

## AWE LIMITED

**DAVID BIGGS, Managing Director and CEO** 

Good Oil Conference, Perth 13 September 2016

#### **Disclaimer**



This presentation may contain forward looking statements that are subject to risk factors associated with the oil and gas businesses. It is believed that the expectations reflected in these statements are reasonable but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially, including but not limited to: price fluctuations, actual demand, currency fluctuations, drilling and production results, reserve estimates, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory developments, economic and financial market conditions in various countries and regions, political risks, project delay or advancement, approvals and cost estimates.

This presentation may also contain non-IFRS measures that are unaudited but are derived from and reconciled to the audited accounts. All references to dollars, cents or \$ in this presentation are to Australian currency, unless otherwise stated.

### Reserves and Contingent Resources



The reserves and contingent resources in this presentation are based on and fairly represent information and supporting documentation prepared by and under the supervision of qualified petroleum reserves and resource evaluator Dr. Suzanne Hunt, General Manager WA Assets and Engineering at AWE. Dr. Hunt, a Petroleum Engineer with a Ph.D. in Geomechanics, is a member of the Society of Petroleum Engineers and has over 18 years' experience in the petroleum sector in geoscience, field development planning, reserves estimation, reservoir production and facilities engineering. Dr Hunt has consented in writing to the inclusion of this information in the format and context in which it appears.

AWE reserves and contingent resources are estimated in accordance with the following:

- SPE/AAPG/WPC/SPEE Petroleum Resources Management System guidelines of November 2011;
- SPEE Monograph 3 "Guidelines for the Practical Evaluation of Undeveloped Reserves in Resource Plays";
- ASX Disclosure rules for Oil and Gas Entities, Chapter 5; and
- ASX Listing Rules Guidance Note 32.

All material changes in reserves and contingent resources are presented to the AWE Reserves Committee. The Committee meets as a minimum every six months, or when any material change occurs, to review and endorse reserves and contingent resource estimates. The endorsed reserves and contingent resources evaluations are reported to the AWE Audit and Governance Committee and form an integral part of the half year and annual financial reporting.

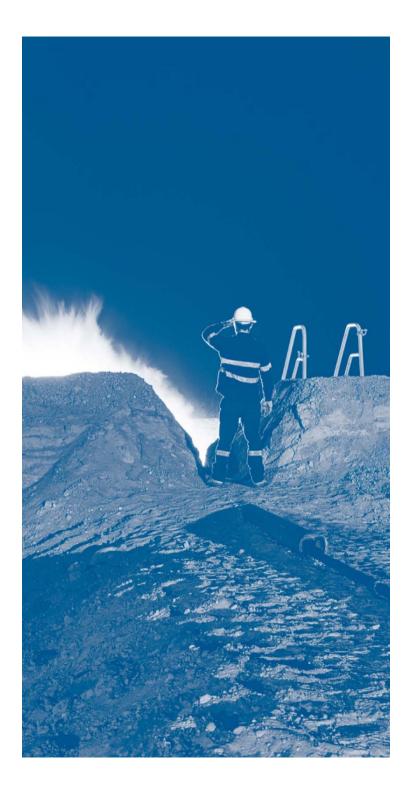
AWE applied deterministic methods for reserves and contingent resource estimation for all assets. The reserves were estimated at the lowest aggregation level (reservoir) and aggregated to field, asset, basin and company levels. Estimated contingent resources are un-risked and it is not certain that these resources will be commercially viable to produce.

## **Agenda**



- Reshaped and refocused
- Priorities, pipeline and gas marketing
- Key projects
- Catalysts and outlook

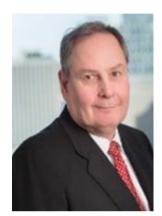




# AWE: reshaped and refocused

## **Management team refreshed**





David Biggs, Managing Director and CEO Commenced in May 2016



lan Bucknell, Chief Financial Officer Commenced in July 2016



Neville Kelly, Company Secretary and GM Corporate Services Commenced in July 1997



