects of the service, such as the emergency service, network inspections, leaks and cathodic protection, concerns the performance of operators with more than 100,000 end-users. The figures are intended to highlight the results obtained on the basis of the Authority's regulatory initiatives.

Figure 3.14 shows the data for low- and high-pressure network inspections conducted since 1997. The current regulations governing inspections reiterate the provisions of Resolution 168/04 of 29 September 2004. Confirming the existing regulations has proved to be effective since 2009 saw a further increase in the amount of network inspected. Indeed, the minimum levels identified by the Authority (20% for low pressure and 30% for medium and high pressure) were met comfortably once again in 2009, with actual inspection rates well above 50%.

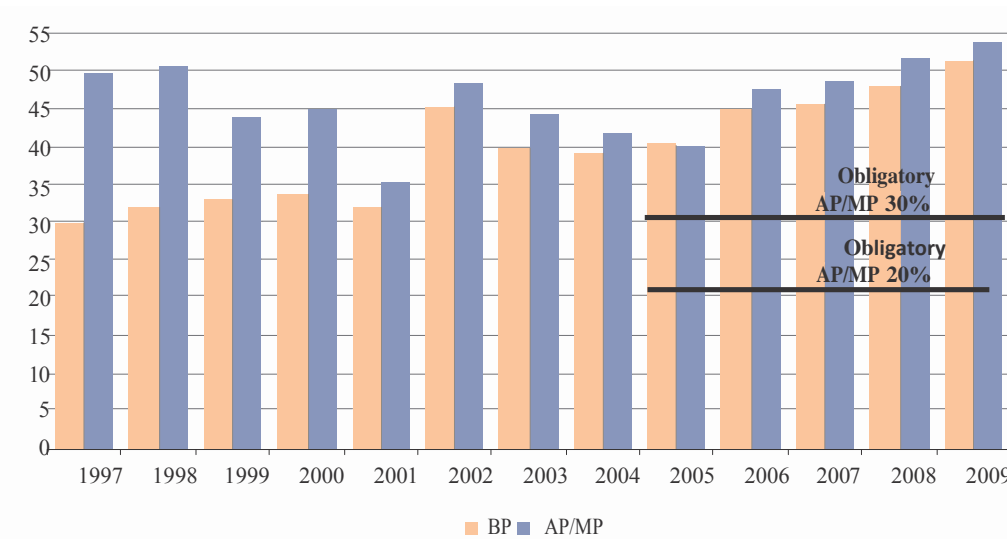


FIG. 3.14

Percentage of network inspected in 1997-2009

Source: Operators' declarations submitted to AEEG.



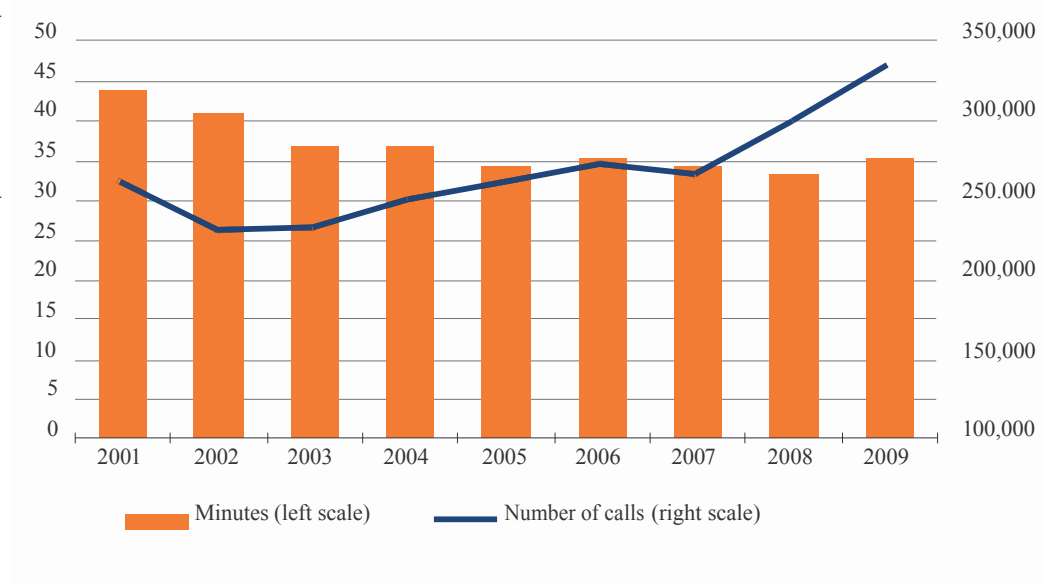
Figure 3.15 shows that the average time required for the rapid-response service for distribution facilities is well below the 60-minute maximum envisaged by the RQDG. Indeed, while the number of emergency calls recorded on distribution plants increased in absolute terms, arrival times at call locations averaged about 35 minutes at the national level. The number of emergency calls increased with respect to 2008, with the effective average time of response also increasing slightly.

This can be explained by the growth, in absolute terms, in the number of non-standard calls for causes attributable to distribution companies. This in turn is an effect of the tighter

regulations introduced by the RQDG for gas emergencies. These consist of a gradual extension to all operators of the incentive system for safety improvements and the introduction, from 1 July 2009, of voice recordings of calls. The latter is accompanied by a new inspection campaign for the gas emergency services provided by companies, implemented with the help of the Guardia di Finanza (Tax Police).

