

COMMITTEE ON ENERGY
WORKING PARTY ON GAS
Geneva, 23 - 24 January 2007

ITALY - 2006 provisional data

Primary Energy Consumption

Period of reference: 2006 first ten months

In 2006 first ten-month period the primary energy consumption in Italy remained almost unchanged, totalling 160.76 million toe, compared with 160.61 in the same 2005 period.

Natural gas primary consumption represented 55.58 Mtoe with an increase of 1 %. Renewables rose by 4.6% and solid fuels by 5% while there is a strong decrease of electricity net imports (-15.2%). Oil primary demand didn't register a relevant change.

Primary Energy Consumption in Italy (Mtoe)

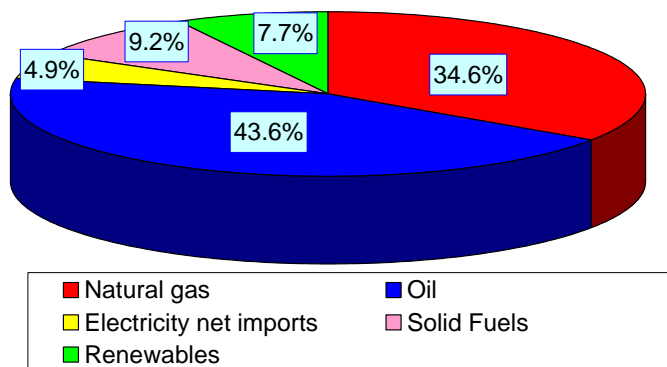
Source: processing of Minister of Economic Development's data and Terna's data

	2006 ⁽²⁾	2005	CHANGE
	Jan. - Oct.	Jan. - Oct.	%
Natural gas	55.58	55.06	1.0%
Oil	70.09	70.31	-0.3%
Electricity net imports	7.92	9.35	-15.2%
Solid Fuels	14.77	14.04	5.1%
Renewables ⁽¹⁾	12.40	11.85	4.6%
TOTAL	160.76	160.61	0.1%

(1) Renewables includes hydro, geothermal, wind, solar, biomass energy

(2) Provisional

Natural gas primary consumption represents the second source of energy in Italy with a 34.6% share of the primary energy consumption in the first ten months of 2006.



Supplies of Natural Gas

Period of reference: January - November 2006

Total net gas supplies (indigenous production + imports - exports +/- stocks) totalled 75.2 billion Scm in the period January - November 2006, almost unchanged with respect to the same 2005 period.

Domestic production decreased by 8.7% confirming the negative trend of the last 10 years. Italy imported 70 billion Scm in the period January - November 2006 registering an increase of 5.6% compared with the same period in 2005.

The 71.7% increase of imports from Libya is due to the fact that the Greenstream has been fully operational since April 2006. It's noticeable the 50.3% increase of imports from "others" which reflects the trend for the future. Due to the liberalization and opening of European gas markets it is and it will be increasingly difficult to locate the origin of gas imports. As a matter of fact there are not only long term supply contracts but also spot contracts and swaps which make it difficult to define the import origin itself.

SUPPLIES OF NATURAL GAS

provisional data for the period January - November 2006

billion Scm (38.1 MJ/m³)

		January - November		CHANGE %
		2006	2005	
indigenous production		10.0	11.0	-8.7%
imports		70.0	66.2	5.6%
for entry points	Mazara del Vallo	22.0	22.8	-3.2%
	Gela	7.0	4.1	71.7%
	Tarvisio	20.5	21.2	-3.7%
	Passo Gries	16.1	14.7	9.3%
	Panigaglia	3.0	2.4	25.2%
	Gorizia	0.2	0.3	-18.8%
	Others	1.2	0.8	50.3%
Exports		0.4	0.4	-0.6%
changes in stocks		4.5	1.7	165.6%
TOTAL NET SUPPLY		75.2	75.2	0.0%

Source: Minister of Economic Development

Inland Sales of Natural Gas by Sector

Period of reference: first 2006 semester

All sectors registered an increase of natural gas demand especially in residential and power plants with a growth rate of about 5% in the first 2006 semester compared with the first 2005 semester.

