



## Interest in LNG/LBG back-up systems in Europe is growing

The current crisis in the natural gas market, the uncertainty of supply with the possible regulation of the quantity of off-take and the volatility of supply prices, is forcing more and more companies across Europe to look for reliable solutions for back-up power supply to their operations. Suppliers of LNG (liquefied natural gas) and LBG (liquefied biogas) back-up systems are seeing increasing demand.

*"Over the past few months we have seen a significant increase in demand for so-called back-up natural gas supply solutions to ensure energy security. For example, glass works, machinery manufacturers or the automotive industry are interested in such solutions. Our systems are able to flexibly and reliably address any shortages or constraints in natural gas supply by replacing LNG/LBG,"* says **Michael Blondin, Vice President, Sales EMEA & India at Chart Industries.**

Chart Industries, a global company listed on the New York Stock Exchange (GTL), designs and supplies complex LNG/LBG back-up systems, including tanks and (ISO) containers for the import and distribution of LNG or biogas. The company has its own production facilities in several European countries such as Italy, Germany, France and the Czech Republic.

### "Virtual pipeline" as a common solution

Systems that use liquefied natural gas (LNG) or liquefied biogas (LBG) based solutions to supply process gas systems in locations where there is no natural gas pipeline have been used in the past where piped natural gas was not available. *"With our equipment, we can effectively create a kind of virtual gas pipeline that works in Scandinavian countries or on the island of Madeira, for example,"* adds **Tomas Cermak, LNG Segment Manager for System Solutions at Chart Industries in Europe.**

To ensure uninterrupted supply for smaller operators, Chart Industries supplies, for example, standardised satellite vaporisation stations for LNG/LBG, which are primarily supplied as compact solutions on a common support frame for gas consumption up to 500 Nm<sup>3</sup>/h. *"For higher consumption, the system contains the same components, only larger in size and positioned according to the structural layout at the installation site,"* adds **Tomas Cermak.** Satellite stations are essentially an all-in-one solution. They include a cryogenic pressure tank for liquefied natural gas, air vaporizers, control and safety system, including interconnecting piping, cryogenic valves, measuring instruments and control system.

### LNG/LBG as a back-up solution

Using LNG/LBG directly at the point of consumption has several undeniable advantages. *"The main advantage is the use of cryogenic storage tanks, which can hold LNG that is 600 times smaller in volume than natural gas in gaseous form. This is a huge advantage for both transport and storage,"* says **Tomas Cermak.**

Chart Industries has been developing and manufacturing cryogenic equipment and system solutions for decades. The storage tanks are designed for long-term storage of liquefied natural gas or liquefied biogas with minimal heat loss. For controlled evaporation, air evaporators are used, in which the LNG/LBG is converted to the gas phase by heating the surrounding atmospheric air. The regulating system ensures the gas supply automatically without human intervention and is connected via a regulator to the off-take pipe.

### **Solutions for small and large plants**

The typical size of the storage tank for the purposes of normal process operation is 40 and 60 m<sup>3</sup>. "This storage tank is capable of maintaining a supply of 100 - 500 m<sup>3</sup> of gas per hour approximately 1 to 5 MW for 3 to 14 days," says **Tomas Cermak**. In order to replenish the storage tank and ensure continuous supply to production facilities, the time reserve of LNG tanker deliveries and the size of the storage tank must always be sized accordingly.



#### **Chart Industries:**

*Chart Industries is a leading global manufacturer of highly engineered cryogenic equipment that serves a variety of applications in the clean energy and industrial gases markets. Its unique product portfolio is used in all phases of the liquid gas supply chain, including initial engineering, service and repair. Chart Industries is listed on the New York Stock Exchange with European engineering and manufacturing facilities in the Czech Republic, Italy, Germany and France.*

More information: <https://www.chartindustries.com/Products/Small-Scale-LNG>