FIG. 3.15

**Emergency calls to distribution plant, 2001-2009**  
Actual average time (in minutes) and number of calls



Source: Operators' declarations submitted to AEEG.

Tables 3.42 and 3.43 summarise the number of leaks detected by operators in 2008 and 2009, broken down by location in the plant or on the distribution network.

They are then sub-divided depending on whether they were detected following scheduled inspections or reports by third parties.

TAB. 3.42

**Number of leaks detected following scheduled network inspections**

LOCATION	A1	A2	B	C	TOTALE
On network	1,145	1,428	1,246	1,339	5,158
On user derivation plant (underground part)	199	199	344	328	1,070
On user derivation plant (aerial part)	97	84	143	1,994	2,318
At metering unit	91	19	47	384	541
<b>TOTAL 2008</b>	<b>1,532</b>	<b>1,730</b>	<b>1,780</b>	<b>4,045</b>	<b>9,087</b>
On network	1,003	1,158	1,195	1,256	4,612
On user derivation plant (underground part)	215	253	485	392	1,345
On user derivation plant (aerial part)	993	133	284	6,402	7,812
At metering unit	109	31	118	1,151	1,409
<b>TOTAL 2009</b>	<b>2,320</b>	<b>1,575</b>	<b>2,082</b>	<b>9,201</b>	<b>15,178</b>

Source: Operators' declarations submitted to AEEG.

TAB. 3.43

**Number of leaks detected following reports by third parties**

LOCATION	A1	A2	B	C	TOTAL
On network	3,098	1,059	1,233	1,013	6,403
On user derivation plant (underground part)	4,499	1,784	1,781	2,785	10,849
On user derivation plant (aerial part)	17,489	5,414	7,055	27,707	57,665
At metering unit	30,448	8,174	6,576	30,033	75,231
<b>TOTAL 2008</b>	<b>55,534</b>	<b>16,431</b>	<b>16,645</b>	<b>61,538</b>	<b>150,148</b>
On network	3,161	1,096	1,048	1,146	6,451
On user derivation plant (underground part)	4,482	1,753	1,522	2,200	9,957
On user derivation plant (aerial part)	19,975	5,752	7,464	30,966	64,157
At metering unit	30,885	8,520	6,693	34,731	80,829
<b>TOTAL 2009</b>	<b>58,503</b>	<b>17,121</b>	<b>16,727</b>	<b>69,043</b>	<b>161,394</b>

Source: Operators' declarations submitted to AEEG.

An analysis of the data submitted by operators reveals that from 2008 to 2009:

- the number of gas leaks detected following scheduled network inspections rose from 9,087 to 15,178; however, those located on the network and on the underground segments, usually more dangerous, decreased from 6,228 to 5,957;
- gas leaks detected following reports by third parties increased from 150,148 to 161,394; however, as in the previous case, those normally most risky, i.e. leaks on the network and in the underground part of the system, decreased from 17,252 to 16,408.

The increase in absolute terms was also caused to some degree by the increase in the extent of the active network and in the number of consumers connected. As regards the number of leaks by km of network located following reports by third parties in 2009, the proportion of actual leaks at the

national level was equal to that recorded the previous year, or 0.07%. This applies only to leaks on the networks and on the underground part of the end user connections.

Tables 3.44, 3.45, 3.46 and 3.47 refer to the major distribution companies' performance in 2009. It should be noted in particular that the number of distributors decreased by 4 with respect to last year, to 32. The resulting groupings can be explained by ownership changes in existing operators. To illustrate these figures in greater detail, Table 3.44 provides a general summary of the emergency services. The number of calls regarding plant is markedly higher than that recorded downstream of the delivery point. Indeed, for every 1,000 final customers, 16.59 calls concerned plant, compared with 1.43 downstream.

Table 3.45 summarises network inspection activity by major distributors on all of their distribution plants for 2009.

Table 3.46 shows leak location activity by major distributors in 2009. shows the extent of the steel network with cathodic protection.

Lastly, table 3.47 provides an overview of cathodic protection activity by major operators for 2009. The table

TAB. 3.44

**Emergency service  
by major operators  
in 2009**

Number of final customers at 31/12/2009; number of cases and number of cases every 1,000 final customers at 31/12/2008

