



ConferenzaGNL®

2nd Conference on Liquefied Natural Gas for Transport Italy and the Mediterranean Area

Rome 10-11 April 2014
Auditorium Antonianum, Viale Manzoni 1

Findings from

2nd Conference on Liquefied Natural Gas for Transport - Italy and the Mediterranean Area

1. Natural gas age is emerging at a worldwide level and this source is set to overtake oil on a long-term; the development of *shale gas* in the USA has changed the resource geopolitics but some rigidities remain to overcome for the LNG supply chain;
2. Gas price levels in the three main markets (North America, Europe, Asia-Pacific) are like to converge but it's difficult to anticipate the time frame, maintaining a structural gap between the three geographic areas due to transport costs;
3. In the panorama of the Euro-Mediterranean region important natural gas resources located in South East (Israel and Cyprus) may constitute an important new option for further diversification of supplies toward Europe; the development of these new resources will also rely on creation of conditions that facilitate a geo-political stability in the countries of the South-East of the Mediterranean Sea;
4. On the LNG supply side the worldwide liquefaction capacity will remain short in the short term while in the medium term, we will assist at the new entry of significant LNG exporting facilities from Australia, South-East Africa, Canada and the USA;
5. On March-April 2014 negotiations within the International Maritime Organization (IMO-) on the reduction of sulphur content in marine fuels, have recently confirmed the entry into force of the 0.1% limit for the Emission Controlled areas (ECA) from the 1st January 2015. Non-ECA areas are expected to be restricted to a reduction of sulphur content in marine fuels from the current 3.5% to 0.5% between 2020 and 2025; in addition, NOx emissions Tier III standards will be applied on ships constructed from January 1st, 2016 onwards;
6. Data on the world fleet powered by LNG (either single or dual fuel) presented by DNV GL indicate 48 vessels already in operation (excluding tankers and vessels for inland waterways) and 53 new orders confirmed by 2018. Moreover, the entry into force of the limits on the sulphur content in marine fuels for ECA areas predict an acceleration of orders that would bring the number of LNG-powered ships at around 1,000 units by 2020 and up to 3500 by 2025.
7. At a European level are being discussed crucial regulation for the future development of liquefied natural gas in road transport and shipping, among which the most important are:
 - Implementation of the Directive 2012/33/UE by June recognizing the limits for sulphur emissions for maritime transport as by IMO regulations starting from 2020;
 - Development of national plans aimed at the construction of "adequate infrastructures" for the deployment of alternative fuels (including LNG and CNG) to be submitted by the Member States by 2016, as envisaged in the consolidated text of the proposal of Directive [COM (2013) 18final]
 - Negotiations on the revision of Directive 2003/96/EC on the Community legislation on the taxation of energy products, within which proposals have been made to increase taxation on natural gas and the inclusion of a tax component also based on the content of the CO₂ in different fuels. If approved in the current form the revision would bring tax on natural gas from few €/GJ to 6.5 €/GJ.
8. About the taxation of energy products the professional organizations of natural gas which attended the conference stressed the importance of revising the EU proposal to avoid to nip in the bud any initiative of the Italian natural gas supply chain in the transport sector, both gaseous and liquid; the Ministry of Economic Development too has urged all Italian stakeholders to keep attention focused on this issue;



9. The European Union is supporting through financial programs several projects for the use of LNG in transport in order to favour the deployment of liquefied natural gas for vessels on short and long-haul and trucks on long-haul:
 - The Project COSTA completed its first phase on 28-29 April, 2014, led by the Italian Ministry of Infrastructure and Transport in cooperation with the RINA, and produced an analytical evaluation for the use of LNG in the area that stretches from the Black Sea to the Atlantic Ocean (Azores) across the Mediterranean Sea;
 - The Blue Corridors Project developed by a consortium of European companies which include also Italian leading companies in the energy and automotive sectors, aims to the construction of 14 LNG fuelling stations and the use of 100 trucks powered by LNG along the four European highway corridors identified by the project (Atlantic area, Mediterranean area, North-South and East-West corridors);

10. In Italy, some of the largest energy companies are developing strategies to promote the deployment and use of liquefied natural gas in transportation, for example Eni built the first service area in Italy capable of delivering LNG to trucks, in Piacenza. On the medium-term the company's strategy on alternative fuels aims to increase the installation of liquefied natural gas filling stations along the major Italian highways traveled by trucks.