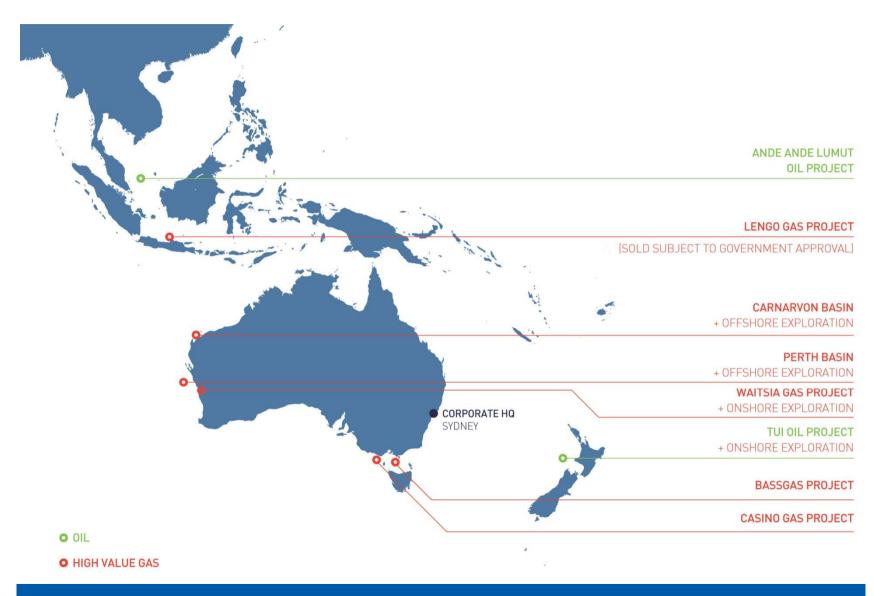
Andy Furniss, GM Exploration and Geoscience
Appointed in January 2016



Suzanne Hunt, GM WA Assets and Engineering Appointed in August 2016

#### Focused on core assets





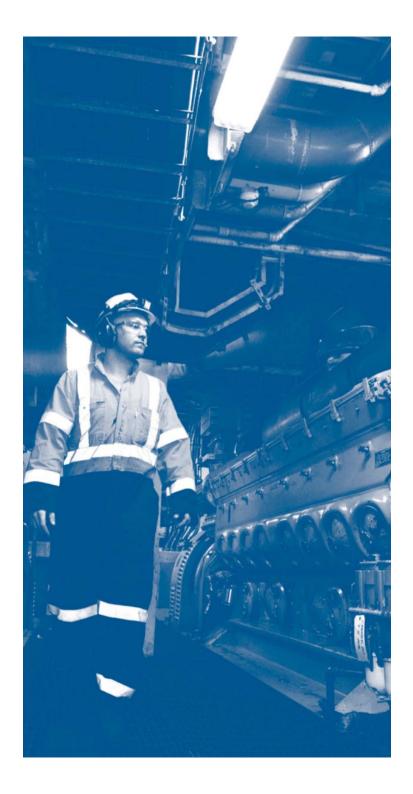
## Health, Safety, Environment & Community





- No Lost Time Injuries recorded in FY16
  - 460 days injury free to 11 September 2016
- No reportable environmental incidents in FY16
  - 4th consecutive year of no reportable environmental incidents
- Increased focus on community and stakeholder relations activities in Western Australia
  - AWE funding CSIRO groundwater study in Mid-West region
  - Over \$12m invested in the local Mid-West community in FY16
- Continue community investment in Taranaki region of New Zealand





# Priorities, pipeline and gas marketing

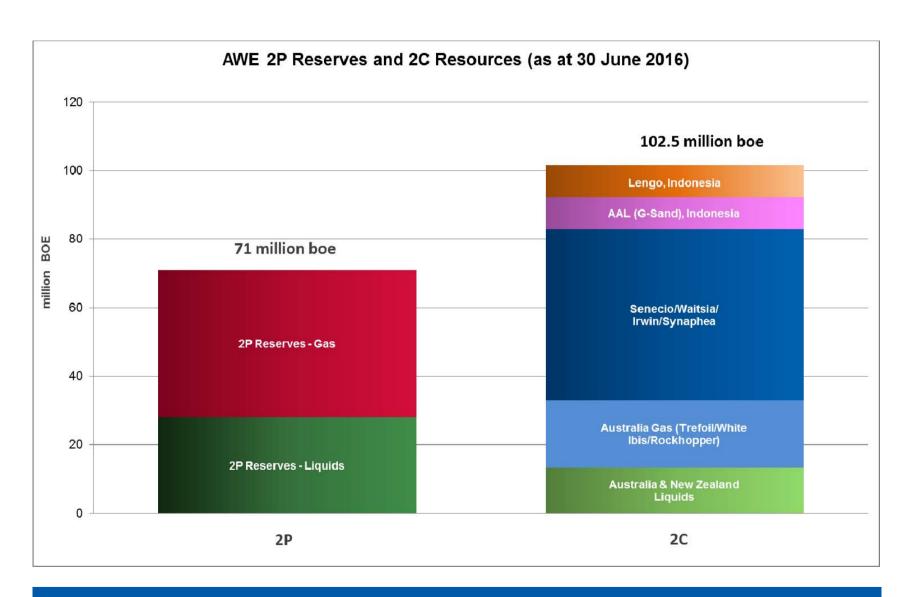
## **Key priorities**



- Deliver Waitsia gas project
- Deliver AAL oil project
- Lock in new gas contracts on east and west coasts at substantially higher prices
- Maintain flexible balance sheet
- Look for new opportunities

