ITALY

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<td>Production (kb/d)</td>
<td>46.5</td>
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<td>Motor gasoline</td>
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<td>Gas/diesel oil</td>
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<td>Residual fuel oil</td>
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<td>303.9</td>
<td>265.7</td>
<td>245.8</td>
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<td>Others</td>
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<td>474.7</td>
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<td>Import dependency</td>
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<td>95.0%</td>
<td>95.8%</td>
<td>92.9%</td>
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<td>2,321</td>
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<td>Oil in TPES</td>
<td>59.9%</td>
<td>58.0%</td>
<td>58.4%</td>
<td>51.8%</td>
<td>44.7%</td>
<td>43.4%</td>
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End-Month Total Oil Stock Levels\(^1\) - Five Year Range

Key Natural Gas Data

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<tbody>
<tr>
<td>Production (mcm/y)</td>
<td>14,245</td>
<td>17,296</td>
<td>20,364</td>
<td>16,633</td>
<td>12,071</td>
<td>9,706</td>
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<td>Demand (mcm/y)</td>
<td>32,592</td>
<td>47,405</td>
<td>54,385</td>
<td>70,745</td>
<td>86,265</td>
<td>84,897</td>
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<td>Transformation</td>
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<td>11,352</td>
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<td>Industry</td>
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<td>11,284</td>
<td>11,264</td>
<td>11,244</td>
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<td>Residential</td>
<td>14,000</td>
<td>13,731</td>
<td>16,421</td>
<td>18,280</td>
<td>22,942</td>
<td>19,509</td>
<td>19,555</td>
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<tr>
<td>Others</td>
<td>611</td>
<td>5,863</td>
<td>7,128</td>
<td>6,154</td>
<td>10,788</td>
<td>10,993</td>
<td>12,860</td>
<td>-</td>
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<tr>
<td>Net Imports (mcm/y)</td>
<td>18,347</td>
<td>30,109</td>
<td>34,091</td>
<td>54,112</td>
<td>74,194</td>
<td>75,191</td>
<td>75,628</td>
<td>70,007</td>
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<tr>
<td>Import dependency</td>
<td>56.3%</td>
<td>63.5%</td>
<td>62.5%</td>
<td>76.5%</td>
<td>89.0%</td>
<td>88.6%</td>
<td>89.1%</td>
<td>89.6%</td>
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<tr>
<td>Natural Gas in TPES</td>
<td>21.4%</td>
<td>27.2%</td>
<td>26.6%</td>
<td>34.5%</td>
<td>39.3%</td>
<td>39.7%</td>
<td>40.3%</td>
<td>40.2%</td>
</tr>
</tbody>
</table>

* Based on monthly data submissions to the IEA.

End-Month Natural Gas Stock Levels\(^2\) - Five Year Range

1. Primary oil stocks on national territory; these exclude utility stocks and including pipeline and entrepot stocks where known.
2. Stocks held on national territory, as reported to the IEA in monthly data submissions.
ITALY

OVERVIEW

Italy has some indigenous production of oil and natural gas, but both oil and gas production will progressively decline in the coming years. Italy’s total domestic hydrocarbon production met less than 10% of the country’s needs in 2008.

Italy is among Europe’s largest energy consumers, with Total Primary Energy Supply (TPES) standing at around 175 Mtoe in 2008. The supply mix remains dominated by oil and natural gas, which together have accounted for well over 80% of the TPES since 1973.

Italian oil demand is increasingly concentrated in the transportation sector. The progressive dieselisation of the vehicle fleet has significantly altered the demand structure. Diesel demand grew by some 60% between 1999 and 2009, whereas motor gasoline dropped by 31%.

The shift away from oil to natural gas, reducing oil’s share from over 77% in 1973 to less than 50% of the total of energy sources in 2008, is mainly due to the increased use of natural gas in power generation. Natural gas-fired electricity plants are replacing dual-fired electricity plants that used to offer the possibility of switching to natural gas in an oil supply disruption. The shift away from dual-fired electricity plants to natural gas-fired electricity plants renders an emergency response system for natural gas indispensable, and the country seems to be well prepared for this situation.

Italy fulfils its minimum oil stockholding requirements to the IEA by placing stockholding obligations on industry. Companies are obliged to report on a monthly basis to the Ministry of Economic Development the exact location, product and quantity of stocks. A company’s non-compliance with its obligations can result in hefty financial penalties. In an emergency, oil operators can be granted permission to draw on stocks.