11. Edison and OLT (Offshore LNG Toscana) are taking into consideration to develop LNG supplies for transports starting from the existing supply infrastructures. In particular, Livorno's re-gasification plant candidates itself as the Tyrrhenian Sea hub for the supply of liquid methane for marine fuel and Edison (which trades liquid methane re-gasified at the plant co-managed with Qatar Gas and Exxon near Rovigo) has built a task force focused on the LNG uses;

12. Italy holds first-class technologies and industrial experiences on road transportation fuelled by natural gas (CNG-LNG), sector in which about the 60% of technologies sold worldwide are Italians. In particular, for the liquid methane use Iveco has developed a line of natural gas fuelled trucks and Ecomotive Solutions (group Holdim) has developed a solution for the truck retrofits that allows the conversion at dual-fuel diesel/methane power. In terms of methane distribution, Italy already has a good level of development and there are also several L-CNG stations in the country.

13. Even in the field of maritime transport the supply chain of liquid methane "speaks Italian", starting from the potential infrastructures of LNG supply (LNG-Italia SNAM, Offshore LNG Toscana, and Adriatic LNG), mini and micro liquefaction (S.TRA.TE. G.I.E), through logistics (the companies represented by Assocostieri already have skills and deposits on coasts which are well positioned on the field) shipbuilding (Fincantieri), engine design (Wartsila Grandi Motori Trieste-Italy, Rosetti Marino, Marine Engineering Services) until the retrofit of dual fuel diesel-natural gas engines. The latter application takes part in a specific supply chain project called "ITALICA" led by Ecomotive Solutions and Starlight partners along with other partners including RINA, Polargas and Vanzetti Engineering.

14. Different realities within the Italian maritime sector are working in collaboration with marine engine companies including the foreign enterprises among which Rolls Royce, for the construction of new LNG-powered ferries. Among the foreign companies active in the supply chain of LNG naval use, Emerson Process Management has introduced a specific solution that provides greater security in liquid natural gas refuelling operation on board.

15. The Italian Navy also plans to convert part of the new fleet to the use of liquefied natural gas in the framework of the so-called "Green Fleet" program aimed to use alternative fuels (biofuels and LNG) for the reduction of overall consumption of 9% and a reduction of CO2 emissions by 40%, in 2020.

The 2nd Conference on Liquefied Natural Gas for Transport - Italy and the Mediterranean Area

The 2nd International Conference on Liquefied Natural Gas for Transport - Italy and the Mediterranean Area, held in Rome on 10-11 April, organized by Symposia and the World Energy Council Italy - (WEC Italy), was attended by two hundred representatives among international organizations, institutions, companies and associations.



The work plan has mapped out a comprehensive framework of regulations, markets and activities associated in the use of liquefied natural gas on road and maritime transport at an international level. The themes addressed by the speakers from companies, institutions and organizations were: the trends in supply, demand and world resources of natural gas in main LNG consumption areas (North America, Europe, Asia); international laws and regulations; the prospects for liquefied natural gas supplies, design engine and shipbuilding solutions and technologies, LNG distribution and logistics.

A significant participation was also ensured by Italian institutions which addressed the issue of LNG use for transport purposes in view of the Italian Presidency of EU (1 July to 31 December 2014) and reported on the latest findings of international negotiations within the EU and the International Maritime Organization (IMO). In particular, the Conference hosted the intervention of the Plenipotentiary Ministry MARSILLI Marco, Deputy General Manager / Chief matters and G8/G20 Global, Ministry of Foreign Affairs, the MEP Carlo Fidanza, Rapporteur of the European Parliament Directive on infrastructure for alternative fuels, Admiral. Cristiano Aliperta, Maritime Attaché Head-Italian Representation to IMO, Embassy of Italy in the United Kingdom, Vincenzo Perrella and Nicola Zezza of the Ministry of Economic Development, CA (CP) Nicola Carlone Body of the Harbor, Giuseppe Alati and Maria Grazia Cacopardi of the Ministry of Infrastructure and Transport, the Ministry of Environment Sebastiano Serra.

ConferenzaGNL proposal for ECA area in the Adriatic and Ionian Sea

During the debate Admiral Cristiano Aliperta, Maritime Attaché Head-Italian Representation to IMO, Embassy of Italy in the United Kingdom, highlighted the importance of the Italian naval fleet, eleventh in the world, and urged the Italian stakeholders to support the Ministry of Environment and the Ministry of Transport to enforce Italian competences and interests within the International Maritime Organisation. Italy could indeed submit an application to IMO to establish a controlled emissions area (ECA) starting from the Adriatic and Ionian Seas in order to then extend its application to the whole Mediterranean Sea.

The Project ConferenzaGNL 2014-2015 aims to raise awareness and enable Italian stakeholders to an evaluation of opportunities in order to accelerate towards more stringent environmental limits for transport in the Mediterranean Area.