## **Tassie Shoal LNG Project**

(Melbana 100%)



## **Project Overview**

The Tassie Shoal LNG Project (TSLNG) is an offshore LNG facility fixed to the sea floor on a shallow water site called Tassie Shoal. TSLNG offers a commercialisation path to LNG for any of the remote gas resources in the region. The design basis is that liquids would be removed from the raw gas at the field location and dry gas piped to TSLNG for processing into LNG.

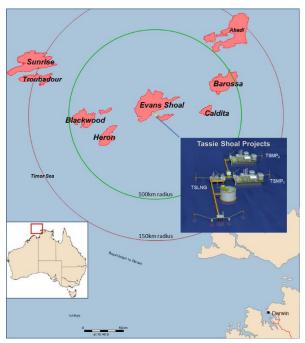
## **Location Map**

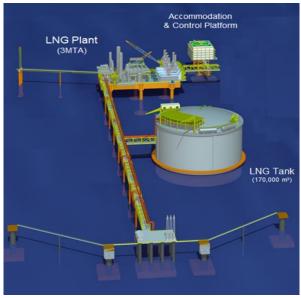
The location is adjacent to many undeveloped gas resources in the region.

Centrally located to regional gas supplies

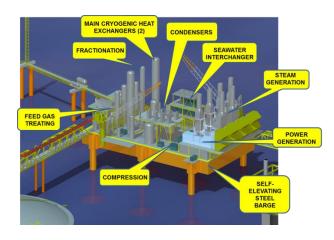
## **Key Project Metrics**

- Water Depth: ~15m
- Capacity: 3.0MTA, expandable to 4.0MTA
- Single module construction
- Processing platform: Jack-up steel structure
- Self installing platform: 100m x 50m
- APCI Dual Mixed Refrigerant technology
- Gas feed assumption: <3% CO<sub>2</sub>
- Process Cooling: Closed loop fresh water with indirect seawater heat exchange
- Storage: 170,000 m³ conventional secondary containment tank on concrete GBS caisson
- LM6000 Aero-derivative gas turbine drivers
- Electric drives
- Conventional Jetty
- Fabrication Location: South East Asia





#### TSLNG Expandable to 4MTA



# Designed by the World's Leading Experts

Pre-FEED design has been completed and the project costed by the world's leading designers WorleyParsons, Arup with input from APCI.

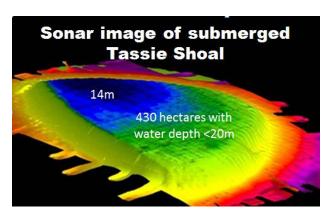
## **Competitive Advantage – single module construction**

TSLNG design embeds a number of key competitive advantages when compared to onshore or FLNG alternatives:

- Shallow water development site at Tassie Shoal
- Benign metocean conditions
- Facilities to be fixed to sea floor, avoiding FLNG motion and mooring complexities
- Process plant designed to be constructed in a single module and carried by heavy lift vessel to site and placed directly on sea floor
- LNG tank to be constructed in casting basin and wet towed to site, then ballasted directly onto sea floor
- Construction at a low cost SE Asian site
- Low cost seawater cooling process
- Able to be relocated at end of project life

## **Environmental Approvals**

Melbana has secured Federal Government Environmental Approvals for an LNG plant to be located at Tassie Shoal. TSLNG Project was assessed by the Federal Government under the Environment Protection and Biodiversity Conservation Act 1999 and Environmental Approval was granted in 2004. Approvals are valid until 2052.



## Regional Undeveloped Resources Evans Shoal (NT/RL7)

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.

#### Petrel, Tern & Frigate (NT/RL1, WA-27-R, WA-40-R)

GDF, Santos and Origin Energy confirmed their proposed FLNG project was not commercially viable and all development options will be considered.

#### Greater Sunrise (NT/RL2, NT/RL4, JPDA 03-19, JPDA 03-20)

Woodside and their joint venturers have proposed a 4MTA Floating LNG option for the gas resource located at Greater Sunrise. The Timor-Leste authorities have indicated the development concept is unacceptable.

#### Barossa (NT/RL5)

Appraisal of this resource is continuing.

#### Caldita (NT/RL6)

The last well drilled in the permit in 2007 tested 13% CO<sub>2</sub> gas.

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