OPERATOR	FINAL CUSTOMERS		DISTRIBUTION PLANT	DOWNSTREAM OF REDELIVERY POINT		TOTAL CASES
	CASES	CASES EVERY 1.000 CONSUMERS	CASES EVERY 1.000 CONSUMERS	CASES	CASES EVERY 1.000 CONSUMERS	
Società Italiana per il Gas	5,045,473	77,668	15.69	4,543	0.92	82,211
Enel Rete Gas	2,126,838	34,356	16.50	1,874	0.90	36,230
A2A Reti Gas	1,223,437	23,865	19.63	3,286	2.70	27,151
Hera	1,096,943	19,519	17.91	825	0.76	20,344
Italcogim Reti	974,901	21,188	22.38	2,281	2.41	23,469
Napolitana Gas	727,446	15,116	21.11	633	0.88	15,749
Toscana Energia	663,245	11,251	17.17	832	1.27	12,083
E.On Rete	602,008	11,075	17.87	834	1.35	11,909
Azienda Energia e Servizi	472,949	8,445	17.89	1,153	2.44	9,598
Gas Natural Distribuzione Italia	413,398	7,354	18.55	1,267	3.20	8,621
Enia	390,160	6,748	17.44	657	1.70	7,405
Ascopiave	331,755	3,312	10.13	463	1.42	3,775
Genova Reti Gas	326,982	5,745	17.53	322	0.98	6,067
Acegas Aps	263,521	2,175	8.29	460	1.75	2,635
Linea Distribuzione	244,389	2,944	12.21	606	2.51	3,550
Consiag Reti	186,213	2,906	15.86	406	2.22	3,312
Gelsia Reti	180,200	2,632	14.82	395	2.22	3,027
Sgr Reti	166,767	1,838	11.21	270	1.65	2,108
G.E.I. Gestione Energetica	144,874	2,489	19.38	117	0.91	2,606
Acsn Agam	142,773	1,437	10.11	147	1.03	1,584
Edison D.G.	142,582	2,134	15.19	213	1.52	2,347
Amg Energia	141,364	4,167	29.96	755	5.43	4,922
Dolomiti Reti	138,146	660	4.89	326	2.41	986
Amga Azienda Multiservizi	135,044	1,292	9.70	183	1.37	1,475
Agsm Distribuzione	134,542	2,608	19.20	517	3.81	3,125
Erogasmet	125,731	2,221	17.97	269	2.18	2,490
As Retigas	122,821	1,405	11.49	89	0.73	1,494
Azienda Municipale Del Gas	117,146	1,888	16.24	24	0.21	1,912
Multiservizi	115,947	2,187	19.01	136	1.18	2,323
Coingas	115,758	2,045	17.93	195	1.71	2,240
Acam Gas	110,160	2,118	19.41	230	2.11	2,348
Intesa Distribuzione	108,087	1,029	9.77	341	3.24	1,370
<b>TOTAL</b>	<b>17,231,600</b>	<b>285,817</b>	<b>16.59</b>	<b>24,649</b>	<b>1.43</b>	<b>310,466</b>

Source: Operators' declarations submitted to AEEG.

TAB. 3.45

**Network inspected  
by major operators in  
2009**

km and percentage values

OPERATOR	LOW-PRESSURE NETWORK			HIGH-PRESSURE NETWORK		
	LENGTH OF NETWORK	LENGTH OF NETWORK INSPECTED	% NETWORK INSPECTED	LENGTH OF NETWORK	LENGTH OF NETWORK INSPECTED	% NETWORK INSPECTED
Società Italiana per il Gas	26,394	10,181	38.6	19,638	8,341	42.5
Enel Rete Gas	18,936	14,754	77.9	12,134	9,600	79.1
A2A Reti Gas	5,749	3,372	58.6	1,873	1,435	76.6
Hera	4,987	3,608	72.4	8,264	6,580	79.6
Italcogim Reti	7,677	4,121	53.7	7,068	3,780	53.5
Napoletana Gas	3,317	1,434	43.2	1,608	838	52.1
Toscana Energia	6,107	1,753	28.7	5,056	1,427	28.2
E.On Rete	5,553	1,980	35.6	3,578	1,328	37.1
Azienda Energia e Servizi	1,113	369	33.2	208	101	48.4
Gas Natural Distribuzione	3,355	1,759	52.4	3,104	1,622	52.2
Enia	2,886	1,732	60.0	2,827	1,867	66.1
Ascopiave	4,374	1,833	41.9	2,179	902	41.4
Genova Reti Gas	1,264	460	36.4	430	163	37.9
Acegas Aps	1,714	1,395	81.4	420	349	83.1
Linea Distribuzione	1,952	1,033	52.9	782	439	56.2
Consiag Reti	1,005	1,005	100.0	559	558	99.7
Gelsia Reti	1,216	604	49.7	262	254	96.6
Sgr Reti	1,253	522	41.7	1,387	566	40.8
G.E.I. Gestione Energetica	1,661	1,369	82.4	679	513	75.6
Acsm Agam	809	454	56.1	222	148	66.6
Edison D.G.	1,406	1,210	86.0	1,104	901	81.6
Amg Energia	560	528	94.4	312	312	100.0
Dolomiti Reti	1,437	771	53.7	719	349	48.5
Amga Azienda Multiservizi	1,546	527	34.1	588	207	35.2
Agsm Distribuzione	893	634	71.0	331	239	72.3
Erogasmet	1,037	222	21.4	464	102	22.0
As Retigas	963	373	38.8	1,132	497	43.9
Azienda Municipale Del Gas	437	151	34.6	123	46	37.5
Multiservizi	591	161	27.2	639	192	30.0
Coingas	1,103	1,103	100.0	720	720	100.0
Acam Gas	1,120	373	33.3	323	148	45.8
Intesa Distribuzione	941	589	62.6	855	514	60.1
<b>TOTAL</b>	<b>113,358</b>	<b>60,382</b>	<b>53.3</b>	<b>79,589</b>	<b>45,037</b>	<b>56.6</b>

(A) Network length includes facilities owned by municipalities and at the start-up stage that have taken over from other operators, or that were divested over the year. Plants for which the operator used the waiver under art. 12 para 11.3 of the RQDG are also taken into consideration.

Source: Operators' declarations submitted to AEEG.