INLAND SALES OF NATURAL GAS BY SECTOR

provisional data for the first 2006 semester

million toe

	1 st semester		CHANGE %
	2006	2005	
industry	8.13	8.12	0.1%
residential	12.72	12.10	5.1%
power plants	13.80	13.07	5.6%
others	1.19	1.18	0.3%
TOTAL inland sales ⁽¹⁾	35.84	34.47	4.0%

Source: processing of Minister of Economic Development's data
(1) with temperature correction

ITALY

Main issues

- **Market opening and competition:** in January 2003, the Italian gas sector was fully liberalised; for electricity, only households are not yet able to choose their supplier. There is a fully functioning Italian Power Exchange (IPEX). As far as gas is concerned there not enough liquidity for a proper exchange, but a Virtual Trading Point ("Punto di Scambio Virtuale"), managed by SnamReteGas, the national gas TSO allows some trading.
- **Regulatory authorities:** the Italian regulator (AEEG) has sufficient powers, ensuring a stable regulatory framework. Its financial and human resources seem to be adequate for its tasks. It is independent and very active. The regulator's competence for cross-border issues is not sufficient -
- **EU integration:** Gas import infrastructure (Italy is not a transit country) also needs upgrading, due to growing CCGT demand.

Overview on regulatory framework

The first step towards liberalisation was the approval of Law 481 of 14 November 1995, establishing the Italian Regulatory Authority for Electricity and Gas (Autorità per l'energia elettrica e il Gas: AEEG). It gave the regulator wide competences, including (inter alia) ex ante tariff fixations, complaints and appeals. Afterwards the Italy transposition of the energy Directives was made thus far by several legislative measures, taken in different occasions. The most relevant are: The Letta Decree (Legislative Decree No. 164/2000 - implementing Directive 98/30/EC) gave a strong impulse to the creation of effective and increasing competition, liberalising the activities of importation, exportation, transportation and dispatching, distribution, and trade of natural gas. Among the most relevant provisions:

- the legal unbundling of transport, storage and distribution activities;
- the reduction of concentration in the market, with the introduction of a 50% maximum market-share ceiling on gas sold to final customers and of 75% of gas imported into Italy by a single player.
- the creation of wholesale market competition;
- the eligibility for all customers by January 2003;

Later Law No. 239/2004 - implementing Directive 2003/54/EC – provided for reorganisation of the energy sector as a whole and established, among others, general objectives of energy policy, including:

- the definition of the scope of central government exclusive competence (transmission issues, import/export, competition, distribution concessions and authorisation of power plant construction, etc), vis-à-vis the competences of regions;
- the introduction of an exemption regime to the third party access right to infrastructure, in cases of new interconnection lines, LNG import terminals and storage plants;

The process is still ongoing: new legislation is in preparation.

Description of the market

Gas market

For gas, the main participants in the markets are as follows: **ENI** 43,9%, **Enel Group** 15,4%, **Edison Group** 7,7%, **AEM Group** 2,6%, **Hera Group** 2,5%, **E.ON** 1,5%, **Gaz de France** 1,5%.

In terms of sectors the Italian natural gas consumption (85 bcm in 2005) can be divided as follows: 43% Gas fired power plants (of which 4% for heat generation), 25,6% households, 21,1% Industry, 9,6% Services, 0,5% CNG vehicles.

SnamReteGas (50% owned by ENI) owns and operate all the transport pipelines; the activity is regulated in detail by a grid code. According to recent legislation ENI had to reduce its ownership to 20%.

Stogit (100% owned by ENI) own and operates most storage facilities

There are about 430 distributors in Italy. The largest one, **Italgas** (100% owned by ENI) has a 32% market share and is legally unbundled since 1999. A distribution code has been recently approved.

The establishment of a **Gas Exchange** is under consideration; in the meantime an embryonic exchange of transport capacity is operating.

Issues

Gas

Functioning of the wholesale market

In 2005 natural gas consumption totalled 85 billion m³, of which 14% produced in Italy.

Domestic production amounted to 12 billion m³, a decrease of 7.6% on the figure for 2004.

The natural gas market is strongly dominated by ENI: it has 84% of domestic production and has a 65% direct share of imports. Considering the gas sold by ENI to new entrants outside the national borders such share rises to 72%. In fact Italy imports gas through five infrastructures: TAG pipeline (NE, mainly Russian gas), TENP pipeline (North, mainly Norwegian gas), Panigaglia LNG terminal (NW, mainly Nigerian and Algerian gas), TTPC pipeline (SE, Algerian gas) and Green Stream pipeline (South, Libyan gas). All five infrastructures are under ENI's direct or indirect control. ENI also controls Stogit, the main national storage operator. Finally it owns 50% of SnamReteGas, the national gas TSO, which is not functionally unbundled.

