HD **World: Commodities - EIU's monthly liquefied natural gas outlook**

WC 4,403 words

PD 1 July 2014

SN Economist Intelligence Unit - ViewsWire

SC EIUCP

ED ViewsWire

PG 8

LA English

LP

Demand

The Economist Intelligence Unit expects global imports of liquefied natural gas (LNG) to expand by a little less than 2% in 2014, slightly slower than last month as supplies are affected by unplanned outages. Nevertheless, new demand will continue to come from **China**, where imports have been rising quickly and from smaller, but fast-growing, economies in South-east Asia and Latin America. There were 29 countries that imported LNG in 2013, according to data from the International Group of Liquefied Natural Gas Importers (GIIGNL), three more than a year earlier as new import terminals opened in Malaysia, Singapore and Israel. The number of countries importing LNG will grow again in 2014-15 as new terminals are added in eastern and central Europe. Import growth will accelerate to over 4% in 2015 as the first of the mega export projects from Australia starts producing, while major consumers, such as Japan and increasingly **China**, add new import capacity.

TD

We are now presenting our historical and forecast data in line with figures from the GIIGNL. Import and export capacity is generally presented in metric tonnes rather than cubic metres for general gas consumption or production (1m tonnes of LNG is equivalent to 1.36bn cu metres of natural gas). New data from the GIIGNL show that Asia remained the overwhelming market for LNG imports in 2013, taking over 75% of the global market. This was an increase from a 70.8% share in 2012 that came largely at the expense of falling imports into Europe (14% of the market in 2013, compared with nearly 30% in 2010). The bulk of the market remains on medium to long-term contracts, with spot purchases taking less than 30% of the total. As significant increases in export capacity come on line from 2014-20, we would expect this share to rise as a more tradable and liquid market in LNG emerges.

Gas will still have a place in Japan's **energy** mix, despite nuclear restart

We expect Japan's LNG imports to stay fairly flat, but elevated compared with its historical level, in 2014-15. In 2013 the country imported a record 87.5m tonnes, according to customs data, and imports in the first four months of 2014 were up by 1.3% year on year. Japan has relied heavily on both gas- and **coal**-fired power since the country's nuclear capacity was shut down following the 2011 earthquake. The government's new Basic **Energy** Plan includes a return of some nuclear power and will also make substantial use of **coal** as a baseload fuel. The scale of the nuclear re-emergence is currently unclear, but we expect that it will begin to cut into natural gas's, and consequently LNG's, market share, but not until beyond our forecast period. In the medium term, however, Japan will still rely on natural-gas-fired power, and the major downside risk is not related to the competition from nuclear, but the impact of the weak yen driving up **energy** costs. Nevertheless, natural gas will play a long-term role in meeting Japan's **energy** demands: major utilities announced plans at the end of March to add around 1,800 mw of new gas-fired capacity in the 2020s.

Japan's utilities are among the most active LNG buyers in seeking ways to develop the market. Chubu Electric Power, which consumed 14m tonnes of LNG in 2013 (around 16% of total Japanese imports) signed a Memorandum of Understanding with GAIL, an Indian utility, to club together in securing LNG cargos in an attempt to drive down prices. In addition, the Japan OTC Exchange is exploring plans to set up derivatives trading in LNG that should allow end-users to hedge purchases at times of greater demand.

South Korea's policies and plans will support greater LNG imports

South Korea's LNG import growth will slow in 2014 owing to a high base effect from 2013, when the country increased its reliance on the fuel after several nuclear facilities were shuttered because of faked security certificates and maintenance. LNG shipments to the world's second-largest importer rose by around 10% in 2013. Recent revised data for 2014 show that imports were up by 1.8% year on year in January-April, and we have nudged down our import forecast slightly to 2.8%, from 3% previously. KOGAS, the Korean utility that is the world's single-largest buyer of liquefied gas, is carrying out work on two import terminals. The first, at Samecheok, will start **operations** in 2015 with import capacity of 8.4m tonnes/year (t/y), and will support a faster level of import growth that year; the second facility, at Boryeong, is scheduled to start importing in 2016 with capacity of 3m t/y. South Korea is encouraging greater use of gas compared with **coal**, providing tax breaks at the retail and wholesale level for gas consumers. The prospect of a gas pipeline linking South Korea and Russia could displace some of the country's reliance on LNG imports, but we do not expect this to happen in the near term.