Italy also established a natural gas emergency response policy which provides for mandatory security measures such as requirements for strategic and working gas storage. The level of strategic storage should equal 50% of peak imports at the main national entry point for 60 days. Italy’s maximum withdrawal capacity from storage could theoretically cover almost 70% of peak winter demand (assumption based on the peak winter demand of about 430 mcm/d). The length of the authorisation process has become a barrier to the entry of new storage capacity.
1. Energy Outlook

Italy is among Europe’s largest energy consumers, with Total Primary Energy Supply (TPES) standing at around 175 Mtoe in 2008. TPES is expected to grow to 232 Mtoe by 2030, largely driven by electricity demand and met by the continued trend towards natural gas usage. Already that trend has reduced oil’s share in the power sector from over 75% in 1973 to less than 50% in 2008. Natural gas-fired electricity plants are replacing dual-fired electricity plants which use residual fuel oil and offer the possibility of switching to gas in an oil supply disruption. Oil demand continues to decline, and its use is becoming ever more concentrated in the transportation sector.

The supply mix remains dominated by oil and natural gas, which combined have accounted for well over 80% of TPES since 1973. The potential for further diversification in the foreseeable future is limited, owing to the limited growth of renewable energy and the local resistance to coal. The nuclear option, which was abandoned in 1987, is being reconsidered as a part of future power generation capacity.

Source: Monthly Oil Statistics, IEA
The decade after 1999 saw significant changes in the Italian power sector. Some 20 000 MW of CCGT plants fuelled with natural gas (including both repowered existing plants and greenfields) came online, and electricity production from natural gas increased from 95 TWh to 158 TWh over the same period. As a result, the share of natural gas in 2008 accounts for 55% of total input to power generation, up from 41% in 2001. Over the same period, the share of oil was halved, from 40% to 20%.

2. Oil

2.1 Market Features and Key Issues

Oil reserves and domestic production

Domestic production of crude and other hydrocarbons remained relatively unchanged between 2005 and 2007, at around 119 kb/d in 2008. New upstream discoveries remain limited, and Italy’s reserves will progressively decline in coming years. Italy’s total domestic hydrocarbon production (oil plus gas) met less than 10% of the country’s needs in 2007.

Oil demand

Italian oil demand declined by 12% between 1999 and 2009. Forecasts indicate that this trend is set to continue. As natural gas replaces oil in electricity generation, the use of oil is becoming increasingly concentrated in the transportation sector. Consumption of residual fuels (notably HFO) was halved during the same period.

With regard to the transport sector, oil consumption has grown between 1999 and 2009, but the progressive dieselisation of the vehicle fleet has significantly altered the demand structure.

The changes in oil use become apparent in the breakdown of product demand. Since the peak level of 1995, total oil demand decreased by an annual average rate of 1.1 % to 2007. Over the same period, diesel consumption grew by an annual average rate of 4%, while motor gasoline and residual fuel oil use declined by 3% and 6.3%, respectively.
Imports/exports and import dependency

Italy is highly dependant on external sources for its oil supply, importing over 90% of its oil needs. While oil supply sources are diversified over some 30 different countries, Libya and Russia are the dominant sources of oil, each accounting for almost a quarter of all Italian crude oil imports. Saudi Arabia, Iraq and Iran together represent an additional quarter of oil imports.

<table>
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<tr>
<th>Crude Oil Imports by Source</th>
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</table>

Taxes and maximum price mechanisms

The Italian oil market is fully open. Imports, exports, trade and prices are free. The government intervenes only to protect competition and to avoid abuse of dominant positions.

Oil company operations

Former state oil company ENI has a dominant position in the Italian upstream oil and gas sector, although a number of private Italian and foreign companies have established a significant presence. Companies willing to set up refineries and oil product storage need an authorisation to do so that is issued by the relevant region. Distribution is principally undertaken by integrated oil companies. While ENI had the largest share of the market in 2008 (around 30%), it intends to reduce its presence in the retail market and will focus on upstream and refining activities. There are three non-OECD companies operating in Italy: Tamoil Italia (Libya), Petroleum Italiana (Kuwait) and Lukoil (Russia). The three companies have refining and marketing operations.
2.2 Oil supply infrastructure

Refining

Italy plays an important role as Europe’s largest refining centre, and is a net exporter of refined products, providing finished products to other countries.

