

## Europe generates solid LNG demand

Mon 25 Apr 2016 by Mike Corkhill



The Baltic is following the example of the Mediterranean and becoming a busy LNG carrier zone, but the emphasis is on small-scale in the northern sea

Europe's net LNG imports surged in 2015, climbing 15.8 per cent on-year to reach 37.6 million tonnes (mt), due to a combination of increased regional demand for gas, declining local gas production and a fall in the number of reload cargoes at European import terminals.

Another determinant was the dramatic slowdown in what was once rapidly growing demand for LNG in Asia. LNG follows the path of least resistance and, with Asian storage tanks now full, gas sellers have turned to European terminals as destinations for more of their cargoes.

In the face of weak global gas demand European LNG prices are at the same low levels as those in Asia and not much different to the cost of pipeline deliveries. The purchase of additional LNG cargoes is enabling European utilities to lessen their dependence on piped gas deemed to be geopolitically sensitive, notably from Russia.

Qatar and Nigeria are the leading examples of exporters reorienting their cargo flows because they no longer command the premium Asian buyers paid for additional LNG cargoes following the Japanese tsunami in March 2011. When shipping costs are factored in, Europe is now a more attractive LNG market than it has been for several years.

According to figures published by the International Group of Liquefied Natural Gas Importers (GIIGNL), Qatar shipped 21.1mt of LNG to Europe in 2015, 20 per cent more than a year earlier. Nigerian exports to the region were 5.45mt, 26 per cent ahead of 2014.

### Big winners

In terms of increased import volumes, the UK, Spain, Italy and Belgium were Europe's big winners in 2015. The UK remained the region's top LNG buyer, its 10.08mt in net imports 20 per cent up on the previous year.

Qatar supplied the UK with 96 per cent of its LNG in 2015 and most of the emirate's cargoes were discharged at South Hook LNG terminal in South Wales, in which Qatar Petroleum holds a controlling stake.

Net Spanish LNG imports last year totalled 8.8mt, an 11.7 per cent on-year increase resulting from a widespread drought that reduced hydroelectric output. Huelva, Barcelona and Sagunto are the busiest of Spain's six receiving terminals.

### Turkish potential

Cargo purchases by Turkey, Europe's third-largest LNG importer, totalled 5.35mt in 2015, a 1.8 per cent drop on the previous year. Qatar, Algeria and Nigeria are the country's principal suppliers and Norway and Trinidad provide occasional shipments.

Turkey is one of the world's fastest-growing power markets and uses gas for more than 50 per cent of its electricity generation. It relies on imports to meet virtually all its gas needs, of which Russian pipeline deliveries account for nearly 60 per cent of the volume it buys from other nations.

Political tensions between the two countries have increased in recent months, prompting Turkish interest in diversifying energy sources and boosting LNG imports through its Aliaga and Marmara receiving terminals.

In December 2015 Turkey and Qatar reached preliminary agreements on the possible development of a third terminal and the sale of LNG under a new term contract. Turkey is also looking to the US as a possible future source of LNG.

### **Neck and neck**

France is Europe's fourth-largest LNG importer, by the smallest of margins over Italy. France's 4.35mt of imports in 2015 were down 4.5 per cent on-year, whereas Italy's 4.32mt represented a 32 per cent increase. The busiest of Italy's three import facilities is the RasGas-controlled offshore Adriatic LNG terminal.

France's lower imports in 2015 are attributed to higher purchases of Norwegian piped gas and increased storage drawdowns. However, inbound French LNG is set for a boost with the opening of the country's fourth receiving terminal, the EDF-operated Dunkirk facility near the Belgian border, this coming June.

Dunkirk has the capacity to process 9.4 mta of LNG, which is enough, through its links to the gas grids of France and Belgium, to meet about 20 per cent of the two countries' annual gas consumption. The terminal also has the ability to reload cargoes and possible LNG bunkering and tank truck loading roles are being investigated.

French state utility EDF holds 60 per cent of Dunkirk's capacity rights and its recent purchase contracts include two deals with Cheniere Energy for output from the recently commissioned Sabine Pass liquefaction complex.

Under the first, Dunkirk will receive 26 Sabine Pass cargoes between 2016 and 2018 and the second covers the purchase of up to 24 LNG cargoes over the 2017-2018 period. Dunkirk is also the most likely destination for the latter tranche, or at least the bulk of it.

France's other terminals, all operated by the Engie affiliate Elengy, are Montoir at St Nazaire and Fos Tonkin and Fos Cavaou, both in the industrial port of Fos, close to Marseilles. Built to handle Medmax ships of up to 75,000m<sup>3</sup> carrying cargoes from Algeria, Fos Tonkin has been in service since 1972 and Elengy is set to make a decision on the facility's post-2020 future by 2017.