TAB. 3.46

**Leaks detected on major operators' networks in 2009**

Length of network in km

OPERATOR	METRES OF NETWORK BY FINAL CUSTOMER	LENGTH OF NETWORK INSPECTED	NUMBER OF LEAKS			
			BY NETWORK INSPECTED	BY KM OF NETWORK INSPECTED	REPORTED BY 3 <sup>RD</sup> PARTIES	BY KM REPORTED BY 3 <sup>RD</sup> PARTIES
Società Italiana per il Gas	9.12	18,522	1,318	0.07	32,587	0.71
Enel Rete Gas	14.62	24,354	375	0.02	15,398	0.50
A2A Reti Gas	6.23	4,807	1,584	0.33	14,757	1.94
Hera	12.08	10,188	779	0.08	10,925	0.82
Italcogim Reti	15.12	7,901	140	0.02	8,815	0.60
Napoletana Gas	6.77	2,273	85	0.04	9,173	1.86
Toscana Energia	16.83	3,180	61	0.02	5,516	0.49
E.On Rete	15.17	3,308	210	0.06	5,616	0.62
Azienda Energia e Servizi	2.79	470	14	0.03	4,558	3.45
Gas Natural Distribuzione Italia	15.59	3,381	111	0.03	2,989	0.46
Enia	14.64	3,599	114	0.03	3,930	0.69
Ascopiave	19.53	2,735	42	0.02	1,499	0.23
Genova Reti Gas	5.18	623	592	0.95	4,054	2.39
Acegas Aps	8.10	1,744	177	0.10	1,182	0.55
Linea Distribuzione	11.19	1,472	82	0.06	1,672	0.61
Consiag Reti	8.40	1,563	203	0.13	757	0.48
Gelsia Reti	8.20	858	5	0.01	1,330	0.90
Sgr Reti	15.83	1,088	4	0.00	998	0.38
G.E.I. Gestione Energetica Impianti	16.15	1,882	19	0.01	1,274	0.54
Acsn Agam	7.22	601	4	0.01	643	0.62
Edison D.G.	17.49	2,111	95	0.05	1,214	0.48
Amg Energia	6.15	840	1	0.00	3,143	3.61
Dolomiti Reti	15.61	1,120	20	0.02	247	0.11
Amga Azienda Multiservizi	15.80	734	13	0.02	533	0.25
Agsm Distribuzione	9.10	873	45	0.05	1,119	0.91
Erogasmet	11.94	324	18	0.06	1,504	1.00
As Retigas	17.05	871	13	0.01	841	0.40
Azienda Municipale Del Gas	4.78	197	6,369	32.25	782	1.40
Multiservizi	10.61	352	3	0.01	1,241	1.01
Coingas	15.55	1,823	12	0.01	820	0.45
Acam Gas	13.10	521	73	0.14	852	0.59
Intesa Distribuzione	16.62	1,103	220	0.20	567	0.32
TOTAL	11.19	105,419	12,801	0.12	140,536	0.73

Source: Operators' declarations submitted to AEEG.

TAB. 3.47

OPERATOR	NETWORK	NETWORK IN STEEL WITH	NETWORK IN STEEL WITH EFFECTIVE PROTECTION	LENGTH OF NETWORK IN STEEL WITHOUT	% NETWORK IN STEEL
					EFFECTIVE PROTECTION
Società Italiana per il Gas	46,032	34,840	33,872	968	97.2%
Enel Rete Gas	31,070	27,640	24,605	3,035	89.0%
A2A Reti Gas	7,622	4,267	3,469	798	81.3%
Hera	13,252	11,201	8,192	3,010	73.1%
Italcogim Reti	14,745	11,495	10,367	1,128	90.2%
Napoletana Gas	4,925	3,659	3,423	236	93.5%
Toscana Energia	11,163	9,917	9,572	346	96.5%
E.On Rete	9,131	8,315	8,298	17	99.8%
Azienda Energia e Servizi	1,321	508	492	17	96.7%
Gas Natural Distribuzione Italia	6,460	4,907	4,907	–	100.0%
Enia	5,713	5,424	1	5,423	0.02%
Ascopiave	6,553	6,389	6,389	–	100.0%
Genova Reti Gas	1,695	502	84	417	16.8%
Acegas Aps	2,134	687	484	204	70.4%
Linea Distribuzione	2,734	2,373	2,078	295	87.6%
Consiag Reti	1,565	1,475	1,469	6	99.6%
Gelsia Reti	1,478	1,463	1,189	274	81.3%
Sgr Reti	2,639	2,612	2,612	–	100.0%
G.E.I. Gestione Energetica Impianti	2,340	2,272	2,272	–	100.0%
Acsm Agam	1,030	1,005	1,005	–	100.0%
Edison D.G.	2,511	1,550	1,550	–	100.0%
Amg Energia	872	304	304	–	100.0%
Dolomiti Reti	2,156	1,954	1,931	23	98.8%
Amga Azienda Multiservizi	2,134	1,731	1,661	69	96.0%
Agsm Distribuzione	1,224	909	875	34	96.2%
Erogasmet	1,501	1,501	1,501	–	100.0%
As Retigas	2,095	1,965	1,965	–	100.0%
Azienda Municipale Del Gas	560	531	463	68	87.2%
Multiservizi	1,230	1,040	728	312	70.0%
Coingas	1,823	1,781	1,781	0	100.0%
Acam Gas	1,443	1,337	938	398	70.2%
Intesa Distribuzione	1,796	1,162	1,156	5	99.5%
<b>TOTAL</b>	<b>192,946</b>	<b>156,713</b>	<b>139,631</b>	<b>17,082</b>	<b>89.1%</b>

Source: Operators' declarations submitted to AEEG.

