

Project Overview

The Tassie Shoal Methanol Project (“TSMP”) is two offshore methanol production plants that are designed to produce methanol from high CO₂ feedstock gas. The locating of the plants on Tassie Shoal followed an exhaustive assessment of the lowest cost and most environmentally acceptable location to site the plants in close proximity to the abundant discovered but undeveloped high CO₂ gas resources.

Central located to regional high CO₂ feedstock gas

By designing for high CO₂ in the feedgas stream, TSMP avoids the need for expensive CO₂ separation, transportation and geo-sequestration costs in alternative LNG or domestic sales gas development scenarios.

Each methanol plant requires 1.8TCF of raw gas over 25 years or 3TCF over a 40 year facilities life.

TSMP design marries proven technologies, with a base concrete gravity structure and with topsides processing based on Davy Process Technology Steam Methane Reforming (SMR) technology.

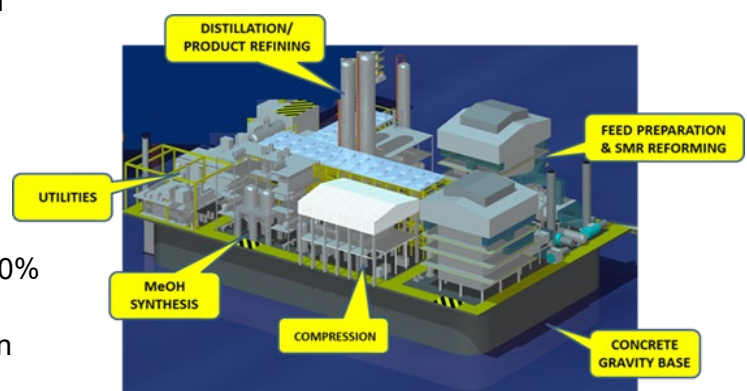
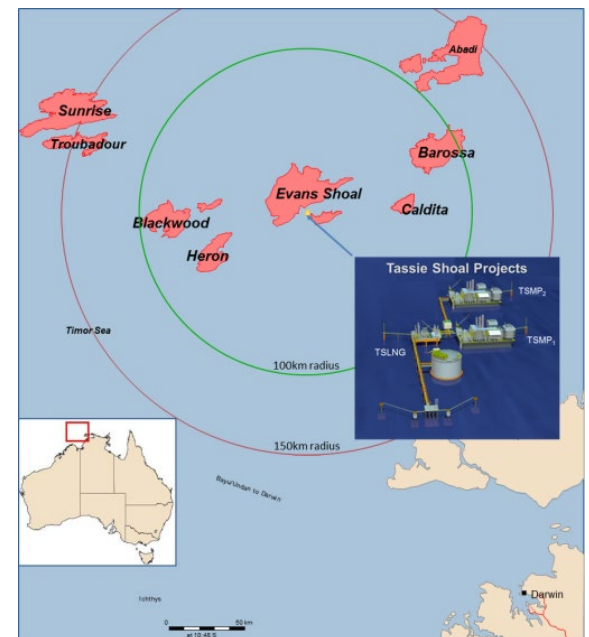
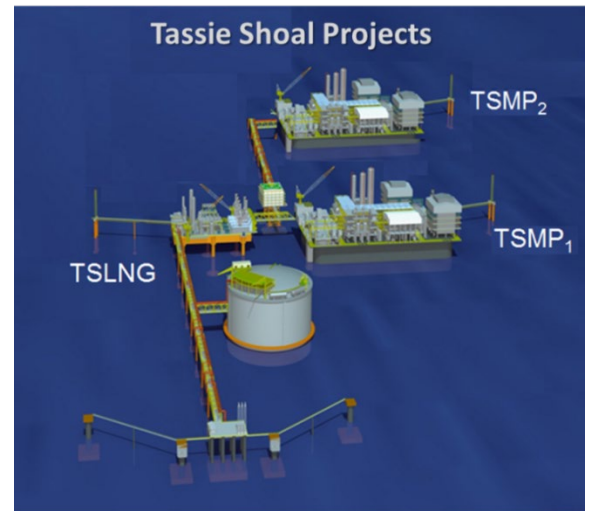
Full methanol development would consume 6TCF of raw gas over the expected 40 year project life