China's LNG demand could be boosted by cheaper gas

Consumption from **China** is on track to record another year of fast-paced growth. LNG imports were up by over 22% year on year in January-April, despite enormous growth in the year-earlier period. We expect **China**'s import growth to expand by 16.8% on average in 2014-15 as new LNG import terminals are added and the government makes a slow but strategic commitment to moving **China**'s **energy** balance away from **coal** and towards greater use of cleaner-burning natural gas. The government reforms announced in November 2013 suggest that **China** is aiming to move to more market-based pricing for fuels, which would enhance the appeal of LNG imports. **China** will also roll out higher wholesale and retail gas prices in 2014-15, which will help importers to recoup losses on LNG. With pollution increasingly moving up **China**'s public agenda, we expect sustained increases in natural gas demand. In 2013 we estimate that the country's shortfall between domestic production and consumption was around 60bn cu metres. LNG is increasingly providing a larger share of this gap.

In May 2014, PetroChina, a state-owned **energy company**, signed a US$400bn, 30-year agreement with Gazprom, the Russian state-controlled gas **company**, to supply **China** with 38bn cu metres/year of gas. **China** will use the gas to meet fast-rising demand-the government expects **China** to consume around 400bn cu metres/year by 2020-but it will also put pressure on LNG exporters relying on selling into **China**. The terms of the deal have not been officially disclosed but the cost of gas is estimated at US$350/1,000 cu metres (equivalent to far less than current spot prices for LNG). The cheaper pipeline-delivered gas will allow **Chinese** importers to put downward pressure on LNG exporters to match the Russian gas price.

Higher gas prices could support greater LNG demand in India

Data from the GIIGNL show that India's LNG imports fell by nearly 2% in 2013 despite additional import capacity being added. The relatively high cost of imported gas, compared with **coal**, at a time of weakness in the rupee will have contributed to the weaker volumes last year. In 2014-15 imports of LNG are tentatively forecast to expand by 2% on average. India's new government, led by the new prime minister, Narendra Modi, may follow through with a plan to double gas prices in India to US$8.4/mBtu, helping to narrow the gap between government set prices and imported LNG. Domestic prices are still likely to undercut the cost of imported LNG, and until this mismatch is erased, Indian LNG imports will be relatively muted.

New markets emerging in South-east Asia

South-east Asia is a small but growing LNG importing region. In 2013 both Malaysia and Singapore started importing LNG and both have plans to expand import capacity. Meanwhile, Indonesia is converting its Arun export terminal to an import facility and planning to add some floating storage and regasification units (FSRU). Despite its high costs, LNG still remains an attractive fuel source for many **energy**-strapped nations in Asia, particularly as existing power infrastructure is largely gas-fired.

New markets will not offset weak European import levels

In line with a third annual decline in underlying natural gas consumption, LNG imports into Europe's main consumers fell again in 2013. Imports into the UK, which had been the third-largest buyer as recently as 2011, fell by over 30% in 2013 and have started 2014 on a strongly negative trend, as a mild winter has dampened demand for gas. Likewise, Spain, France and Turkey-all considerable importers-also saw large declines in LNG imports in 2013 as overall gas demand dropped in OECD Europe. In eastern Europe and the Baltic, new import terminals will open in Poland and Lithuania and will start receiving cargoes in earnest by 2015. Russia's annexation of Crimea and the escalating political tension between it and the EU have raised concern about the region's heavy dependency on Russian gas. In early March Finland and Estonia signed an agreement jointly to develop an LNG import facility. In the short term the simplest course of action to decrease reliance on Russian gas would be to improve the EU's internal gas networks,

so that fuel landed in France or Spain is directed eastwards rather than to Latin American or Asian markets.