**Cathodic protection  
of major operators'  
networks in 2009**  
km

#### Safety improvements in the gas distribution service

Safety improvements are calculated under the old rules envisaged by Resolution 168/04. The incentive system envisages two separate components. The first is intended to reduce gas leaks, and the second to increase the number of checks on the degree of gas odourisation with respect to the obligatory annual minimum set by the Authority. For 2006-2008, the first three-year period of application of the incentive mechanism, access by distributors to the incentive system was voluntary. Table 3.49 shows the incentives for 2008 approved under Resolution ARG/gas 14/10 of 8 February 2010.

From 2010 on, the new regulations in the RQDG envisage that the incentive and penalty mechanism to encourage security improvements will kick in for operators with more than 50,000 final customers. It will be extended gradually and progressively to all other operators, with the exception of distributors of gas other than natural gas. The regulations also establish that natural gas distribution companies with fewer than 50,000 final customers may request a waiver from participation for the third regulatory period. They also envisage that security improvements be based on the company's province of operation rather than on single distribution facilities, the aim being to ensure that the scope

of application of the incentive scheme for gas distributors is sufficiently broad.

Table 3.48 shows the 13 distributors and the incentives for each, broken down into their two components.

TAB. 3.48

**Summary of security improvement incentives in 2008.**

Number of plants and incentives in €

DISTRIBUTOR	ODORISATION		LEAKS		TOTAL INCENTIVES
	PLANTS	INCENTIVES	PLANTS	INCENTIVES	
AMGA – Azienda Multiservizi	24	37,964.49	3	4,812.70	42,777.19
Ascopiave	24	103,792.69	–	–	103,792.69
Napoletana Gas	39	209,967.31	1	8,521.28	218,488.59
Consiag Reti	3	57,592.30	2	265,387.10	322,979.40
Enel Rete Gas	489	653,905.28	73	480,505.89	1,134,411.17
G.E.I, Gestione Energetica Impianti	32	36,709.40	18	124,323.68	161,033.08
Gas Natural Distribuzione Italia	59	95,769.94	2	11,392.16	107,162.10
Italcogim Reti	104	156,044.77	33	280,523.14	436,567.91
Sgr Reti	2	54,246.63	–	–	54,246.63
Simgas Nord	2	1,601.45	1	7,527.26	9,128.71
Società Italiana per il Gas – Italgas	413	1,469,409.44	23	892,764.58	2,362,174.02
Soelia	5	2,488.98	1	2,719.08	5,208.06
<b>Total</b>	<b>1,196</b>	<b>2,879,492.68</b>	<b>157</b>	<b>2,078,476.87</b>	<b>4,957,969.55</b>

It reveals that of the 1,196 gas distribution plants in question, all were included for the odorisation component and only 157 for both odorisation and the leak component also. This is easily explained: the mechanism to obtain the odorisation incentive is simpler than that for the leak component.

Indeed, to obtain the “odorisation” component of the

incentives directly, all that a distributor has to do is carry out at least the obligatory minimum number of odorisation checks. Investments made by distributors to reduce leaks, however, usually produce their effects on the “leak” component of the incentive indirectly and over a longer timescale.

---

## Commercial quality of the gas distribution service

---



---

### Natural gas distribution service

---

Table 3.49 highlights two phenomena seen in 2009. The first is the convergence between the number of cases of failure to meet those standards that are subject to reimbursement and the number of reimbursements actually paid. The second is the progressive decrease in the number of cases subject to automatic reimbursement for failure to meet the standards.

2009 therefore saw a confirmation of the trends seen in 2008 as regards the prompt payment of compensation in compliance with the rules laid down by the Authority. Also seen was a further improvement to the service in the form of fewer cases of failure to meet standards. For the 15,578 such cases that are subject to reimbursement, corresponding to 15,783 refunds actually paid, the amount paid out was just over 1 million euros. This progressive reduction in the number of cases of failure to meet the standards, and consequently in the reimbursements paid, occurred for the third year running.

The lower numbers of cases of failure to meet the standards for causes attributable to the distribution company is a sign that companies are organising their operations more efficiently and thus managing to meet consumers' needs more and more effectively.

It should be noted, however, that the table also includes the data for the new guaranteed standards now in force: sending the retailer a copy of the report on the metering

unit check at the request of the final customer; and reactivation of supply for reasons of potential risk to public safety.

Generally speaking, the previous standards were introduced as a result of the need to strengthen the mechanisms for protecting final customers. The Authority felt, for example, that the requirement to send the retailer a copy of the report on the metering unit check should be subject to a time limit. The aim is to collect further data with a view to monitoring the phenomenon.

The Authority found it necessary to establish that, in cases where the gas supply was suspended following works during which a situation of potential danger to public safety was identified downstream of the redelivery point, the distributor must reactivate the supply. This is done after the distributor receives the documentation from the final customer certifying that they have brought the plant into line with standards. In so doing, the distribution company must comply with the timescale established by the Authority for reactivation following disconnection for arrears.