For each individual TSMP, feedgas of ~200 million standard cubic feet per day (Mscfd) is required, depending upon CO₂ content, to enable the production of 5000 tonnes of methanol per day or 1.75million tonnes of methanol per annum. Tassie Shoal site is located adjacent to many undeveloped high CO₂ gas resources in the region.

Environmental approval in place until 2052

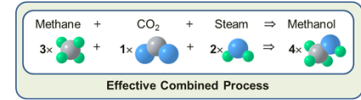
Key Project Details

- Tassie Shoal site water depth: ~14m
- Plant Capacity (each): 1.75MTA
- Single Module Construction
- Platform: Concrete Gravity Structure
- Technology: Davy Process Technology
- Offloading: Single Point Mooring
- Gas feed assumption: 10-30% CO₂
- Storage: 20 days production within CGS
- Fabrication Location: South East Asia
- CO₂ is utilised in the methanol production process



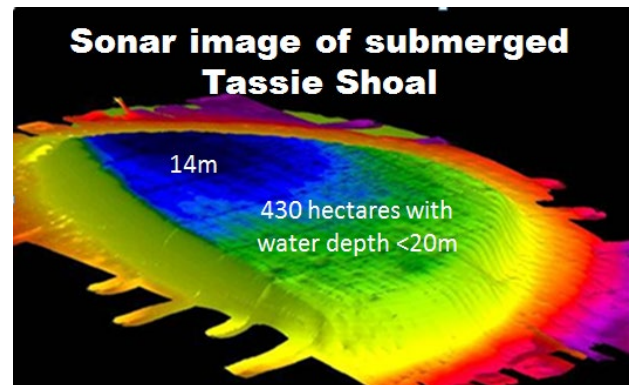
Designed by the World's Leading Experts

The TSMP has been designed in conjunction with leading industry experts including Davy Process Technology (topsides), Arup (substructure) and WorleyParsons (utilities and integration).



Environmental Approvals in Place

Melbana has secured long term Federal Government Environmental Approvals until 2052 for two methanol plants to be located on Tassie Shoal. TSMP project was assessed by the Federal Government under the Environment Protection and Biodiversity Conservation Act 1999 and Environmental Approval was granted in 2002.



Competitive advantages result in globally competitive cost outcomes

Competitive Advantage – single module construction

TSMP design embeds a number of key competitive advantages when compared to onshore or floating development alternatives:

- Shallow water development site at Tassie Shoal with benign metocean conditions
- Facilities to be located on sea floor, avoiding motion related floating complexities
- Accepts up to 30% CO₂ in the feedgas stream
- Proximal to regional high CO₂ resources, avoiding long pipelines to shore
- World-scale capacity based on DPT SMR process
- CGS and plant topsides to be constructed in a single module in a casting basin and wet towed to site then ballasted directly onto sea floor
- Construction can occur at a low cost SE Asian site

Major Project Facilitation Status

The project has previously been granted Major Project Facilitation (MPF) status by the Federal Government Department of Infrastructure and Transport.

Regional Undeveloped High CO₂ Resources

Evans Shoal (NT/RL7) ~28% CO₂

The Evans Shoal gas discovery lies directly adjacent to NT/P68 and only 10 km from Tassie Shoal. An appraisal well was successfully drilled in late 2013. Eni have indicated they believe the raw gas in place is 8Tcf.

Barossa (NT/RL5) ~19% CO₂

Recent successful appraisal results with high CO₂; ongoing appraisal planned.

Caldita (NT/RL6) ~13% CO₂

The last well drilled in the permit in 2007 tested 13% CO₂ gas.

CONTACT

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