Liquefied natural gas (LNG):
consumption
('
m tonnes unless otherwise indicated)

	2011	2012	2013	2014	2015
Japan	79.1	88.1	88.0	88.7	88.9
South Korea	35.6	36.8	40.4	41.5	45.7
China	13.1	14.7	18.6	22.7	25.3
India	12.3	13.3	13.1	13.2	13.4
Taiwan	12.2	12.7	12.7	11.4	11.6
Spain	17.3	14.5	9.1	7.6	6.8
United Kingdom	18.4	10.4	6.9	5.5	4.8
France	10.5	7.2	5.9	5.0	4.6
Mexico	2.8	3.5	5.7	6.1	6.6
Others	39.5	35.3	36.5	39.3	43.5
World total	240.8	236.3	236.9	241.1	251.3
% change	9.3	-1.9	0.2	1.8	4.2

Imports of LNG.
Sources: International Group of Liquefied Natural Gas Importers; International Gas Union; The Economist Intelligence Unit.

Import demand is accelerating in Latin America

Mexico was one of the fastest-growing import markets for LNG in 2013, with imports rising by over 60%. Argentina and Brazil also saw rapid growth in imports, and further gains in Brazil are likely as the country seeks to ensure adequate power supply during this summer's football World Cup tournament. Import capacity expansions are also under way in Chile, which will add to regional imports at the margins.

Supply

Global LNG exports will expand by less than 2% in 2014, slower than we forecast last month, as unplanned outages at the Angola facility will cut into available supplies. New liquefaction facilities in Australia and Papua New Guinea will begin operation in 2014, helping to add new exports to the market, and we expect further growth of around 4.2% in 2015 as more capacity enters the market. Over 11m tonnes of entirely new liquefaction capacity is on track to be completed by the end of 2014, and the full start-up of replacement trains in Algeria will bring the total additional capacity closer to 20m tonnes. In 2015 an even greater volume of new capacity is due to come on line, including the first LNG export terminal in the US and the Gorgon megaproject in Australia. LNG projects are routinely subject to delays caused by cost overruns or construction timelines. In addition, many of the firms behind proposed export terminals in the US, Canada and Australia may lack the capital, financial robustness and technical capabilities to bring their projects on line. Nevertheless, from 2015-19 we expect a significant expansion of the global LNG industry, even if only a small share of the proposed projects comes to fruition.

Qatar's output to be flat in 2014-15

Qatar's LNG exports rose by over 2% in 2013, with over 70% of exports directed toward Asian markets. At present Qatar has no plans to add additional LNG capacity, and we forecast relatively stable production in 2014-15, with the only variation being the result of maintenance. Although the country has secured long-term supply contracts with many Asian consumers, it is facing pressure to cut prices as the advent of cheaper US LNG exports comes closer to fruition.

Malaysia raises production via floating LNG and expansion at existing site

Malaysia exported 25m tonnes of LNG in 2013, 5% higher than 2012. Petronas, the state-run **oil** and gas **company**, is carrying out expansion work at Malaysia's existing LNG export facility at Bintulu, adding a ninth train that it expects to start operating by late 2015 or into 2016. Petronas is also undertaking work on developing two floating LNG facilities (FLNG). The Petronas FLNG vessel is due to start **operations** in 2015 with capacity of 1.2m t/y; its hull was launched in April 2014 and the vessel is on track to be completed by the end of the year. The Rotan FLNG-which will have slightly larger capacity-is scheduled to begin producing LNG by 2018. Malaysia's share of the global LNG market will start to fall from 2015 when greater Australian production enters the market and as more natural gas is consumed locally. Petronas opened Malaysia's first LNG import terminal in 2013 and several more are due to be commissioned between 2015 and 2017. Part of the fuel for these facilities is likely to be produced locally.

