Key issues

Competition in the electricity market has been enhanced by the development of the electricity network and the excess of supply caused by demand reduction and growth in renewables. Despite all this, power prices in Italy are generally still higher than in other EU member states.

Increasing interconnection capacity and developing congestion management rules with neighbouring markets should be encouraged to allow the secure integration of renewables and better price alignment with adjacent countries. National infrastructure capacity should be increased to tackle the North-South disparities within the country.

Competition within the gas sector has improved due to successful unbundling of the TSO and the implementation of new capacity allocation rules. Nevertheless, the spot market liquidity is still low. Security of supply at peak periods is limited due to low flexibility. Access rules to interconnection capacity should be further developed to avoid contractual congestions.

1. General overview

In 2012, after a 5% decrease, gross energy consumption reached 163 Mtoe. The share of oil products over the total consumption (37%) fell below the share of natural gas (38%) for the first time, while the share of solid fuel and renewables (13.5%) increased, thus moving Italy closer to achieving the 2020 renewables target of 17%.

*Figure 1: Gross inland consumption mix 2008 – 2012 (source: Eurostat)*
2. Regulatory framework

General
A new national energy strategy (Strategia energetica nazionale, SEN) was approved at the beginning of 2013\(^{296}\) and confirmed by the latest Italian Government. Infrastructure development, import reduction and further integration into the European single market are among the primary goals for the electricity sector. Meanwhile, the natural gas sector focused on continuous development and integration into the European gas market, with the final aim of Italy becoming the primary hub in southern Europe.

In 2012, Legislative decree 28/11 came into force, reshaping incentives for renewables: the Green Certificates mechanism was replaced by feed-in tariffs, with caps to limit overall expenditure and to incentivise capacity. Auction procedures are planned for larger plants.

National Energy Regulator
The Italian National Energy and Water Service Regulatory Authority (Autorità per l’Energia Elettrica, il Gas ed il sistema idrico), which has been in operation since 1997, working in both energy and water services regulation had 172 staff in 2012 with an annual budget of EUR 58.5 million. The Authority collects levies from energy market and water service stakeholders to cover this budget.

Unbundling
In the first half of 2013 the Italian Regulator certified Terna, the main transmission system operator, under the ownership unbundling regime. There is a total of 138 electricity distributors, 10 of which serve more than 100,000 customers each. In 2012, the market share of Enel Distribuzione, the dominant operator in distribution, remained stable at 86% of total volume distributed.

Snam Rete Gas’s unbundling process from its former parent company (Eni) has been concluded and it is now certified as an ownership unbundled TSO. In September 2013 Infrastrutture Trasporto Gas was certified as independent transmission operator. There were 232 gas distributors in 2012, of which 35 served more than 100,000 customers. In 2013, there were five distributors with market share higher than 5%, with Snam providing almost 23% of market. In the coming years, the number of gas distributors will be reduced to 177 and each concession will be auctioned.

3. Wholesale markets

Electricity

Competition on the wholesale market continues to improve: the market share of the four largest operators decreased by 5%, compared to 2011 (49%). ENEL remains the main market operator holding 25% of the market (26% in 2011), followed by ENI (9%), Edison (7.2%) and E.On (4.4%). Further progress was made by small-sized operators whose collective shares rose to 30.2%. Global national electricity consumption dropped from 328.2 TWh in 2012 to 317.1 in 2013.

Congestion management rules were improved as the introduction of market coupling between Italy and Slovenia brought about tangible benefits, mainly by improving efficiency in cross-border capacity transmission rights allocation. As a result of this and a decrease in natural gas prices, a decline of the day-ahead prices was observed from the end of 2012. Even though Italy remains one of the best interconnected European countries, the average price of electricity was still above the rest of the Europe due to the generation park composition by far led by combined cycles gas fired plants (see Fig. 2).

Gas

Final gas consumption continued to decrease, reaching the lowest level since sector’s liberalisation (70 Gm³ in 2013 against 74.9 Gm³ in 2012). Net volumes of imported gas fell consequently as well, but Italy’s dependency on gas imports remains high (90%). In 2012, Russia was Italy’s main supplier (35.2%) followed by Algeria (32.2%). LNG is imported mainly from Qatar. Most imported gas is based on long-term contracts, with just 4.6% of the total import purchased on European exchanges.

Eni, Edison and Enel continued to dominate gas supply, increasing their share to a combined amount of 78.2% (74.3% in 2011) but the concentration remains low (HHI in 2012 below 500).

Despite rather low market liquidity (the churn rate of the Italian PSV remained stable at the 2011 level of 2.6) the level of competitiveness was enhanced by early introduction of congestion management rules at the North border. Prices on the OTC spot market at PSV, after a 21% increase in 2012, remained largely stable at around EUR 28/MWh with reduced spread in respect of main European hubs. Products available at the gas exchange are increasing (the organised forward market was activated in 2013).