Following reports from consumers and through articles published in the press, the Authority has learned of cases where, in these circumstances, the distributor did not promptly reactivate the supply after receiving the above-mentioned documentation from the final customer, with serious inconvenience for the customers concerned.



TAB. 3.49

YEAR	FAILURE TO MEET STANDARDS	REIMBURSEMENTS ACTUALLY PAID
	SUBJECT TO REIMBURSEMENT (NO. CASES)	OVER THE YEAR
<b>SERVICE CHARTER</b>		
1997	14,265	1,237
1998	12,366	707
1999	11,212	1,64
2000	14,635	3,709
<b>COMMERCIAL QUALITY REGULATION</b>		
2001	16,424	12,086
2002	14,651	13,368
2003	11,766	8,535
2004	25,826	19,249
2005	34,333	31,189
2006	31,439	35,146
2007	43,741	43,886
2008	19,954	19,265
2009	15,578	15,783

**Number of cases and number of reimbursements paid for failure to meet commercial quality standards**  
1997-2008; operators with more than 5,000 final customers

Source: Operators' declarations submitted to AEEG.

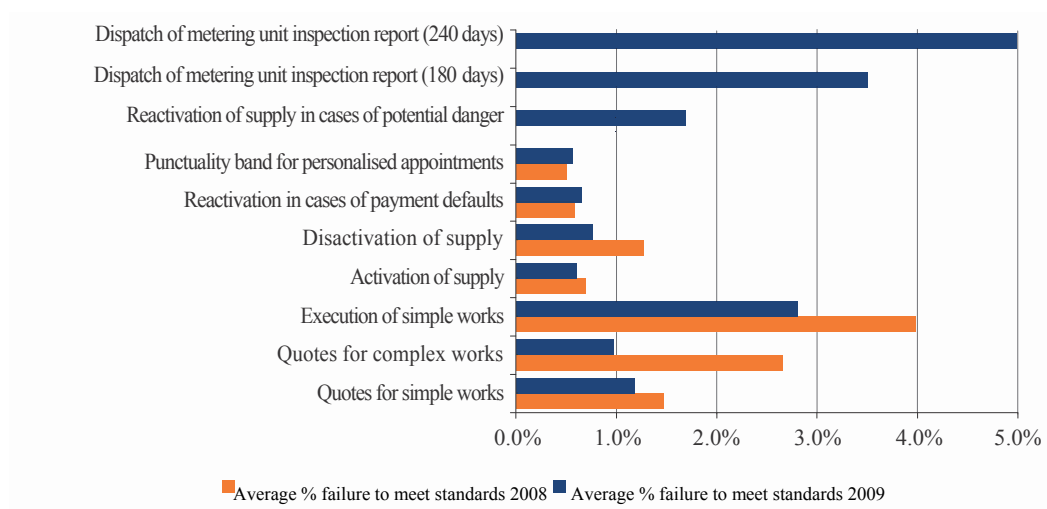
For 2009, the execution of simple works was, once again, the service generating the highest number of failures to meet standards, and therefore of refunds. The activation of supply, on the other hand, is the guaranteed standard encountered most frequently. This standard alone covers nearly 39% of the total services delivered; it is followed by disactivation of supply and the execution of simple works. 96% of requests can be attributed to customers with meters up to category G6 (domestic users). The data for these users

are shown in table 3.51.

As regards failure to meet standards (Fig. 3.16), the values recorded for 2009 show that the situation is improving. Of those services showing a slight deterioration, reactivation in cases of payment defaults should be underscored.

FIG. 3.16

**% of failure to meet guaranteed commercial quality standards**  
2008-2009; operators with more than 5,000 final customers



Source: Operators' declarations submitted to AEEG.

If we compare the various services, a particularly high percentage of operators failed to meet the standards for sending in the report on metering-unit checks, as introduced in 2009.

This guaranteed level consists of a maximum timescale within which the distributor must send the retailer the report on metering-unit checks carried out at the consumer's request. The report must be sent within 180 calendar days of the date the distributor receives confirmation of the retailer's request, in cases where it is technically possible to carry out the check at the final customer's premises.

This deadline is extended by a further 60 days in cases where it is not technically possible to carry out this check. The timescale includes the time intervening between the

dates on which the metering unit was sent to and returned by a qualified laboratory.

The distribution company is required to pay an automatic reimbursement of €30 to the retailer concerned for each metering-unit inspection request for which the distributor fails to send the report within the envisaged timescale, for causes attributable to the distribution company itself. The retailer is required to pass the reimbursement on to the consumer.

For all services to customers with meters up to category G6, the average response time actually recorded is markedly lower than the standard established by the Authority (Fig. 3.17). More specifically, the time recorded for reactivation in cases of disconnection for arrears was half that required by the standard: one rather than 2 working days.