US government revises LNG approval process

In May the US government revised its approval process for LNG export facilities under consideration. Companies will now need to receive environmental approval from the Federal **Energy** Regulatory Commission (FERC) first, before the Department of **Energy** (DoE) authorises exports to countries with whom the US does not have a free-trade agreement. FERC approval is a more onerous and lengthy process, and the government's objective may be to identify only projects that have the substantial commercial backing of either buyers or companies with LNG experience. Over 280m tonnes of export capacity has been proposed to the DoE, and there was never any likelihood that the full amount would enter the market. So far only one project is under construction: Sabine Pass in Louisiana. Additional facilities received interim environmental approval from the FERC in May; Dominion Resource's Cove Point facility in Maryland and the Downeast LNG plant in Maine. However, these facilities will still need to receive full FERC approval before they begin construction. At present, we do not expect exports of LNG from the US to make a significant impact on global markets until 2016 at the earliest, with a greater effect towards the end of the decade.

New gas production will be needed for Algeria to expand LNG exports

Algeria is set to open the 4.8m-t/y Arzew LNG train in mid-2014, following on from the 4.5m-t/y train at Skikda, which replaced an earlier, damaged facility. We expect gas exports to rise by an average of 2.8% in 2014-15, helping to reverse several years of falling output. Similarly to other early movers in the LNG industry, rapidly growing domestic gas demand is putting pressure on the availability of supply for exports, suggesting that Algeria will struggle to raise output significantly in the forecast period.

Elsewhere in the Middle East, political and economic disruptions have affected the supply of LNG from Egypt. Since the overthrow of the Mubarak govern-ment in 2011, Egypt's LNG output has dropped off markedly and we now expect almost no contribution to global markets from Egypt in 2014-15. In Yemen, exports rose strongly in 2013, but maintenance on one of the country's two trains in June will mean lower output in 2014, before a recovery in 2015. Over the long term there is potential for additional LNG exports from the eastern Mediterranean, with Israel exploring the option of LNG to be fed by offshore gasfields and an export terminal under discussion for Cyprus.

Angola LNG has been shut down until at least 2015

Angola LNG, the only major new export facility to come on line in 2013, has suspended **operations** until at least 2015 as a result of technical issues at the facility. The plant is targeting output of 5.2m t/y and sells directly into the spot market. Angola has also apparently leased out its entire tanker fleet, which should help to ease prices in 2014. As a result of the outage, we have cut our Angola export forecast to flat in 2014, with a recovery expected in 2015.

New projects are unlikely in Nigeria

Supplies of LNG from Nigeria continue to be affected by a difficult operating environment. Output fell sharply in 2013, by nearly 16%, and we expect only a minimal recovery in 2014-15. Persistent security concerns and availability of gas have hampered plans to expand Nigeria's LNG potential, and the economic rationale for new projects has dissipated as the US no longer needs LNG imports in the near to medium term.

Elsewhere in Africa, attention is focusing on the potential for East Africa to emerge as a new LNG exporting region. Both Mozambique and Tanzania have discovered large commercial reserves of gas. Eni (Italy) and Anadarko (US) have entered into an agreement to develop a four-train, 20m-t/y facility in Mozambique, which the government expects to be operational by 2018. However, substantial investment in infrastructure will be required to bring the project on line and we do not expect it before the end of the decade. East African gas also faces a risk from impending US exports, where significant **energy** infrastructure is already in place.

