

Shell's FLNG facility.

NG was a hot topic in the industry throughout 2010, especially in Australia, the third largest producer of LNG, and is predicted to take over Qatar as the world's largest LNG producer in the next decade.

Of course that outcome depends on the number of projects approved in Australia over the next few years. Last year alone there were several major LNG projects that progressed through particular approval stages, causing widespread interest and debate. One project which is making good progress towards a Final Investment Decision (FID) is Shell's Prelude FLNG project, the first of its kind in the world.

The project, 100% Shell owned and operated, was given the environmental go-ahead by the Federal Government in November, 2010, to be deployed off the northwest coast of Western Australia at the Prelude gas field.

Shell discovered the field in the Browse Basin in January 2007, before discovering the Concerto gas field there in March 2009. The gas reserves of the fields are fairly small and remote, so both will be developed by the Prelude FLNG facility sequentially.

The Federal Minister for Sustainability, Tony Burke, said the large scale project will use world-first technology. "We can't risk getting it wrong, so I have set very strict conditions to help ensure our precious marine environment will be protected", he said. "To ensure the facility's environmental impact is reduced as much as possible, the start of operations will be dependent on several plans getting my approval.

"Shell must develop an oil spill contingency plan, to the Government's satisfaction, specifying how it will minimise the risks of oil spills and how it will minimise the environmental impact in the event of an oil spill. Should such an accident occur, the company will pay for any environmental rehabilitation needed"

The Prelude project, currently at its Front End Engineering Development (FEED) phase, will process the gas on the field site instead of piping it hundreds of kilometres to shore.

"Deploying our Floating LNG technology reduces the project's cost and environmental footprint, as it removes the need for offshore compression platforms, long pipelines to shore, near-shore works such as dredging and jetty construction, and onshore development such as building roads, laydown areas and accommodation facilities", Ann Pickard, Country Chair of Shell Australia, said.

Once operational, the Prelude FLNG project is expected to produce 3.6 MMtpa of LNG, 1.3 MMtpa of condensate and 0.4 MMtpa of LPG, and Shell expects it to have a lifespan of 25 years. Shell plans to have a FID made in early 2011, with construction scheduled for 2011-2015 in order to commence production before 2016.