The import infrastructure is mainly used for import contracts linked to take or pay contracts, many of which were entered into by ENI shortly before the European Directive of 1998 on market opening entered into force. At end 2005, 50% had a residual duration of between 10 and 15 years, 19% of between 15 and 20 years, and 4,4% of over 20 years. In the short-term, marginal transportation capacity made available by the flexibility of some import contracts also appears difficult to use, since the absence of a European regulatory framework for tariffs and for transparent, non-discriminatory access to international gas pipelines means that its use is still fraught with difficulties.

Functioning of the retail market

In spite of the some concentration occurred recent years, ownership of the distribution network remains very fragmented, with about 430 operators; most of them also own the network. The Eni Group controls 32% of the market, through Italgas. In June 2006 the AEEG approved the standard Distribution Network Code, which contains rules for access to and delivery of the gas distribution service. It is aimed to regulate and clarify relations between the companies operating distribution plants and the sales and wholesale companies using these facilities, and to insure that DSOs act a neutral and non-discriminatory manner towards wholesalers and suppliers.

In December 2006 380 companies owned a gas sales licence; most of them represent unbundled sales divisions of formerly integrated distribution companies. However the market is strongly dominated by the three largest groups: Eni (43.0%), Enel (15.8%) and Edison (7.9%). In 2005 these three operators covered:

91% of sales to electricity producers (in order: Eni, Enel and Edison);
71% of sales to industrial customers (in order: Eni, Enel and Gaz de France);
43% of sales to commercial and service sector customers (in order: Eni, Enel and Hera);
Although all customer (including domestic ones) are eligible since 1 January 2003, the switching rate is significant (23%) for large customers (i.e. consuming more than 200,000 m³/year), much lower (3%) for medium customers (consuming between 5,000 and 200,000 m³/year), negligible (1%) for small customers (consuming less than 5,000 m³/year). However in terms of volume the figures are 53%, 6%, and 1% respectively.
Domestic customers have the right to be supplied at a regulated price.

Security of supply

Gas consumption increased considerably in the last few years, mainly driven by new CCGT power plants. While gas domestic consumption is stable at 28-30 billion m³ as well as industrial at 20-21 billion m³ it grew from 25 billion m³ in 2003 to an estimated 35 billion m³ in 2006 and a forecasted 40 billion m³ in 2009. Global consumption was 85 billion m³ in 2005, but could amount to between 98 and 112 billion m³ in 2015. The growing demand and the dwindling domestic production put strain on the gas import and storage infrastructure, whose capacity had remained substantially stable. When electricity exports grew brusquely (by 40% from October to December 2005), driven by the favourable prices in foreign power exchanges, gas demand from power plants peaked as well, while at the same time a very cold winter caused an high demand from domestic heating. The country found itself in a critical situation and a state of emergency was declared on 19 December 2005. Things worsened markedly in January 2006 with the reduction in gas imports from Russia, initially (first few days of January) as a result of the crisis with the Ukraine and then of the cold spell which increased withdrawals in all the countries of the former USSR. Supply to some interruptible customers had to be curtailed and dual fuel industrial and thermoelectric plants were instructed to burn BTZ fuel oil. Heating was reduced in all buildings.

A detailed emergence plan has been prepared for winter 2006-2007, which includes optimised use of infrastructure and several gas saving measures. However the solution will be a planned substantial upgrade of import and storage infrastructures.

Infrastructure

The plans include upgrades to the TAG transit pipeline in Austria (of 3.3 billion m³ in 2008-09) and the TTPC transit line in Tunisia (3.2 billion m³ in 2008-09), plus a further upgrade that will take place in the following years.

In addition a Greece-Italy Interconnection (Italian acronym IGI) could come into service in 2010. This would enable imports of over 8 billion m³/year of gas passing through Turkey and extracted in Russia, the Caucasus and Iran.

Two more pipelines are also being developed: the Trans Adriatic Pipeline which would also bringing gas from Turkey crossing the Adriatic and Albania; and a new Italy-Algeria Pipeline, passing through Sardinia (known by its Italian acronym GALSI).

As far as LNG is concerned there are eleven terminals under consideration. However only three of these have been granted authorisation to proceed, and construction work is under way on one (Rovigo) to be operating in 2008-2009 while the second (Brindisi) is facing a strong opposition from local communities.

Present storage capacity is about 14 billion m³; six new concessions have been granted by the government for an extra capacity of 8,5 billion m³, which could become operative in 2009.

REFERENCE

Source:

EU Commission staff working document, Prospect for the internal gas and electricity market, Implementation report,10-1-2007.

Italian Minister of Economic Development