#### Reserves & Resources at 30 June 2016





## Clear development pipeline



#### Near term - next 12 months

- First gas produced from Waitsia gas field (Stage 1A) in August 2016
- Further appraisal drilling on Waitsia field (2 wells planned in 1H CY 2017)
- On-platform compression at BassGas to deliver increased production from end FY17
- Gas contracting in east and west coast markets under way

#### Medium term – 1-3 years

- Waitsia full field development (replacing BassGas as primary gas producing asset)
- Continue exploration and appraisal within Perth Basin permits
- Casino development drilling (extend field life)
- Gas contracting completed and revenue uplift achieved

#### Medium term plus – 3-5 years

- AAL oil project development (replacing Tui as primary oil producing asset)
- Potential to add Trefoil to BassGas and extend project life
- Appraisal of additional fields within Casino permit

## AWE well positioned for gas marketing



#### East coast gas market

- Energy supply issues in SA and Tasmania contribute to significant spot price increases
- Industry demand for reliable domestic supply
- Widespread view that some Queensland LNG producers are short gas
- Both BassGas and Casino production off contract in 2018
- Anticipate significantly higher prices when recontracting

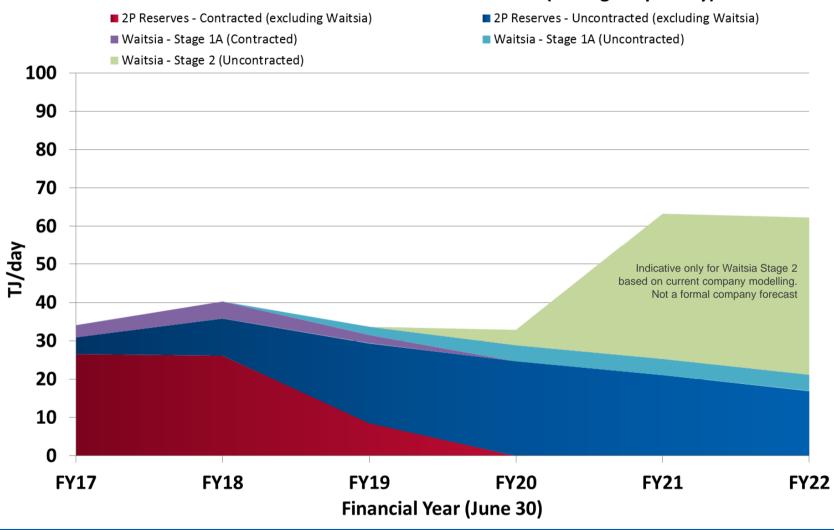
#### West coast gas market

- NW Shelf confirmed reduced supply to WA market
- Temporary spot market oversupply expected to be absorbed/eliminated
- Domestic demand resilient
- Customers looking for diversity of gas producers
- Optimal customer recontracting window over next 3-5 years
- Anticipate return to strong historic pricing for term supply contracts

