

INFRASTRUCTURES FOR GAS IMPORT IN ITALY: RATING METHODOLOGY AND EVOLUTION (2009-2014)

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Introduction – methodology (1)

- ✦ By early 2000's, due to a number of factors – among which a strong growth in gas demand, especially from the powergen sector, a structural dependency from import, storage constraints (both on capacity and on allocation procedures) and, more generally, a very limited flexibility, especially for peak supply – in Italy a particular interest has developed for building additional gas import capacity, both as expansion of the existing infrastructures and as realization of new ones.
- ✦ As a result, in a few years a lot of projects (7 pipelines and 15 LNG terminals) have been subjected to feasibility studies and in many cases to the authorization procedures. In the second half of 2000's, the projected additional capacity amounted to about 140 bcm, of which 21% pipeline and 79% LNG capacity. Even without the subsequent economic crisis, which has dramatically pull down gas demand - and in particular powergen sector gas demand, also displaced by the strong rise of renewables - it was self evident that there wouldn't be room for all of that capacity and, above all, that not all the capacity would have the same chance to be realized.
- ✦ Therefore, starting from 2008 NE Nomisma Energia started publishing a rating of the probability of additional import capacity realization, as an useful tool for stakeholders (proposing companies, banks, funders, policy makers, operators of the gas sector, large end users) in order to assess the economic and strategic potential of a project.
- ✦ The variables involved in this assessment are so many and often interdependent, and have a different impact on the overall process, so that it is necessary to accurately consider all of these variables, weighing up interactions and cross effects on the probability of realization of the project.
- ✦ Some of these variables have a particular influence in the definition of the rating, as they represent a kind of barrier to the effective implementation of a project, the passing of which constitutes a real step forward.

Introduction – methodology (2)

✦ These variables are related to:

- the authorization process, which turns out to be - especially for LNG terminals - particularly complex and with a large number of decision makers involved;
- the level of acceptance by the local authorities and populations whose territory is affected by the project, often the strategic point on which relies the possibility of construction of infrastructure;
- the process of negotiation and conclusion of supply contracts, usually quite long and requiring, to be completed, a considerable degree of certainty about project realization;
- the existence of alternative import projects and their construction timing;
- actual progresses of the work;
- the method of allocation of available capacity and the possible TPA exemptions;
- issues related to access to the national transport network, through which the imported gas will be transported to consumers and whose congestion may require an agreement on capacity increase by the network manager;
- the evaluation of the proposing operator (integration in the gas supply chain, synergies with the electric power) at the Italian and European level, in particular for gas terminals (LNG integration in the supply chain and in particular upstream).

✦ Carefully assessing these variables through the publicly available information, Nomisma Energia compiled a rating of the import infrastructures in project. The rating is divided into 12 levels (from "AA +" to "-c") and has no predictive value, but is like a monitoring of the evolution of the project as a whole.

Rating comparison (2009-2014)

	May 2009	May 2012	May 2014
1 - Pipeline TTPC – expansion II (3,3 bcm)	aa+	completed (2009)	-
2 - Pipeline TAG – expansion II (3,3 bcm)	aa-	completed (2009)	-
3 - Pipeline Greenstream – expansion (3 bcm)	cc+	completed (2011)	-
4 - Pipeline IGI-Poseidon (8,8 bcm)	a-	a+	a+
5 - Pipeline TAP – Trans Adriatic Pipeline (10 bcm)	bb+	aa-	aa+
6 - Pipeline Galsi (8 bcm)	bb-	aa-	bb-
7 - Pipeline TGL – TransAustria GasLeitung (12 bcm)	-	c-	abandoned (2013)
8 - LNG terminal Porto Empedocle (AG) (8 bcm)	a-	aa+	aa+
9 - LNG terminal Livorno offshore (LI) (3,75 bcm)	a-	a+	completed (2013)
10 - LNG terminal Gioia Tauro (RC) (12 bcm)	a-	bb+	bb+
11 - LNG terminal Augusta-Melilli (SR) (8 bcm)	b+	bb-	abandoned (2012)
12 - LNG terminal Zaule (TS) (8 bcm)	b+	bb-	bb-
13 - LNG terminal Falconara offshore (AN) (4 bcm)	b+	a-	a-
14 - LNG terminal Porto Recanati offshore (AN) (5 bcm)	b-	bb-	bb-
15 - LNG terminal Panigaglia (SP) – expansion (4,5 bcm)	b-	b+	b+
16 - LNG terminal Brindisi (BR) (8 bcm)	cc+	bb-	abandoned (2013)
17 - LNG terminal Monfalcone (GO) (8 bcm)	c+	b+	b+
18 - LNG terminal Rosignano Marittimo (LI) (8 bcm)	c+	b-	b-
19 - LNG terminal Taranto (TA) (8 bcm)	c-	c-	abandoned (2012)
20 - LNG terminal Trinitapoli (FG) (8 bcm)	c- (rumors)	c- (rumors)	abandoned
21 - LNG terminal offshore Ravenna (RA) (8 bcm)	c- (rumors)	c- (rumors)	abandoned
22 - LNG terminal offshore Civitavecchia (RM) (8 bcm)	c- (rumors)	c- (rumors)	abandoned

