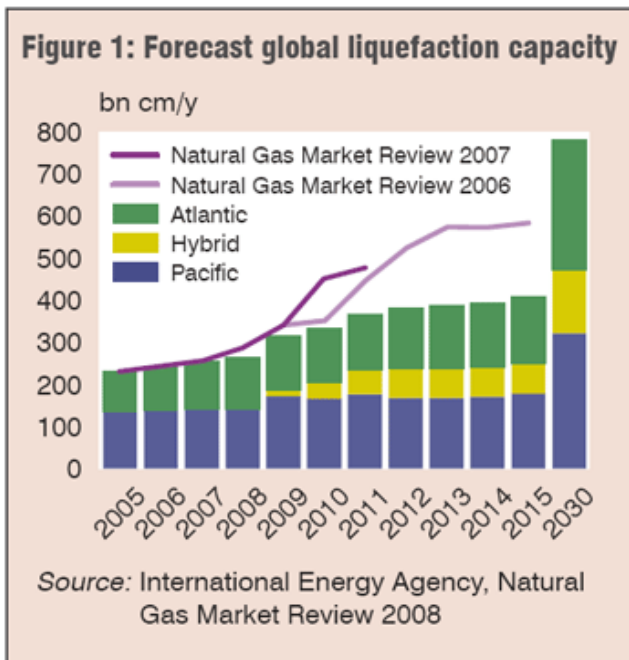




Sellers' market here to stay

Analysis - Liquefied natural gas 2008-10

An LNG supply crunch looks inevitable around 2011/13, but what about the years beyond, asks Alex Forbes?



Supply projection revised sharply downwards

THE DEARTH of final investment decisions for export projects seen since the start of 2006 has prompted the International Energy Agency to revise sharply downwards its projections for liquefied natural gas (LNG) supply.

The agency's Natural Gas Market Review 2008, says LNG supply will reach around 410bn cubic metres (cm), or 300m tonnes, in 2015. This compares with a projection of 0.58 trillion cm in the 2007 review, a downward revision of around a third.

This pessimistic view of how supply is likely to evolve after 2011, when the projects under construction are all on stream, comes at a time of unusually rapid growth in demand, not just for LNG, but for gas as a whole, mostly for electricity generation.

According to the IEA, demand growth in 2007 in the OECD economies was 4.5%, compared with growth of 1% in overall energy supply, and "strong growth has continued into 2008, particularly in the non-OECD countries". Consumption growth in the three largest LNG markets – Japan, South Korea and Spain – is in double digits.

abandoned early this year in favour of the more ambitious Shtokman project.

The single train, 7.5m t/y Shtokman plant is due to come on stream in 2014. But the technology and engineering involved in developing the Arctic-offshore field and building a 600

FOLLOWING the large chunk of new liquefied natural gas (LNG) supply due to come on stream by 2011 – around half in Qatar – incremental supply growth will slow drastically for at least two years (PE 5/08 p8).

It takes between three and four years from final investment decision (FID) to construct an export project. So, assuming projects are not unexpectedly delayed, it is a straightforward matter to project the evolution of incremental supply up to four years ahead. But only five FIDs have been taken since the start of 2006, representing just 19m tonnes a year (t/y) of new supply.

How long will it last?

How long this supply crunch will last will depend on how many projects are sanctioned over coming years. But while the list of proposed projects is long, those with a realistic chance of coming on stream in the 2012-15 time-frame are surprisingly few. And the three countries with the largest gas reserves – Russia, Iran and Qatar – are unlikely to make much of a contribution.

Russia, surprisingly still not an LNG exporter despite being the world's biggest producer and exporter of natural gas, has in recent years advanced various plans to expand LNG production beyond the two-train, 9.6m t/y Sakhalin-2 project, which will come on stream soon. But its Baltic LNG proposal was

km subsea pipeline to bring the gas ashore are complex – making the target date seem rather ambitious. Another possibility is a third, 4.6m t/y train at Sakhalin-2 that could come on stream in 2014, so long as it does not suffer the kind of delays experienced by the first two trains.

Iran has proposed several LNG supply projects, but even the front-runners are unlikely to come on stream before 2015 (PE 9/08 p6). The majors that were negotiating to take part in the projects have withdrawn and Western contractors are reluctant to take on new projects in Iran until the stand-off with the UN Security Council over the nation's nuclear ambitions is resolved. Iran is unlikely to make a success of LNG development by itself.

Meanwhile, Qatar's moratorium on further projects utilising North Field gas is not due to be reviewed until around 2012. Even then, if Qatar decided to proceed with a second wave of LNG development, none of this capacity would come on stream before 2015.

Elsewhere in the Middle East and North Africa (Mena) region, because of emerging shortages of natural gas, as domestic demand rises sharply, further export projects are dependent on the discovery of new reserves. Existing projects in Egypt and Oman are already operating below capacity because of feed-gas shortages and planned expansion projects in Egypt, Yemen and Libya will not be sanctioned until more reserves are proved.

Algeria has no firm plans for more liquefaction capacity beyond the 4.5m t/y Skikda replacement project, sanctioned in 2007, and the 3.7m t/y Gassi Touil project, which received the green light in July (PE 9/08 p2). One possible new plant in the Mena region is a 3.4m t/y project proposed by Eni and National Oil Corporation at Mellitah, Libya, but little has been said by either firm about their plans since October 2007.

All eyes on Africa, Australia

The best prospects for the addition of substantial new gas-liquefaction capacity in the 2012-15 time-frame are in sub-Saharan Africa and Australia, both of which have long lists of proposed projects, some more likely to proceed than others.

In Nigeria, the NLNG Seven Plus, Brass LNG and Olokola LNG projects could yield a combined 29m t/y of capacity coming on stream by 2014. These projects are behind their initially proposed schedules (see p19), but all three remain candidates for FID before the end of 2009.

Equatorial Guinea and Angola plan to expand projects already in operation or under construction, but these are dependent on sourcing new gas supplies, either indigenous or imported. It remains possible that both expansions, a total of 9.6m t/y of new capacity, could come on stream by 2015.

Australia has the longest list of proposed projects, with planned new capacity amounting to 68m t/y (see p23). In the unlikely event that they were all to come to fruition, the country would have a total LNG production capacity of more than 105m t/y – some 50% more than Qatar will have at its planned peak. However, several of the proposals are unlikely to come on stream until after 2015.

Incremental supply in the 2012-15 time-frame could come from the Gorgon, Wheatstone, Prelude, Ichthys and Browse basin projects, and an expansion at Pluto. And there could be several FIDs before the end of 2009. But it is unlikely that more than half of this potential capacity will be on stream by 2015 – Gorgon, for example, looks unlikely to be sanctioned until 2010 at the earliest.

Elsewhere in the world, there are proposals for projects that could come on stream between 2012 and 2015 in Indonesia, Papua New Guinea, and Trinidad and Tobago. If all were to come to fruition, these would represent a total of 17m t/y of new capacity.

Adding up these sub-totals (allocating 34m t/y to Australia) gives a total potential incremental capacity of 107m t/y in the 2012-15 time-frame. But, given the industry's recent record of

resource constraints, delays, cost over-runs and troubled start-ups, achieving this seems very optimistic.

The latest projection from the International Energy Agency is that incremental supply during that time-frame will be more like 25m t/y (see Figure 1), effectively extending the LNG supply crunch to 2015 (see box). It looks a safe bet that the LNG industry will remain a seller's market for a good while yet.