There are 16 major refineries operating in Italy, 12 of which are located along the coast and are supplied by sea. The other four are situated in the Po Valley, in the north of Italy, and are supplied by pipelines from Genoa, Venice and Vado Ligure. Total crude oil refining capacity stands at around 100 Mt annually, or roughly 2.1 mb/d.

Substantial investments have been carried out in order to adapt the refineries to the decline in heavy fuel oil demand in the power sector and the growth of cleaner fuel consumption in the transport sector. Further investment in conversion capacity and fuel quality is expected in light of ever-growing demand for diesel fuels and greater availability on the market of sour (rather than sweet) crude oils.

Refinery Output vs. Demand

Source: Monthly Oil Statistics, IEA
Ports and Pipelines

Italy has 16 crude oil tanker ports, four of which (Taranto, Milazzo, Falconara [Ancona], Augusta [Santa Panagia]) can receive cargo ships of up to 300 dwt. As most refineries are along the Mediterranean coast, there are relatively few crude oil pipelines in Italy.

There are two major crude oil pipelines: the Central European Line (CEL) from Genoa (1 mb/d capacity), which supplies inland refineries in northern Italy and the Swiss refinery of Collombey; and the Trans-Alpine Pipeline (TAL) from Trieste, which supplies Germany, Austria and the Czech Republic. The trunk line, from Trieste to Ingolstadt (TAL-IG), has a capacity of 850 kb/d. There is no connection between the eastern and western halves of the northern pipeline network, raising concerns of accessibility during a supply disruption.

The PEOP (Pan European Oil Pipeline) is a pipeline project which aims at diversifying and improving the security of supply of Italy. The pipeline would start at Constanța in Romania, and travel through Serbia, Croatia and Slovenia to Trieste in Italy. It would involve both Energy Community and European Union member states, and would be over 1 300 km long, with a transport capacity of more than 1.2 mb/d of crude oil mainly from the Caspian Sea.

Storage capacity

Italy has 704 industrial and commercial depots across the country, with a total storage capacity of at least 26 million cubic metres, of which over 50% are located in four regions in the north of the country. Storage capacity is roughly split into one-third crude and two-thirds finished products.

2.3 Decision-making Structure for Oil Emergencies

Responsibilities for energy policy are shared between the central government and regional authorities. The Ministry of Economic Development is responsible for energy policy, and for maintaining an operating handbook on emergency procedures and measures for oil supply disruptions. The latest version of the handbook, from 2003, places emphasis on public appeals to reduce energy consumption, on reduction in heating levels and hours, on driving restrictions, on stock drawdown and on fuel switching away from oil to other sources in electricity generation.

Within the Ministry, the Oil Office of the Security of Supply and Energy Infrastructure Directorate of the Department of Energy functions as the permanent body of the National Emergency Strategy Organisation (NESO). Its role is to monitor the oil market, and in the case of an emergency, to prepare information, data and studies, and to ensure liaison with the IEA Secretariat and industry. It is also responsible for monitoring industry’s compliance with minimum stockholding requirements.

In a disruption, the Ministry would convene the full NESO body, called the Conference of Services. This includes representatives from several relevant ministries: the Ministry of Foreign Affairs, the Ministry of the Interior and its Department for the Civil Defence, the Ministry of Transport, the Ministry of Defence, the Ministry of Environment, the Ministry of Health and the Ministry for Communications. The Conference of Services also includes representatives from the oil industry and industry associations. The Conference of Services, chaired by a representative of the Ministry of Economic Development, would meet within 24 hours and would decide the measures to be taken in a supply disruption.
2.4 Stocks

Stockholding Structure

All stocks in Italy are held by industry. Italian legislation requires that total compulsory stocks for the country as a whole must not be less than 90 days of domestic consumption during the preceding calendar year. This applies to the three product categories covered by EU obligations. The stockholding obligation is distributed proportionally among the various companies in the market on the basis of product amounts sold in the previous year. The holding requirements are then increased by the difference needed to meet the country’s obligations as an IEA member – i.e. to hold total oil stocks of at least 90 days of net imports.

Legislation passed in 1998 established a National Reserve Stock Agency (Agenzia Nazionale delle Scorte di Riserva). However, this agency so far never really played a role in the holding or managing of emergency reserves.