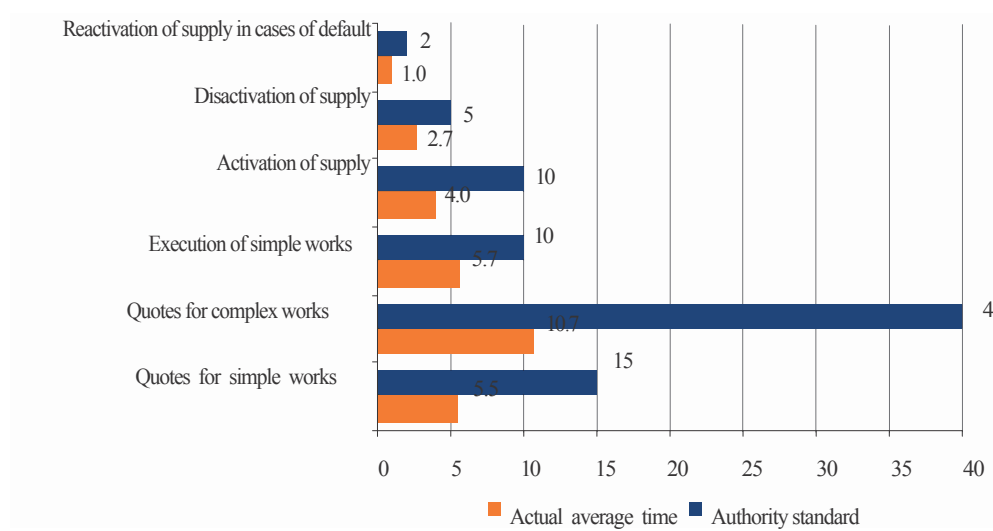


FIG. 3.17

**Actual average time compared with standard defined by the Authority for all commercial quality services for customers with meters up to class G6**

2008; operators with more than 5,000 final customers

Source: Operators' declarations submitted to AEEG.

Table 3.50 shows, for 2008 and 2009, the main data for all services subject to automatic reimbursement as applicable to the most widespread type of user, i.e. low-voltage consumers with metering units up to G6. For 2009 only, the guaranteed standard for supply-pressure inspections should be noted. For all services, the standards set by the Authority were essentially complied with.

While the number of services was similar over the two years, the number of reimbursements fell, from 18,374 in 2008 to 15,089 in 2009. Along with an increase in the number of requests for personalised appointments, the number of reimbursements paid increased significantly, while the amount paid almost doubled.

For services involving the execution of complex works, metering unit replacements, responses to complaints or written requests for metering unit checks, the current quality standards are general rather than guaranteed, and therefore do not entail automatic reimbursement. As things stand at

present, overall standards make it possible to monitor commercial quality trends and identify any critical points.

TAB. 3.50

**Services subject to automatic reimbursement for low-pressure final customers with metering units up to class G6**  
2008-2009

SERVICE	AUTHORITY STANDARD	NUMBER OF APPLICATIONS	2008 ACTUAL AVERAGE TIME	NUMBER OF AUTOMATIC REFUNDS	NUMBER OF APPLICATIONS	2009 ACTUAL AVERAGE TIME	NUMBER OF AUTOMATIC REFUNDS
Quotes for simple works	15 working days	239,729	5.4	2,801	216,392	5.5	2,363
Quotes for complex works	40 working days	10,554	13.0	197	7,987	10.7	37
Execution of simple works	10 working days	184,981	6.2	5,573	169,363	5.7	4,523
Activation of supply	10 working days	678,298	4.1	4,842	654,714	4	4,079
Disactivation of supply	5 working days	320,501	2.6	3,988	335,710	2.7	2,624
Reactivation after payment default	2 weekdays	64,681	0.9	385	78,343	1	504
Punctuality band for personalised appointments	2 hours	141,826	–	588	171,413	–	959
<b>TOTAL</b>	–	<b>1,640,560</b>	–	<b>33,822</b>	<b>1,633,922</b>	–	<b>185,089</b>

Source: Operators' declarations submitted to AEEG.

## Gas quality and security downstream of redelivery points

### Safety checks on users' gas installations

The period from 1 October 2008 to 30 September 2009, the 5th year of implementation of Resolution 40/04 of 18 March 2004, saw a decline in the number of new-user plants inspected. Most notably, the number of checks with a

positive outcome fell by 14% with respect to thermal year 2007-2008.

It should be underscored that the first thermal year saw a significant reduction, of 53%, in both negative inspections and in the number of installations inspected more than once.

More precisely, out of about 390,000 inspections, fewer than 9,000 units produced a negative result and therefore required more than one check.

This result is important as it provides tangible evidence of the efficacy of the regulations. Over time, the procedures introduced by Resolution 40/04 have become established practice, with ever-growing protection levels for consumers.

Tables 3.51 and 3.52 illustrate the inspections carried out. The former provides a breakdown of inspections by heating power, the latter by size of distribution company. Requests for checks leading to a positive outcome, requests with a negative outcome and installations subjected to more than one inspection are all shown.

TYPE OF USER	REQUESTS WITH POSITIVE OUTCOME	REQUESTS WITH NEGATIVE OUTCOME	PLANTS WITH MORE THAN ONE CHECK
≤ 34.8 kW	339,599	7,312	7,231
> 34.8 kW e ≤ 116 kW	42,166	1,111	1,046
> 116 kW	5,997	327	296
<b>TOTAL</b>	<b>387,762</b>	<b>8,750</b>	<b>8,573</b>

TAB. 3.51

**Summary of data relative to Resolution 40/04 as submitted by distributors**

Thermal year 2008-2009

Source: Operators' declarations submitted to AEEG.