4. Retail markets

Electricity

Due to a significant downturn in power demand the size of the retail market in 2012 decreased by 4.2% compared to 2011, reaching 264 TWh. Despite the numerous active suppliers (about 140), the standard offer market remained concentrated, as 85.4% of the total supply was provided by Enel. The free market was less concentrated with a combined share of the three main operators (Enel, Edison and Eni) at 34.3%, of which the leading operator (Enel group) accounted for 20.3%. The competition on the overall retail market was at medium level (HHI just above 1800) with only two companies having a market share greater than 5%.

In Italy, consumers that do not choose a supplier remain with a default supplier, the local DSO, which provides electricity according to a ‘standard offer’. In this case, the local DSOs buy electricity from the Single Buyer at wholesale market price. Today the majority (80%) of households and SMEs are still served on the base of this ‘standard offer’. Other consumers (i.e. other than households and SMEs) are obliged to find a supplier, but if they cannot find a suitable offer, electricity is supplied by a Last Resort Supplier, selected through an open auction. Customers remained relatively active in switching suppliers: 7.6% of the total number of withdrawal points changed supplier in 2012 (compared to 7.0% in 2011). An independent data hub to support the switching process has been launched in 2013.

Figure 3: Electricity price change by component 2008 – 2012 (source: Eurostat, energy statistics)

Gas

In 2012, domestic demands in the gas sector decreased by 9% compared to 2011, with 64.2 Gcm of natural gas sold to the end market. As the share of the top three sellers (Eni, Enel and Edison) decreased slightly (from 49% in 2011 to 47.5% in 2012) the market remained concentrated.

Consumers have been able to choose their own supplier since January 2003. Nevertheless, the majority (84%) of households and SMEs are still served on the base of this ‘standard offer’. 4.7% of
overall gas customers changed supplier in 2012, representing 45.2% of the total volume of gas consumption. An independent data hub to support the switching process has been launched in 2013.

In 2013 the gas retail market regulatory framework in Italy has been redefined. The new balancing market, introduced in 2011, decoupled the price from petroleum products, which led to a renegotiation of prices and quantities. This reform has incentivised the wholesale spot market and has brought prices more in line with those of other European markets. The aim was to pass on the benefits deriving from wholesale spot commodity prices to consumers through a reform of the economic terms for the "servizio di tutela gas" (standard offer for domestic consumers).

Figure 4: Natural gas price change by component 2008 – 2012 (source: EC, EPCR metadata)

5. Consumers

Italy has implemented several instruments to protect consumers and promote informed choices. The NRA acts as single point of contact providing online information to consumers through the Consumers' Atlas as well as an online price comparability tool. Italy has undertaken specific institutional communication campaigns. In 2013, the NRA set up a new Energy Customer Conciliation Service300 parallel to the existing joint dispute resolution procedure protocols.

In 2012, the number of cases processed by the Energy Help-Desk 301 decreased by 6% when compared with 2011 and numbering almost 36,000, submitted mostly by residential customers. The NRA has also adopted a Resolution on the transparency of billing. Other forms of protection are the presence of a last resort supplier and of social tariffs available for vulnerable customers who suffer

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300 This service is provided completely online, and provides for a third-party conciliator who is independent of the two parties with expertise in mediation and energy.
301 A help tool managed in collaboration with the Single Buyer (Acquirente Unico) that is conducting material, informational and fact-finding activities and ensuring the effective processing of complaints.
from financial hardship or serious health conditions\textsuperscript{302}. The number of families who have benefited from social tariffs is 957,192 for the electricity sector and 609,301 for the gas sector\textsuperscript{303}.

The assessment of both retail electricity and gas markets in Italy is the 5\textsuperscript{th} lowest in the EU and well below the EU average (65.7 and 71.0 points compared to 72.0 and 74.1, respectively). In addition, the score of both markets is well below the average observed for 31 domestic services markets (almost 8 points for electricity and over 2 points for gas), with 30\textsuperscript{th} and 21\textsuperscript{st} position in the ranking. While the performance of gas market has stayed relatively stable since 2012, the electricity market has seen a considerable (4.2) decrease in score. The electricity market scores below the EU average on all indicators (with the third lowest score on trust in providers) with the exception of switching provider or tariff plan with the existing provider (which is 4\textsuperscript{th} highest in the EU). Likewise gas services are assessed below EU average on all the components with the exception of switching provider or tariff plan (with the 4\textsuperscript{th} lowest EU score on overall consumer satisfaction and 4\textsuperscript{th} highest incidence of complaints). \textsuperscript{304}

6. Infrastructure

The Italian authorities should ensure a proper and timely adoption of the measures stemming from Regulation 347/2013 on the trans-European energy infrastructure, including the establishment of the one-stop-shop for Projects of Common Interest (PCIs) (due by 16 November 2013), and other measures foreseen for 2014 and 2015, including the publication of the manual on the permit granting process for project promoters, and the adoption of legislative and non-legislative measures streamlining the environmental assessment procedures.