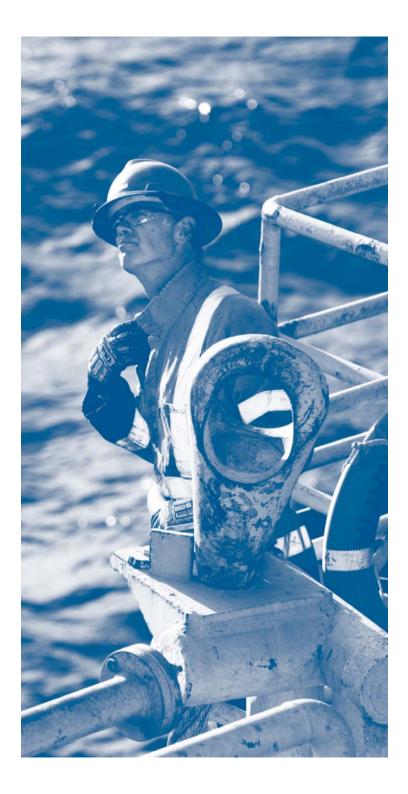
## Capturing value in uncontracted gas



#### AWE Net Australian Sales Gas Production Outlook (average TJ per day)







## **Key projects**

## **Outstanding Waitsia-1 flow test results**

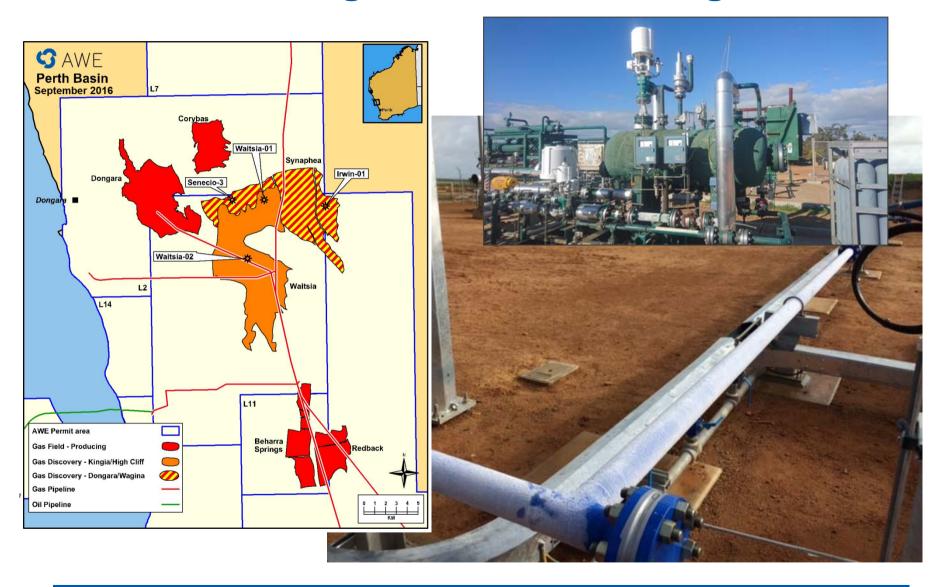




- Combined flow rate over 50 mmscf/d from two zones, constrained by production tubing diameter, achieved from Waitsia-1 in October 2015
- Some of the best onshore well test results observed in Australia for the past 20 to 30 years

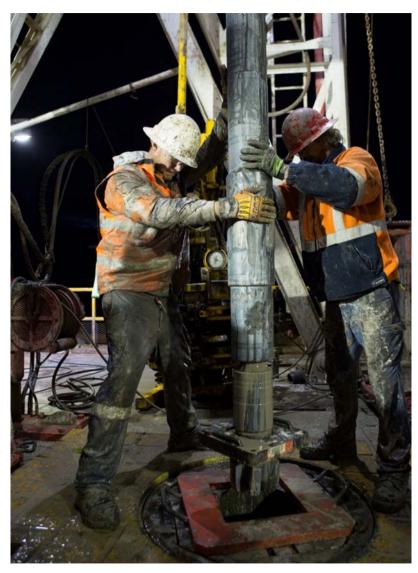
## Waitsia 1A first gas on time and budget





## Waitsia Stage 2 - full field development





- 344 Bcf of gas gross 2P Reserves (172 Bcf or 30.4 mmboe net to AWE)\*
- Independent reserves report under way
- Moving directly to Waitsia Stage 2 provides the optimal NPV outcome:
  - Less capex by bypassing intermediate stage
  - Capture anticipated improvement in gas pricing
- Maximise value by aligning with customer demand windows
- Stage 2 first gas targeting CY 2020
- Gas marketing in progress looking to contract gas in 2017 ahead of FID

\* Waitsia field reserves upgraded on 3 June 2016

### Good results from AAL appraisal drilling



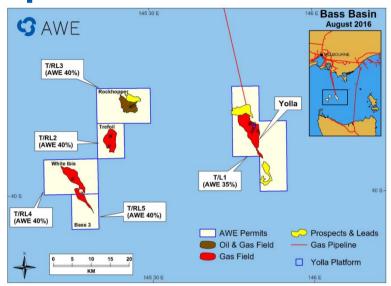
- Better quality crude from AAL-4XST1 well indicates the potential for:
  - Lower capex and opex
  - o Improved crude pricing
  - Enhanced overall project economics
- Well head platform and FPSO tendering processes to continue over remainder of 2016
- Look to achieve savings on major cost items: well head platform, FPSO and drilling
- Operator targeting FID in 2H CY 2017 with first oil in CY 2020



