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#### **ASX & Media Release**

# **Tassie Shoal Methanol Project Update**

## **Key Points:**

- Tassie Shoal Methanol Plant (TSMP) technology, capital and operating cost estimates have been updated by major international engineering firms
- Key cost advantage drivers are the Tassie Shoal shallow water site, single module construction in a low cost South East Asian environment and proximity to feedstock gas
- MEO is currently assessing pricing and commercial terms to short list potential long term methanol buyers

#### MELBOURNE, AUSTRALIA (16th November, 2012)

MEO Australia Limited (ASX: **MEO**; OTCQX: **MEOAY**) provides the following update in relation to the commercialisation of the first Tassie Shoal Methanol Plant ("**TSMP**<sub>1</sub>").

Reports recently commissioned from major international engineering firms Davy Process Technology, WorleyParsons and Arup to assess the technology basis and provide updated development costs estimates for TSMP<sub>1</sub> for a range of feedstock gas qualities have been received.

The TSMP<sub>1</sub> cost estimate is for an overall capital spend of US\$1.5 Billion (including contingency of 20%) for the first of two plants that will each have nameplate capacity of 1.75 million tonnes per annum (MTA) of methanol. The cost estimates are on a +/-25% basis, consistent with the detailed pre-FEED status of the TSMP<sub>1</sub> project. A high level breakdown of the cost estimates is provided in Table 1.

TSMP Component	Capital Cost Estimate (US\$M)	Company
Plant Process Inside Battery Limit (IBL)	569	Davy Process Technology
Plant Process Outside Battery Limit (OBL)	273	WorleyParsons
Concrete Gravity Structure incl Storage (CGS)	376	ARUP
Accommodation and Control Platform (ACP)	92	WorleyParsons
Single Point Mooring Loadout (SPM)	64	WorleyParsons
Project Development & Owners Costs	115	MEO estimate with input from APCI and Fluor
Total (US\$Million)	1,488	

Table 1 – TSMP<sub>1</sub> Capital Cost Estimates Summary (Tassie Shoal infrastructure)

From a business development perspective, since MEO received Expressions of Interest in April, 2012 for long term supply of 8.3MTA of methanol from TSMP<sub>1</sub>\*, MEO has been actively engaged in negotiations to shortlist its preferred buyers by defining the commercial basis for long term sales. Methanol pricing and indicative commercial terms have been received from major industry participants and are currently in the process of being evaluated. Exploratory discussions for broader strategic partnerships across the value chain continue in parallel.

#### MEO's Executive Manager Business Development Robert Zammit commented:

"The technology and cost estimate review by leading international engineering firms has confirmed the economic fundamentals of the design basis and its suitability as a commercialisation option for gas resources with high CO<sub>2</sub>. The updated cost estimate coupled with market pricing and commercial terms underpins the project economics and supports our ongoing maturing of the commercial framework for TSMP<sub>1</sub>."

<sup>\*</sup> see ASX release 12/4/2012 – Tassie Shoal Methanol Project Expressions of Interest



# Tassie Shoal Methanol Project (MEO 100%)

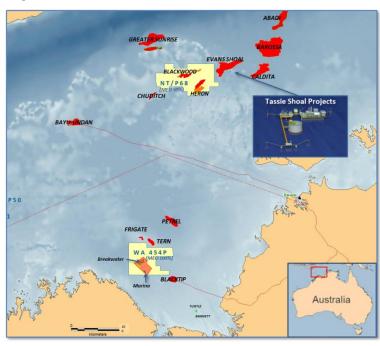
## **Project Overview**

The Tassie Shoal Methanol Project ("TSMP") combines established proven technology in an innovative way to produce methanol from high  $CO_2$  feedstock gas. By designing for high  $CO_2$  in the feedgas stream, TSMP avoids the need for expensive separation, transportation and geo-sequestration costs in alternative LNG or domestic sales gas development scenarios.