Australian projects will **lead** to significant reshaping of global industry

There are currently 61.9m tonnes of new LNG export capacity under construction in Australia. This would represent more than one-quarter of total global supply in 2013, and if all was completed on schedule by the end of 2017 would make Australia the leading producer of LNG, ahead of Qatar. The first of the new large Australian LNG projects, the 8.5m-t/y Queensland Curtis LNG (QCLNG) facility, is on course to start production in the fourth quarter of 2014. QCLNG is the world's first **coal**-seam gas LNG project and its off-take is geared mainly towards Asian (**China**, Japan and Singapore) buyers. Plans to expand the project have now been put on hold in consideration of the massive capital expenditure required for LNG projects. After QCLNG, the next mega-project due to come on line is the 15.6m-t/y Gorgon facility, operated by Chevron. The giant plant has reportedly secured sales-and-**purchase** agreements, mainly

with Asian utilities. Expansion of the project seems unlikely, given the already huge sums that the companies backing the project have had to invest.

There are several additional projects under consideration in Australia that could bring total capacity to nearly 100m t/y, well above Qatar's already huge production. However, substantial cost overruns and competition from the development of export facilities in the US have led some firms to reconsider projects that have longer timeframes. LNG Limited planned to start producing 3.8m t/y by 2017 from its Fisherman's Landing project, but has now reported that it is struggling to secure adequate gas supplies. Meanwhile, the Browse project (Woodside, Shell BHP Billiton and smaller Japanese partners) is now being reconsidered for conversion to an FLNG vessel.

PNGLNG will start production ahead of schedule

The 6.9m-t/y Papua New Guinea LNG (PNGLNG) has shipped its first LNG to Japan, ahead of schedule. Buyers for PNGLNG's gas include Tepco and Osaka Gas in Japan, as well as **Chinese** and Taiwan utilities. Elsewhere in PNG, the government has endorsed the **sale** of a majority **stake** in InterOil's licences covering the Elk and Antelope natural gasfields to Total. InterOil has plans to develop an 11m-t/y LNG facility in PNG's Gulf province, although the deal has yet to be signed, given a disagreement over the value of Total's **stake**. The timeline for the project will fall well outside our forecast period, as the appraisal of the Elk and Antelope fields, which would feed the facility, is set to be completed only by 2015. Nevertheless, the deal suggests that new developments in PNG will help to compensate for falling exports from other Pacific basin producers.

Indonesia's LNG exports to fall sharply as local gas production dwindles

Indonesia currently has three operating LNG export terminals, in Arun in Aceh, Bontang in East Kalimantan and Tangguh in Papua. Exports have been declining in recent years as domestic consumption of gas increases and production disruptions have cut supply. New production capabilities are under construction, with the 2m-t/y Donggi-Senoro project set to start **operations** in 2015. Meanwhile, a final investment decision is expected for an additional train at the Tangguh site that would bring total capacity there to 11.4m t/y by 2019. At the same time, some of Indonesia's existing capacity, 2.5m t/y at Arun, is due to be decommissioned in 2014-15 and the facility will start to serve as an LNG import terminal. In February SKKMigas, the upstream **energy** regulator, announced that the Tangguh plant would be shut in July-August for planned maintenance. At around the same time SKKMigas awarded a consortium of international firms contracts to develop the Jangrik gasfields, which are set to add LNG export capacity from 2017.

Russia is keen to emerge as a major new LNG exporter

Russia is seeking to increase its share of the global LNG market with plans for further export facilities. Until now Gazprom (50.1% government-controlled) had a monopoly over natural gas exports and shipped LNG from its 10m-t/y Sakhalin plan on the Pacific coast, operated in partnership with Shell (and where a preliminary agreement for a new train has been signed by the project partners). However, a law liberalising LNG exports from 2014 was passed in 2013. Rosneft, a majority state-owned **oil** producer, signed a huge, US$270bn **energy** supply deal with **China**, which includes providing up to 3m t/y of LNG. It has also signed LNG supply contracts with Vitol, an **oil** trader, and Japanese **energy** firms, to be supplied from a facility in eastern Russia from 2019. It now looks likely that the Russian LNG industry will be characterised by competition between Rosneft and Gazprom both for resources and buyers, with the sector remaining highly subject to government policy decisions. The most immediate transformation in Russia's LNG capacity will come from the Yamal LNG project, which is under development by Novatek, a Russian **oil** major. Yamal LNG will begin production in 2016 and will have capacity of 16.5m t/y. Novatek has arranged preliminary financing from several **Chinese** banks for its project. Gazprom's Vladivostok LNG, with expected capacity of up to 10m t/y, is expected to become operational in 2018. We expect overall Russian LNG production to continue to tick upwards in 2014, ahead of sizeable increases thereafter.