Conclusion (1)

- ✦ Looking at the previous comparison table, it is evident that during the period there was a redundancy of the planned additional capacity, which has been progressively reduced - beside the economic downturn and the fall of demand forecast - also by market dynamics.
- ✦ In fact, among the 22 infrastructures in project - quite all planned to be in operation between 2010 and 2015 - only 4 have been effectively completed in 2014 and, out of these, only 1 is a new infrastructure (the LNG terminal offshore Livorno, opening the way also for supply diversification), the others being expansion of capacity on existing pipelines (TAG, TTPC and Greenstream), that is "historical" supply routes.
- ✦ Among the other 18 projects, 7 have been abandoned in the last two years (2012-13):
 - 3 because of difficulties in the authorization process (Augusta-Melilli, Taranto and Brindisi LNG terminals, the third one also facing a very strong local opposition);
 - 1 because of market reasons (TGL pipeline, due to an unsuccessful open season);
 - another 3 (Trinitapoli, offshore Ravenna and offshore Civitavecchia LNG terminals) have not even passed the proposal stage, because it wasn't opened any investigation to obtain the necessary authorizations; therefore, they were no more included in the rating.
- ✦ At present there are still 11 projects ongoing, of which 3 pipelines and 8 LNG terminal. However, taking into consideration the probability of realization, there are some relevant differences among them.

Conclusion (2)

- ✦ Only one of the pipelines (the TAP projects) has constantly improved its rating, which is a sign of a growing probability of realization, while the other two are stable (IGI-Poseidon project) or even worsening (Galsi project). IGI-Posiedon project, which is completely authorized, faces some difficulties in finding gas supply, while over the past two years Galsi project has postponed the FID from semester to semester because of partners disagreement on gas prices.
- ✦ Looking at the LNG terminal projects, just three of them (Porto Empedocle, Falconara offshore and Gioia Tauro) are completely authorized. However, only the first one is waiting for the start of the works, planned by early 2015. Falconara offshore project is suffering for the slowdown of the activities of the API group (which is the project operator), while the Gioia Tauro project faces some problems because of its big size (impacting both on its feasibility, in a scenario of falling gas demand, and on supply contracts conclusion) and could be sold by its proponents to third parties.
- ✦ Another two projects (Monfalcone offshore and Zaule), both located in the gulf of Trieste, have recently been stopped by MATTM because of their potential impact on vessel traffic. For this reason, in fact, MATTM didn't granted the VIA to Monfalcone project and in December 2013 annulled the VIA to Zaule project.
- ✦ About the last 3 LNG terminal (Porto Recanati offshore, Panigaglia expansion and Rosignano Solvay, all have obtained the VIA), it is quite probable they won't be realized at all. Porto Recanati proponent GdF Suez has changed its business strategy in Italy and doesn't seem to be more interested in importing LNG. Panigaglia expansion faces some environmental difficulties, moreover the proponent ENI said it is interested in investing in LNG projects as long as the regulation provides an adequate return on the investment. In the end, one of the proponet of the Rosignano project (BP) has withdrawn, while the other (Edison) is already involved and more interested in other more advanced import projects (Galsi and especially IGI-Poseidon).