There are approximately 100 companies with stockholding obligations in Italy. Refiners processing for third parties abroad or for export must hold stocks equivalent to 23 days of product output. This amount is deducted from the national obligation calculated by the Ministry. The balance is then allocated to all operators that delivered products into domestic consumption in the preceding calendar year.

Secondary storage licence holders (small product depots authorised by the local prefecture) are required to hold stocks equivalent to 10% of gross tank capacity. As these depots are distributed widely over the country, such a compulsory stock requirement ensures broad product availability in a domestic emergency. Individual stock holding commitments of companies may be transferred to another through leasing or storage rental agreements.

Crude or Products

Italy stipulates that all compulsory stocks must be held as products, but companies may hold crude to meet up to 40% of their light/middle distillate stock obligations and up to 50% of their fuel oil stock obligations. The compulsory and commercial stocks are commingled.

Location and Availability

Decree 22/2001 sets out guidelines for intergovernmental agreements on stockholding with other EU member states, in order to facilitate the coverage of stock obligations for companies. Italy has bilateral agreements with Germany, Hungary, Malta, the Netherlands, Slovenia and Spain. Bilateral agreements with Denmark and Cyprus are close to conclusion. Italy has no maximum ceiling for the amount of bilateral stocks which companies can hold in other countries in order to fulfil their reserve holding commitment. Most stocks held in other countries under bilateral agreements are in the form of tickets.
As of late 2009, around 20 million barrels of compulsory stocks were held in other countries, accounting for around 13% of total stocks and around 15 days of net imports. Some 7 million barrels on average are held in Italy on behalf of other European countries.

Monitoring and Non-compliance

Companies are obliged to report on a monthly basis to the Ministry of Economic Development the exact location, quality and quantity of stocks. In times of possible tensions in international markets, or in a supply crisis, the ministry can demand more frequent reporting. In collaboration with the Revenue Guard Corps and the Customs Agency, the Ministry monitors each company’s compliance with the decree obligations. The standard sanction for breaching stock obligations is a fine of EUR 5 165 per day per tonne by which the company falls short of its prescribed minimum for that specific location.

Stock and Timeframe Drawdown

In a CERM-type co-ordinated emergency response, the Ministry has the authority to impose a stock drawdown on industry. The time required from a government stockdraw decision until the physical deliveries is estimated to be less than 24 hours.

A NESO decision to use emergency reserves during a supply disruption would be announced in a ministerial decree that would authorise companies to reduce their mandatory stocks by a certain amount and to make these stocks available to the market. This decree would include an indication of each company’s share of stock drawdown.

Financing and Fees

No financial support is given to oil companies for holding stocks.

3. Other Measures

3.1 Demand Restraint

The Conference of Services has the legal authority to decide upon demand restraint measures, implementing them through its operational structures.

The specific measures considered include appeals to the public for voluntary measures to limit consumption, reduction in domestic heating, and possibly also driving restrictions. During a crisis, monitoring activities would be intensified, including increased frequency of reporting of stock levels and product deliveries to the market. Industry participants would also be required to submit forecasts of anticipated sales on a regional basis. The regional prefectures would become responsible for monitoring deliveries to vital sectors and assuring initial data verification of regional
reporting. Regional shortages of oil products could be addressed through a redistribution of supplies, subject to approval by the Ministry of Economic Development.

The Administration has indicated that a driving ban is the measure that would be prioritised if it resorted to demand restraint measures. Italy has significant experience in imposing odd/even licence plate schemes, mainly to reduce air pollution in metropolitan areas during the winter. On an average day of application, this measure can reduce 10-15% of normal gasoline and diesel consumption for transportation. As the use of oil for heating is diminishing, the scope for oil savings through demand restraint measures on domestic heating is reduced.

### Oil Consumption by Sector*

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<td>2007</td>
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</table>

* Total Consumption (including refinery consumption), does not include international marine bunkers.
Source: Oil Information, IEA

### 3.2 Fuel Switching

During the Gulf Crisis, Italy used about half of its fuel-switching capacity at the time (4 000 t/d, or 27 kb/d) by replacing fuel oil with natural gas. Around a third of the oil-fired plants can still switch to gas in the case of an emergency. The potential of this emergency response measure is quickly diminishing with falling fuel switching capacity due to the shrinking share of oil in thermoelectric plants.