Liquefied natural gas (LNG):
production
('
m tonnes unless otherwise indicated)

	2011	2012	2013	2014	2015
Qatar	75.4	76.4	78.0	78.8	79.3
Malaysia	24.9	23.7	25.1	26.4	27.2
Australia	19.5	20.9	22.4	24.4	28.1
Indonesia	21.9	19.0	18.4	17.3	16.6
Nigeria	18.9	19.6	16.5	15.8	15.5
Trinidad and Tobago	13.0	13.5	13.7	13.9	14.2

Algeria	12.5	11.2	10.8	11.1	11.4
Russia	10.6	10.9	10.7	10.8	11.1
Oman	8.1	8.2	8.4	8.5	8.6
Others	36.1	33.1	33.0	34.2	39.4
World total	240.8	236.3	236.9	241.1	251.3
% change	9.4	-1.9	0.2	1.8	4.2

Exports of LNG.
Sources: International Group of Liquefied Natural Gas Importers; International Gas Union; The Economist Intelligence Unit.

Prices

LNG spot prices for delivery into North Asia have eased back sharply from the high levels in the first two months of 2014, when prices hit a record of over US$20/mBtu. In early June spot prices were being reported at below US$13/mBtu. We expect prices for imported LNG into Japan (an average of long-term and spot prices) to move downwards this year. Prices will continue to slide in 2015-16 as new supplies come into the market from Australia and PNG, and Angola resumes exports. The introduction of LNG exports from the US will add further downward momentum to markets. As the LNG market becomes increasingly more globalised through the introduction of US, East African and Canadian exports in the latter parts of the decade, we expect to see the development of more futures and exchange-based trading, allowing consumers and producers to take advantage of regional changes in natural gas demand.

Liquefied natural gas:
prices

	2012	2013	2014	2015	2016
Prices					
1 Qtr	16.36	16.21	16.46	16.20	15.20
2 Qtr	17.06	16.34	15.50	15.30	14.80
3 Qtr	17.56	15.58	15.20	14.80	14.20
4 Qtr	15.24	15.69	15.80	15.00	-
Year	16.55	15.96	15.74	15.33	-
% change	12.9	-3.6	-1.4	-2.6	-

Japan basis,
US$/mBtu.
Sources:
World Bank; The Economist Intelligence Unit.

RF EIU ViewsWire 01 Jul 2014 (T15:10), Part 8 of 20

NS c312 : External Markets | mlpg : Liquid Petroleum Gas Markets | mnatgs : Natural Gas Markets | gtrade : Tariffs/Trade Barriers | e512 : Physical Trade | c31 : Marketing | ccat : Corporate/Industrial News | e51 : Trade/External Payments | ecat : Economic News | gcat : Political/General News | gdip : International Relations | gpir : Politics/International Relations | m14 : Commodity Markets | m143 : Energy Markets | mcat : Commodity/Financial Market News | mcrntg : Crude Oil/Natural Gas Product Markets | ncat : Content Types | nfact : Factiva Filters | nfce : FC&E Exclusion Filter | nfcpin : FC&E Industry News Filter

RE austr : Australia | china : China | jap : Japan | malay : Malaysia | apacz : Asia Pacific | asiaz : Asia | ausnz : Australia/Oceania | bric : BRIC Countries | chinaz : Greater China | devgcoz : Emerging Market Countries | dvpcoz : Developing Economies | easiaz : Eastern Asia | seasiaz : Southeast Asia

IPD Economy

PUB The Economist Intelligence Unit, N.A., Inc.

AN Document EIUCP00020140702ea710002b