DISTRIBUTORS	REQUESTS WITH POSITIVE OUTCOME	REQUESTS WITH NEGATIVE OUTCOME	PLANTS WITH MORE THAN ONE CHECK
Large	300,643	6,550	5,345
Medium	72,302	2,024	1,895
Small	14,817	176	1,333
<b>TOTAL</b>	<b>387,762</b>	<b>8,750</b>	<b>8,573</b>

TAB. 3.52

**Summary of data relative to Resolution 40/04 as submitted by distributors and on basis of distributor size**

Source: Operators' declarations submitted to AEEG.

### Quality in the transport service

With Resolution 185/05 of 6 September 2005 as supplemented and amended, the Authority introduced provisions whereby each transport company must ensure that the Gross Calorific Value (GCV) and the chemical and physical properties of the natural gas supplied to consumers are monitored more closely.

The Resolution gives transport companies responsibility for measuring and checking the gas quality parameters, the aim being to ensure that the metering service is both reliable and prompt. It also establishes that metering units should be made accessible for checks by the Authority; this also applies to the owners of the metering systems, where these

are not transport companies.

The resolution establishes the rules for measuring and checking the GCV and other gas quality parameters at entry points to the transmission networks. For points within the networks, it provides that heating power should be measured using gas chromatography.

The data provided by natural gas transporters for measurement points in a uniform withdrawal area (Italian initials AOP) and at entry points to the network show that, for thermal year 2008-2009, 179 of the 277 gas chromatographs installed were owned by transporters and 98 by third parties. The total number installed increased by 88%.

### Insurance for civil gas consumers

The statistical survey of incidents involving fuel gas, drawn up by the Italian Gas Committee (CIG) in compliance with the RQDG, shows that for thermal year 2008-2009 225 incidents, as defined by Resolution 152/03 of 12 December 2003, occurred downstream of delivery points.

Under the provisions of paragraph 3.3 of resolution 152/03, the CIG sent the Authority a brief summary of the incident reports received as well as a progress report on compensation procedures from 1 October 2007 to 30 September 2008. A total of 84 incidents were reported.

### Domestic customer satisfaction surveys

For 2009, ISTAT again conducted its survey on domestic customers' satisfaction with their electricity and gas services. For the gas service, the survey included over 187,000 households and monitored, at the regional level, their satisfaction with those aspects of the service for which quality is regulated. These include frequency of meter

readings, ease of understanding of bills and customers' opinion of the information provided on the services. The Survey was introduced in 1998 and is repeated annually. It should be noted that no results are available for 2004; this is because until 2003 the survey took place in November but since 2004 has been conducted in the month of February. For more general aspects of the survey, please see the section on domestic customer satisfaction with the electricity service in Chapter 2 of this volume. The Authority and ISTAT have drawn up a further customer-satisfaction survey agreement for 2010-2014.

In 2009, the general level of user-satisfaction increased by about 1 percentage point with respect to the previous year. With the exception of the north-west of the country, user-satisfaction showed a marked increase on 2008 (Tab. 3.53). A geographical breakdown reveals that user-satisfaction levels are lowest in north-eastern Italy, albeit higher than in 2008. In line with the data on overall satisfaction levels, increased customer-satisfaction can also be observed for individual factors (frequency of meter readings, ease of understanding of bills, information on the service) (Tab. 3.54). Particularly worthy of note is the rise in users' satisfaction with the "information on the service" parameter.

TAB. 3.53

#### Overall satisfaction with the gas service

Percentages obtained from "very satisfied" and "fairly satisfied" responses

	1998	1999	2000	2001	2002	2003	2005	2006	2007	2008	2009
North-West	94.9	95.0	94.6	94.7	95.4	94.7	94.7	92.9	94.2	92.4	91.9
North-East	94.5	94.8	94.0	94.5	93.1	94.3	92.3	91.5	91.1	88.1	89.3
Centre	94.3	95.7	94.9	94.3	95.0	94.6	92.9	92.7	93.7	91.6	92.6
South	94.5	95.1	94.9	96.0	94.0	93.9	92.5	92.9	94.0	90.6	92.6
Islands	89.6	95.6	91.5	96.3	94.6	90.8	95.3	93.3	93.4	92.0	92.2
<b>ITALY</b>	<b>94.5</b>	<b>95.2</b>	<b>94.5</b>	<b>94.9</b>	<b>94.6</b>	<b>94.3</b>	<b>93.4</b>	<b>92.6</b>	<b>93.4</b>	<b>90.9</b>	<b>91.7</b>

Source: ISTAT "Omnibus" survey, 1998-2009.

TAB. 3.54

#### Overall satisfaction with the different aspects of the gas service

Percentages obtained from "very satisfied" and "fairly satisfied" response

	1998	1999	2000	2001	2002	2003	2005	2006	2007	2008	2009
Frequency of reading	86.1	86.9	85.7	82.9	82.4	81.0	78.5	80.9	82.0	78.6	79.0
Bills: ease of understanding	80.2	81.5	79.6	80.4	78.4	77.0	74.4	74.4	75.2	69.5	71.2
Information on service	79.4	81.1	79.5	79.0	77.3	75.8	72.9	73.2	74.8	69.2	71.4
<b>OVERALL SATISFACTION</b>	<b>94.5</b>	<b>95.2</b>	<b>94.5</b>	<b>94.9</b>	<b>94.6</b>	<b>94.3</b>	<b>93.4</b>	<b>92.6</b>	<b>93.4</b>	<b>90.9</b>	<b>91.7</b>

Source: ISTAT "Omnibus" survey, 1998-2009.

---