## **BassGas MLE nearing completion**



- Hook up of compression and condensate pumping modules on schedule for completion by end FY17
- Compression to deliver significant uplift in production from FY18
- Mid Life Enhancement project will then be complete
- Gas contract rolls off in CY 2018 substantially higher pricing anticipated
- Operator has accelerated development studies for Trefoil field

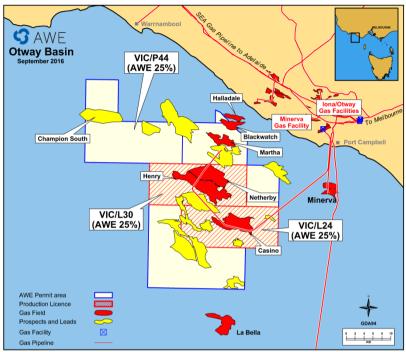




## Casino gas project



- Gas contract rolls off in CY 2018 substantially higher pricing anticipated
- Operator assessing potential development well
- Also evaluating nearby prospects for potential exploration drilling
- Alternative gas processing options being assessed





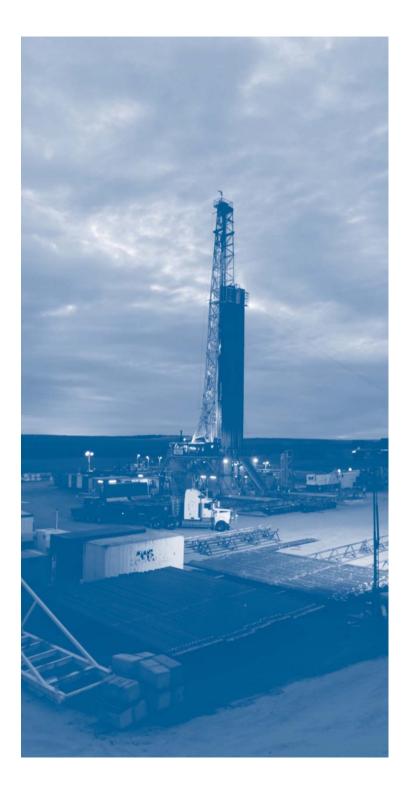
### Tui hedged and cash flow positive



- Around 80% of Tui FY17 production hedged at US\$47.82/bbl
- Cash flow positive at current prices
- Reduced opex through helicopter and boat sharing arrangements and sustainable cost reductions
- Working to extend field life to at least the end of 2019
- Will be the first offshore decommissioning in New Zealand
- Potential to divest Tui asset







# Catalysts and outlook

## **Key near-term catalysts**



#### Waitsia gas project enters next phase

- Independent reserves review due in September 2016
- Appraisal drilling (2 wells) planned for 1H CY 2017
- AWE looking to contract Stage 2 gas in CY 2017 ahead of FID

#### **BassGas MLE stage 3 nearing completion**

- Compression to enhance production from end FY17
- Trefoil development studies being accelerated

#### **Ande Ande Lumut oil project**

- Complete FPSO and well head platform tender process ahead of FID in 2H CY 2017
- Complete analysis and evaluation of G-Sand appraisal well results

#### Asset sales and farm outs

- Lengo sold, subject to government approval
- Potential to divest Tui asset
- Targeting farm out of 100% owned WA offshore exploration assets

### **Summary**



- Stronger balance sheet with low debt levels
- Waitsia first gas achieved in August 2016; concept select process for Stage 2 (~100 TJ/d) under way
- Better quality crude from AAL G-Sand appraisal well has potential to improve project economics
- BassGas compression to enhance production from mid CY 2017; accelerate Trefoil development studies
- Working to extend Tui field life to beyond 2019
- 2P Reserves plus 2C Contingent Resources total 173.5 mmboe
- Looking to recontract gas in stronger pricing environment







## **Appendix**

#### **Guidance for FY17**



Key Indicator	Unit	FY16 Actual	FY17 Guidance
Production	mmboe	5.0	2.7 – 3.0
Sales Revenue	\$m	202	100 - 120
Development Expenditure	\$m	120	50 - 60
Exploration Expenditure	\$m	19	5

#### **Notes**

Guidance prepared using Brent Oil price of USD 52 per barrel and AUD/USD exchange rate of 74 cents and includes hedged oil revenues from Tui.

In relation to Tui oil production, 403,000 barrels (approximately 80% of forecast Tui production) have been hedged for the 12 months to June 2017 at a weighted average Brent price of USD 47.82 per barrel.