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

For each TSMP, feedgas of between 180 - 210 million standard cubic feet per day (MCFD) is required, depending upon  $CO_2$  content, to enable the production of 5000 tonnes of methanol per day or 1.75million tonnes of methanol per annum.

## **Location Map**



Central located to regional high CO<sub>2</sub> feedstock gas

Single module

construction in

a low cost SE

Asian location

The location is adjacent to many undeveloped gas resources in the region including the Blackwood and Heron discoveries in the nearby NT/P68 exploration permit (MEO 50%) and is approximately 400kms from MEO's 100% owned WA-454P permit.

# **Key Project Metrics**

Water Depth: ~15m

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% CO<sub>2</sub>
- Storage: 20 days production within CGS
- Fabrication Location: South East Asia TBC



Designed by Industry Leaders

## **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).

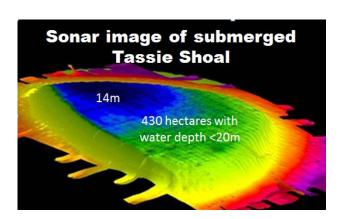
# Competitive Advantage – single module construction

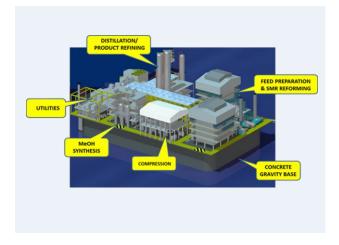
TSLNG design embeds a number of key competitive advantages when compared to onshore or floating alternatives:

- Shallow water development site at Tassie Shoal
- Benign metocean conditions
- Facilities to be located on sea floor, avoiding floating complexities, motion issues

Competitive advantages result in globally competitive cost outcomes

- Accepts up to 30% CO<sub>2</sub> in the feedgas stream
- Proximal to regional high CO<sub>2</sub> resources, avoiding long pipelines
- 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 at a low cost SE Asian site





The ability to accept up to 30% CO<sub>2</sub> in the feedgas stream provides feedstock flexibility over the TSMP life.

CO<sub>2</sub> is utilized in the chemical process





# **Environmental Approvals**

Approvals in place

MEO has secured Federal Government Environmental Approvals for two methanol plants to be located at 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. The approval is valid until 2052.

# **Major Project Facilitation Status**

MPF granted

The project has been granted Major Project Facilitation (MPF) status by the Federal Government Department of Infrastructure and Transport. The Australian government grants Major Project Facilitiation (MPF) status to projects that meet strict criteria. The MPF service endeavours to ensure that Commonwealth approval processes are coordinated with relevant state and territory government approval processes. MPF status was renewed in 2012.

# **Capital Cost Estimates**

The following table details the capital cost estimate for the first TSMP.

TSMP Component	Capital Cost Estimate (US\$M)	Company
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# **Surrounding Area Activity**

#### Heron/Blackwood (NT/P68)

Eni and MEO are engaged in a drilling program to appraise the Heron and Blackwood discoveries after which development options will be considered.

#### **Evans Shoal (NT/P48)**

The Evans Shoal gas discovery lies directly adjacent to NT/P68 and only 10 km from Tassie Shoal. In October 2011 Santos reached agreement with Eni to divest their 40% interest in the Evans Shoal field for up to US\$350 million. An appraisal well is planned for 2012/3.

#### Barossa (NT/P69)

The last well drilled in the permit in 2006 tested 16% CO<sub>2</sub> gas. In June 2012 SK E&S farmed into both NT/P69 and NT/P61 earning up to a 49.5% interest in both permits for funding up to US\$520 million in carry obligations and contingent milestone payments. Three appraisal wells are planned for 2013.

#### Caldita (NT/P61)

The last well drilled in the permit in 2007 tested 13% CO<sub>2</sub> gas. In June 2012 SK E&S farmed into both NT/P69 and NT/P61 earning up to a 49.5% interest in both permits for funding up to US\$520 million in carry obligations and contingent milestone payments.