### 3.3 Others

The scope for surge production of crude oil is very limited as active fields operate at or close to maximum capacity.
4. Natural Gas

4.1 Market Features and Key Issues

Gas production and reserves

Italy has indigenous production of natural gas. Around two-thirds of Italy’s gas reserves are located offshore. Whereas in 1973, domestic production accounted for almost 90% of Italy’s supply needs, Italy’s production has progressively declined over the last thirty years, from 15.4 bcm (12.6 Mtoe) in 1973 to 8.0 bcm (6.6 Mtoe) in 2009.

Gas demand

Demand for natural gas in Italy has grown rapidly over the last decades, notably as part of a national programme to alleviate the country’s dependence on oil imports. Gas demand shot up by 359% between 1973 and 2009, growing from just 17 bcm in 1973 to almost 78 bcm in 2009. This growth is almost entirely attributable to the increase in demand for power generation, as indicated in the graph below.

![Natural Gas Consumption by Sector*](image-url)

Source: Natural Gas Information, IEA

Power generation accounts for almost 40% of total gas demand in Italy. The residential and commercial sector is the second biggest source of demand growth for natural gas. This growth was due both to market substitution of oil-fuelled heating appliances in old buildings, and to natural gas being the preferred choice for domestic uses in new buildings. In the industrial sector, gas consumption has remained rather stable, due both to the high market share that gas had already attained and to the low rates of industrial growth in recent years.

Import dependency

Import dependency for natural gas is very high, standing at around 90% in 2009. Italy’s import dependency is set to increase to over 95% by the 2030s. The vast majority (98.1%) of imports were delivered by pipeline in 2009, and the remaining 1.9% were LNG cargoes. OECD Europe only accounted for 21% of imports (14.6 bcm) in 2009. Two countries alone – Algeria (22.7 bcm) and Russia (20.0 bcm) – account for two-thirds of Italy’s imports.
Since May 2000, gas import contracts must have a flexibility of at least 10%, allowing the possibility to import during the winter period a daily gas volume at least 10% higher than the daily average import volume over the whole year. Almost half of import activity is conducted on the basis of long-term take-or-pay contracts, with an overall duration exceeding 30 years. One-quarter of the import activity is carried out through contracts having a total duration of between 20 and 30 years. The remaining one quarter of contracts involves durations of less than 20 years.

### 4.2 Natural Gas Supply Infrastructure

#### Pipelines and LNG Terminals

There are seven delivery points for imported natural gas in Italy; five are gas pipelines (Mazara, Gela, Tarvisio, Passo Gries and Gorizia) and two are LNG terminals. Two pipeline entry points (Tarvisio and Mazara) account for almost two-thirds of Italy’s gas imports. Italy’s biggest entry point is the TAG pipeline interconnection through Tarvisio in the North-East of the country, which in 2009 delivered 22.9 bcm of natural gas (maximum capacity of 4.99 mcm/h), equivalent to some 33.1% of total gas imports to Italy. The TPMC interconnection to Tunisia through Mazara del Vallo is also significant, delivering 21.3 bcm (30.8% of total gas imports to Italy) in 2009 (maximum capacity of 4.40 mcm/h).

Italy has two LNG regasification terminals in operation: at Panigaglia in Liguria; and the North Adriatic Sea offshore terminal near Rovigo, which began operations in 2009. A tentative start-up date for a third LNG terminal at Livorno in Tuscany is 2011.

#### Storage

Gas storage infrastructure plays an important part in the Italian gas market. Storage is filled in the low-demand summer months and emptied during the peak-demand winter months. Ten storage fields operate in Italy, totalling about 9 bcm of commercial working capacity. Given that peak winter demand in recent years has stood at around 430 mcm/d, Italy’s maximum withdrawal capacity can theoretically cover almost 70% of peak winter demand (assuming perfect interconnectivity).

The long authorisation process, which includes environmental impact assessment requirements, has become a barrier to the creation of new storage capacity. Access to storage facilities is based on regulated TPA, and published tariffs are established by the regulatory authority in line with criteria established by the government. The tariffs include a commodity charge, a strategic storage fee, and charges for volume, injection and withdrawal capacity.
4.3 Emergency Policy for Natural Gas

Italy’s natural gas emergency response policy provides for mandatory security measures in the national gas system (e.g. dispatching rules) aimed at reducing price fluctuation, increasing supply security, coordinating the storage system, and reducing the vulnerability of the gas system.