## **Production analysis – FY 2016**



REGION AND ASSETS	FY16 Production	Percentage of total	FY15 Production	Percentage of total
Australia	'000 BOE		'000 BOE	
Bass Basin (BassGas)	1,497	30%	1,093	22%
Otway Basin (Casino)	805	16%	1,072	21%
Perth Basin (Cliff Head^, onshore*)	638	13%	766	15%
New Zealand				
Taranaki Basin (Tui*)	789	16%	836	16%
USA				
Eagle Ford, Texas (Sugarloaf)^^	1,289	25%	1,327	26%
TOTAL ('000 BOE)	5,019	5,094		

Numbers may not add due to rounding

<sup>\*</sup> Denotes Operatorship (not all Perth Basin assets operated) ^ Sold on 30 June 2016 ^ Sold on 17 March 2016

#### 2P Reserves as at 30 June 2016



**2P Reserves Project/Area Equity** (mmboe) 7.4 6.2 24.6 BassGas BassGas 35% 7.4 Otway Basin 6.2 **Otway Basin** 25% Onshore PB Onshore PB 33-100% 31.7 Tui ■ Ande Ande Lumut 1.1 Tui 57.5% AAL 50%^ 24.6 31.7 **Total** 71.0

<sup>^</sup> Reported reserves reflect AWE's net entitlement under the PSC terms and not 50% of gross recoverable oil Note: Numbers may not add due to rounding. AWE's annual reserves statement to be published in the company's 2016 Annual Report in October 2016.





		2C Contingent Resources			
Project/Area	Equity	(mmboe)	9.5		
Bass Basin	35-40%	30.3	9.3	30.3	■ Bass Basin
Otway Basin	25%	1.3	0.9		<ul><li>Otway Basin</li><li>Onshore PB</li></ul>
Onshore PB	50-100%	51.2			■ Tui
Tui	57.5%	0.9		1.3	<ul><li>Ande Ande Lum</li><li>Other Indonesia</li></ul>
AAL	50%^	9.3			= other madriesia
Lengo	42.5-100%	9.5	51.2		
Total		102.5			

<sup>^</sup> Reported reserves reflect AWE's net entitlement under the PSC terms and not 50% of gross recoverable oil Note: Numbers may not add due to rounding. AWE's annual reserves statement to be published in the company's 2016 Annual Report in October 2016.

#### **Conversion Tables**



#### Volume

1 cubic metre = 1 kilolitre = 35.3 cubic feet = 6.29 barrels 1 megalitre = 1,000 cubic metres

#### **Energy Value**

1,000 standard cubic feet of sales gas yields about

1.055 gigajoules (GJ) of heat

1 petajoule (PJ) = 1,000,000 gigajoules (GJ)

1 gigajoule = 947,817 British Thermal Units (BTU)

#### **Barrel of Oil Equivalents (BOE)**

Sales Gas: 6PJ = 1 MMBOE LPG: 1 tonne = 11.6 BOE

Condensate: 1 barrel = 1 BOE

Oil: 1 barrel = 1 BOE

#### **Decimal Number Prefixes**

kilo = thousand =  $10^3$ mega = million =  $10^6$ giga = 1,000 million =  $10^9$ tera = million million =  $10^{12}$ peta = 1,000 million million =  $10^{15}$ 

## **Glossary**

LPG

LTI

Liquefied Petroleum Gas

Lost Time Injuries



1H	First Half	MLE	Mid Life Enhancement
2H	Second Half	mmboe	Million Barrels of Oil Equivalent
2P	Proved and Probable Reserves	mmscf/d	Million Standard Cubic Feet of gas per
2C	Contingent Resources		Day
AAL	Ande Ande Lumut	Opex	Operating expenditure
AMI	Area of Mutual Interest	p.a.	Per annum
Bcf	Billion cubic feet	P&L	Profit & Loss Account
BOE	Barrels of Oil Equivalent	PJ	Petajoules
Bbls	Barrels	PSC	Production Sharing Contract
Bopd	Barrels of oil per day	SA	South Australia
Capex	Capital expenditure	TJ	Terajoules
CY	Calendar Year	TJ/d	Terajoules per day
EBITDAX		WA	Western Australia
	depreciation, amortisation and	WHP	Well head platform
	exploration expenses	*****	Won Hodd platform
FID	Final Investment Decision		
FPSO	Floating Production Storage and		
1130	Offloading		
FY	Financial Year		
GM	General Manager		