### **Benelux flexibility**

Besides Europe's Big Five importers, six European Union (EU) nations each received under 2mt of LNG in 2015. Belgium's Fluxys facility in Zeebrugge was the busiest of the facilities handling smaller volumes, accommodating net imports of 1.9mt, some 89.7 per cent more than the previous year.

Zeebrugge supplements its regasification activities with cargo reloads and road tanker loadings. Last year Fluxys re-exported 0.83mt of LNG using both conventional-sized and small coastal LNG carriers and its LNG tank-truck consignments are now approaching 2,000 annually. The range of operations at the terminal is set to widen again.

Fluxys has won a 20-year contract to tranship up to 8 mta of Yamal LNG, from Yamal's fleet of dedicated icebreaking LNGCs to conventional gas ships for onward distribution to the final customer. A fifth in-ground storage tank, of 180,000m<sup>3</sup>, is being built at Zeebrugge to assist with this work.

Fluxys is also constructing a multipurpose second jetty, for commissioning this year, to accommodate both LNG cargo discharges and loadings as well as ships in the size range 2,000-217,000m<sup>3</sup>. The smaller gas vessels utilising the terminal will include a 5,100m<sup>3</sup> tanker which is set to be the industry's first purpose-built LNG bunker vessel on delivery to NYK/Engie later in 2016.

The neighbouring Gate terminal at Rotterdam in the Netherlands recorded net imports of 0.63mt in 2015, up by 50 per

cent on the previous year. Amongst the factors boosting Benelux interest in LNG purchases is the falling output from the Dutch Groningen gas field.

Gate is seeking to enhance its hub role, as is being done at Zeebrugge. A breakbulk facility is being built adjacent to its main terminal to facilitate the distribution of smaller volumes of LNG around Europe's busiest port and its hinterlands.

Like Zeebrugge, Gate will also have its own LNG bunker vessel. The 6,500m<sup>3</sup> gas tanker being built for Shell and 2017 delivery will load at the Gate breakbulk facility and fuel LNG-powered vessels in Rotterdam and the surrounding area.

### **Greece in transition**

Greece began importing LNG in February 2000, at its Revithoussa terminal on a small island west of Athens that in 2015 handled 0.45mt, an 18.4 per cent increase on-year.

DEPA, Greece's state-owned gas utility, is upgrading Revithoussa through the provision of a third in-ground tank to boost the terminal's storage capacity by 73 per cent. Additional modifications, due for completion by the end of 2016, will permit the berthing of vessels of up to 266,000m<sup>3</sup> and increase the terminal's regas capacity by 40 per cent, to 4.7 mta.

Greece, like Turkey, depends on imports for virtually all its gas, some two-thirds of which comes from Russia by pipeline via Bulgaria and Turkey. Greece is keen to reduce this dependence through increased purchases of LNG.

In addition to the Revithoussa expansion two FSRU-based terminals have been proposed, in Thrace in northeastern Greece, to broaden gas supply choices for the country and its neighbours in southeastern Europe. The Copelouzos Group has put forward a 1.9 mta project for Alexandroupolis close to the Turkish border whereas DEPA is promoting Aegean LNG, based on a 2.6 mta FSRU in the port of Kavala.

Croatia is another Mediterranean EU Member State looking to ease reliance on Russian pipeline gas and fast-track LNG imports using an FSRU. EU subsidies are being mooted for the proposed floater as part of a drive to serve customers in central Europe.

### **Baltic breakthrough**

The Baltic Sea is also poised for a major increase in LNG carrier traffic, although the emphasis will be on smaller vessels. Lithuania and Sweden recently became the first two Baltic countries to import LNG.

Sweden's breakthrough is a great advertisement for small-scale LNG. Between them, the Scandinavian nation's two coastal distribution terminals, at Nynäshamn and Lysekil, received 290,000 tonnes of LNG in 2015, not far short of the 320,000 tonnes that neighbouring Lithuania imported via its 170,000m<sup>3</sup> FSRU.

Poland is set to become the third Baltic Sea LNG importer when its 3.7 mta Swinoujscie terminal opens for business this summer.

Elsewhere, Gazprom is set to take delivery of an FSRU in 2017 that will bring LNG to the Russian enclave of Kaliningrad.

Finland, meanwhile, has three small-scale receiving terminals under construction, at Pori, Tornio and Hamina, for commissioning in 2016, 2017 and 2018.