

LNG and regasification terminals in Italy and abroad

Prior to the development of LNG technology, natural gas was excluded from sea transport, and essentially remained a regional fuel. Following technological development and a reduction in costs, the long-distance transport of LNG on methane tankers has contributed to the rapid establishment of gas as a commodity for international trade.

The development of LNG business promotes the internationalisation of the system as well as the link between regional macro-areas of the gas market. This enables:

- the **expansion and diversification of import sources** by improving the **security** of the supply, using resources **otherwise unavailable**: this is an important aspect since LNG is increasingly traded in countries far from the production sites;
- a greater **flexibility of sources and delivery points** due to the lack of a physical connection between producers and consumers, a pipeline requires instead; this guarantees producers the possibility of **arbitrage between the various areas** in relation to demand and prices, and consumers the possibility to benefit from any **advantageous condition** based on market situations.

In 2017, LNG imports reached **289 million of tonnes**, recording the highest annual growth rate since 2010 (+9.9% compared to 2016). Importing countries account for **40**, while exporting countries are **19**. The naval fleet for LNG logistics has reached **511** units.

There are **25 facilities in Europe**, whose **average utilization rate** in 2017 was **22%** (source: GLE).

In Italy, there are **3** regasification terminals (Panigaglia, Livorno and Rovigo), for a total capacity of 15 billion m³ per year, with **an average utilization rate of 45% in 2017** (82.5% in Rovigo). In 2017, Italian regasification terminals imported approximately 11% of gas demand.

Site	Regasification terminal	Annual nominal capacity	Gas fed into the network in 2017
Rovigo	Adriatic LNG	8 billion m ³	6.9 billion m ³
Panigaglia	Snam	3.5 billion m ³	0.6 billion m ³
OLT Livorno	Iren + Uniper + Golar LNG	3.75 billion m ³	0.9 billion m ³

Source: Ministry of Economic Development - DGSAIE

Within the national system, the supply of **flexibility** services by terminals contributes to the increase of **liquidity** and **market competitiveness**, as well as resources for **balancing the system**.

New market challenges

In the next 20 years, it is assumed that there will be a **growing interest** in the development of the use of **LNG for maritime and heavy transport**. Natural gas is a valid alternative to traditional fuels both in terms of environmental impact and **cost effectiveness**.

In January 2017, Italy implemented the European Directive promoting sustainable mobility (DAFI), which established the phases concerning the realization of infrastructures for fuels alternative to oil for land and sea transport, in order to ensure a coordinated development of the market within the EU.

The directive represents a fundamental step for the development of the **small-scale LNG** supply chain, that is to say, projects and processes in which LNG leaves unloading facilities for ports, in order to be used for maritime transport.