Italy was severely affected by a disruption of gas supplies over the winter of 2005-2006 (partly due to a Russia-Ukraine gas dispute), and has since taken significant measures to better prepare for
another such situation. The Ministry of Economic Development has adopted and updated its legislation in 2007 regarding specific emergency procedures. The update establishes the roles of the actors involved, the system monitoring procedures, and the measures to be taken by the Ministry in the case of a crisis. A specific “technical emergency committee for the gas system” within the Ministry was designed to adopt the most appropriate available measures. The emergency procedures list a series of measures for increasing gas imports and reducing gas consumption. For example, penalties can be levied for non-compliance with the full use of the booked import capacity obligations.

**Strategic Gas Stocks and Drawdown**

Each year, strategic stock volumes are set by a Ministry of Economic Development communiqué, and are based on assumptions of import reduction through the system’s major entry points. Strategic stocks belong to storage companies. The level of strategic storage should cover for 60 days a 50% disruption of peak capacity at the main national entry point. Strategic storage requirements are charged on all gas imports from outside the EU. Italy’s strategic stocks, located in the North of the country, stood at around 5.1 bcm ahead of the 2009-2010 winter.

During the gas crisis in the winter of 2005-2006, the Italian Administration decided to release 1.5 bcm from the strategic reserves, in order to alleviate the gas shortage.

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*Demand used here is monthly gross inland deliveries (observed) as reported in the MOS. Source: Monthly Oil Statistics, IEA*

**Demand restraint**

A decree passed in September 2007 by the Ministry of Economic Development introduced a flexibility scheme for coping with supply crises which applies to industrial customers directly connected to transport infrastructure and other voluntarily adherents. Customers adhering to this scheme must reduce consumption at the request of the system operator, which can encourage such behaviour through a system of incentives and fines. If the total decrease in consumption of voluntarily adhering customers is lower than necessary, the scheme can impose penalties and incentives upon all customers connected to transport infrastructure.
**Fuel switching**

Six percent of gas-fired power generation can also run on oil, albeit at higher production costs. Dual fuel plants are obliged to hold oil stocks, but the quantity is not linked to a predetermined number of days. Switching will only occur following a specific governmental request, due to the inherently higher costs involved. Technically speaking, the fuel switch can be achieved at short notice (from hours to days), depending on the technology.

Only 0.5% of the industrial load can operate on fuels other than gas. Furthermore, large industrial facilities are not required to have alternative fuel available. Fuel-switching abilities are thus very limited in the industrial sector.

**Electricity exports**

Gas policy is linked to arrangements for the electricity markets; emergency measures in the thermoelectric sector are based on the constant monitoring of gas consumption in that sector. No specific legislation has been passed to regulate electricity production from gas-fuelled plants in the case of a crisis. As Italian gas prices are more rigid than electricity prices in neighbouring countries, power plants can continue exporting electricity when gas is scarce. The excess production of electricity by gas-fuelled plants significantly exacerbated the gas supply shortage during the 2005-2006 winter. To limit the possibility of such a scenario occurring again, a penalty system has been established to discourage drawing on storage during the winter season beyond specific thresholds, which reflect household needs. Gas-fired electricity plants would have to pay this penalty when drawing on gas stocks during gas shortages, effectively raising gas prices in Italy and thus limiting the profitability of exporting electricity.
The International Energy Agency (IEA), an autonomous agency, was established in November 1974. Its mandate is two-fold: to promote energy security amongst its member countries through collective response to physical disruptions in oil supply and to advise member countries on sound energy policy.

The IEA carries out a comprehensive programme of energy co-operation among 28 advanced economies, each of which is obliged to hold oil stocks equivalent to 90 days of its net imports. The Agency aims to:

- Secure member countries’ access to reliable and ample supplies of all forms of energy; in particular, through maintaining effective emergency response capabilities in case of oil supply disruptions.
- Promote sustainable energy policies that spur economic growth and environmental protection in a global context – particularly in terms of reducing greenhouse-gas emissions that contribute to climate change.
- Improve transparency of international markets through collection and analysis of energy data.
- Support global collaboration on energy technology to secure future energy supplies and mitigate their environmental impact, including through improved energy efficiency and development and deployment of low-carbon technologies.
- Find solutions to global energy challenges through engagement and dialogue with non-member countries, industry, international organisations and other stakeholders.

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