Electricity

Various upgrades of the internal grid were completed in 2012 allowing better integration of different market zones and improving the transit of electricity throughout the critical South-Central-South section. Future investments include 19 Projects of Common Interest under the guidelines for trans-European energy infrastructure, mainly interconnecting Italy with France, Switzerland and Austria and the necessary internal reinforcements. Altogether such investments will ease the grid constraints and reduce differences between price zones. The SAPEI project doubled the existing interconnection capacity between Sardinia and the Italian mainland thus contributing to resolving congestion issues in that area. A sub-sea transmission cable between Sicily ("Sorgente-Rizziconi") and the continent is still under construction; entry into operation is expected in 2015. The Italian TSO is among a small number of entities worldwide that have decided to implement electricity storage pilot projects on a large scale to manage congestion caused by renewable generation. The electricity sector roll-out of the smart meters is almost complete, ENEL has installed over 32 million smart meters.

\textsuperscript{302} Resolution 02nd August 2012, 350/2012/R/eel pursuant to Ministry of Health Decree dated 13th January 2011 entitled “Identification of medical-therapeutic equipment powered by electricity required to keep people with serious health conditions alive”, and pursuant to the provisions of Ministerial Decree dated 28th December 2007.

Gas
The new offshore LNG regasification terminal in Livorno was completed at the end of 2013. Despite the third party access exemption obtained, the terminal asked for admission to the regulated system. Another one in Porto Empedocle, Sicily, started construction activities in 2013.

Snam Rete Gas is developing a Project of Common Interest within the North-South East Corridor to allow future flows from the Southern Gas Corridor project, the construction of Trans Adriatic Pipeline transporting Azeri gas from the Turkish border to the South of Italy through Greece and Albania will start in 2015. It also has a PCI ensuring reverse flow capacity towards the north western markets and a planned pipeline for Algerian gas through Sardinia.

The AEEG has proposed updating the previously established timeframe for the mass roll-out of smart meters in the gas sector, delaying it by 2018.

7. Security of supply

Electricity
The Italian system is characterised by substantial surplus of generation capacity which currently stands at over twice the peak load. The excess of available capacity has been enhanced by a very large amount of new renewable generation capacity commissioned in the last two years. A capacity market mechanism is expected to substitute the existing temporary scheme of capacity payment. According to the proposed scheme, the TSO will purchase guaranteed options from the generation companies (physically backed call options) for the amounts required to ensure system adequacy, however, implementation is still awaiting final approval.

Gas
Despite the excess of overall import capacity Italy’s reserves at peak daily demand are rather tight. Given the high (and increasing) share of residential consumption over the total demand (around 30%), the daily demand is very sensitive to temperatures. The new storage site of Bordolano (Stogit) is completed and expected to go on online in 2015, meanwhile the construction of the San Potito e Cotignola (Edison Stocaggio) and Cornegliano (Italgas Storage) sites have been delayed and the concession for Rivara (Independent Resources plc) was cancelled. Because of the high share of gas fired generation capacity a shortage of gas may create flow problems in the electricity sector. The emergency plan for the gas system, in line with Regulation 994/2010 is based on reactivation of cold reserve oil plants and disconnection of industrial customers.

8. Key indicators

<table>
<thead>
<tr>
<th>Electricity</th>
<th>Gas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of companies representing at least 95% of net power generation</td>
<td>291</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of main power-generation companies</th>
<th>3</th>
<th>Number of main gas entities</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market share of the largest power-generation company</td>
<td>25%</td>
<td>Market share of the largest entity bringing natural gas</td>
<td>44.6%</td>
</tr>
<tr>
<td>Number of electricity retailers</td>
<td>412</td>
<td>Number of retailers selling natural gas to final customers</td>
<td>465</td>
</tr>
<tr>
<td>Number of main electricity retailers</td>
<td>2</td>
<td>Number of main natural gas retailers</td>
<td>4</td>
</tr>
<tr>
<td>Switching rates (entire electricity retail market)</td>
<td>7.6%</td>
<td>Switching rates (entire retail market)</td>
<td>4.7%</td>
</tr>
<tr>
<td>Regulated prices for households – electricity</td>
<td>No</td>
<td>Regulated prices for households – gas</td>
<td>No</td>
</tr>
<tr>
<td>Regulated prices for non-households – electricity</td>
<td>No</td>
<td>Regulated prices for non-households – gas</td>
<td>No</td>
</tr>
<tr>
<td>HHI in power-generation market</td>
<td>884</td>
<td>HHI in gas supply market</td>
<td>&lt;500</td>
</tr>
<tr>
<td>HHI in electricity retail market</td>
<td>1,865</td>
<td>HHI in gas retail market</td>
<td>1,275</td>
</tr>
<tr>
<td>Electricity market value(^{308}) (bn€)</td>
<td>39,410</td>
<td>Gas market value(^{309}) (bn€)</td>
<td>23,110</td>
</tr>
<tr>
<td>Installed generation capacity (MW)</td>
<td>124,224</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peak demand (MW)</td>
<td>54,113</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of smart meters installed</td>
<td>32 mln(^{309})</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* AEEG updates and publishes every 3 months standard conditions for households and small enterprises based on wholesale market conditions

\(^{308}\) Market value is an estimation of the size of the retail electricity and gas markets. It is calculated using data on electricity and gas consumption in the household and non-household sectors (average bands) and annual average retail prices.