

# Quarterly Activities Summary for Period Ended 31 December 2016

## Highlights:

### **Cuba**

- Update to prospective resource assessment of Block 9 PSC currently being finalised
- Progressed engineering and cost studies to support potential drilling program in early 2018
- To date the Lower Sheet Play has been assessed to contain exploration potential for 8.183 billion barrels of Oil-in-Place with a Prospective (Recoverable) Resource of 395 million barrels (Best Estimate, 100% basis)\*

### **New Zealand – PEP51153**

- Drilling of the high impact Pukatea-1 prospect anticipated in 3Q/4Q 2017
- Pukatea is a low cost, commercially robust, mature drilling opportunity
- Assessment of Pukatea prospect significantly upgraded with Prospective Resources Best Estimate of 12.4 million barrels of oil equivalent (100% share) with a Chance of Success also revised upwards to 19%

### **Australia – WA-488-P**

- Melbana granted a 16 month extension to the work program for WA-488-P
- Progressed farm-out discussions with potential farminees

### **Corporate**

- Ends quarter with strong cash position of \$4.4 million
- Company relaunched as Melbana Energy Limited highlighting a new era for the company.

MELBOURNE, AUSTRALIA (30<sup>th</sup> January, 2017)

Melbana Energy Limited (ASX: **MAY**) (“**Melbana**” or “**Company**”) provides the following summary in relation to its activities during the quarter ended 31 December 2016.

## Activity Summary

### **Cuba**

Melbana continued its evaluation of existing exploration data and reprocessing of selected 2D seismic data covering the Company’s onshore Block 9 PSC in Cuba (“**Block 9**”) during the quarter and is currently in the process of finalizing the updated prospective resource assessment. An update to the Company’s assessment of the exploration potential is expected in 1Q 2017.

Melbana also progressed plans during the quarter for the planned drilling of an accelerated initial program of up to two exploration wells in Block 9, with a target of finalizing well proposals by the end of Q1, 2017.

*\*Refer to Cautionary Statement in this report (Page 4) relating to estimates of prospective resources*

An 8 month extension to the first exploration sub-period for Block 9 PSC to November 2017, with a corresponding reduction in the term of future sub-periods was also received during the quarter.

#### **New Zealand – PEP51153**

During the quarter, the PEP51153 joint venture approved plans to drill Pukatea-1, with drilling expected to commence in Q3/Q4 2017. The Pukatea prospect is a high impact exploration opportunity, targeting a highly productive conventional reservoir. The PEP51153 Joint Venture also significantly upgraded the prospective resources attributable to the Pukatea prospect which are estimated to range from 1.3 to 40 million barrels (Low-High estimates) with a Best Estimate of 12.4 million barrels of oil equivalent\*. The chance of success for Pukatea was also revised upward from 16% to 19%.

Based on the initial cost estimate for Pukatea-1, Melbana's share of the dry hole cost of the well, including potential testing, is expected to be approximately \$2.8 million.

#### **WA-488-P**

During the quarter, Melbana was granted a 16 month extension to the work program for WA-488-P. A formal farmout process continued during the period.

#### **AC/P50 & AC/P51**

During the quarter, 3D seismic reprocessing studies proceeded in accordance with the agreed timeline.

#### **Corporate**

Melbana shareholders approved the proposed change of the Company name from MEO Australia Limited to Melbana Energy Limited during the quarter. The relaunching highlights a new era for the Company and a strategic focus on its high potential Cuban activities.

#### **Cash balance at end of quarter**

Consolidated cash balance at 31 December 2016 was \$4.4 million.

#### **Priorities for the current quarter ending 31 March 2017**

- Complete next stage of technical assessment of exploration potential in Block 9, onshore Cuba.
- Select highgraded drilling targets for potential accelerated drilling program in Cuba.
- Progress long lead items associated with Pukatea-1 well in PEP51153, onshore New Zealand
- Progress WA-488-P Farmout and reprocessing of existing 2D data
- Progress discussions with potential gas suppliers to the Tassie Shoal Projects as opportunities arise.

A handwritten signature in blue ink, appearing to read "Peter Stickland".

Peter Stickland

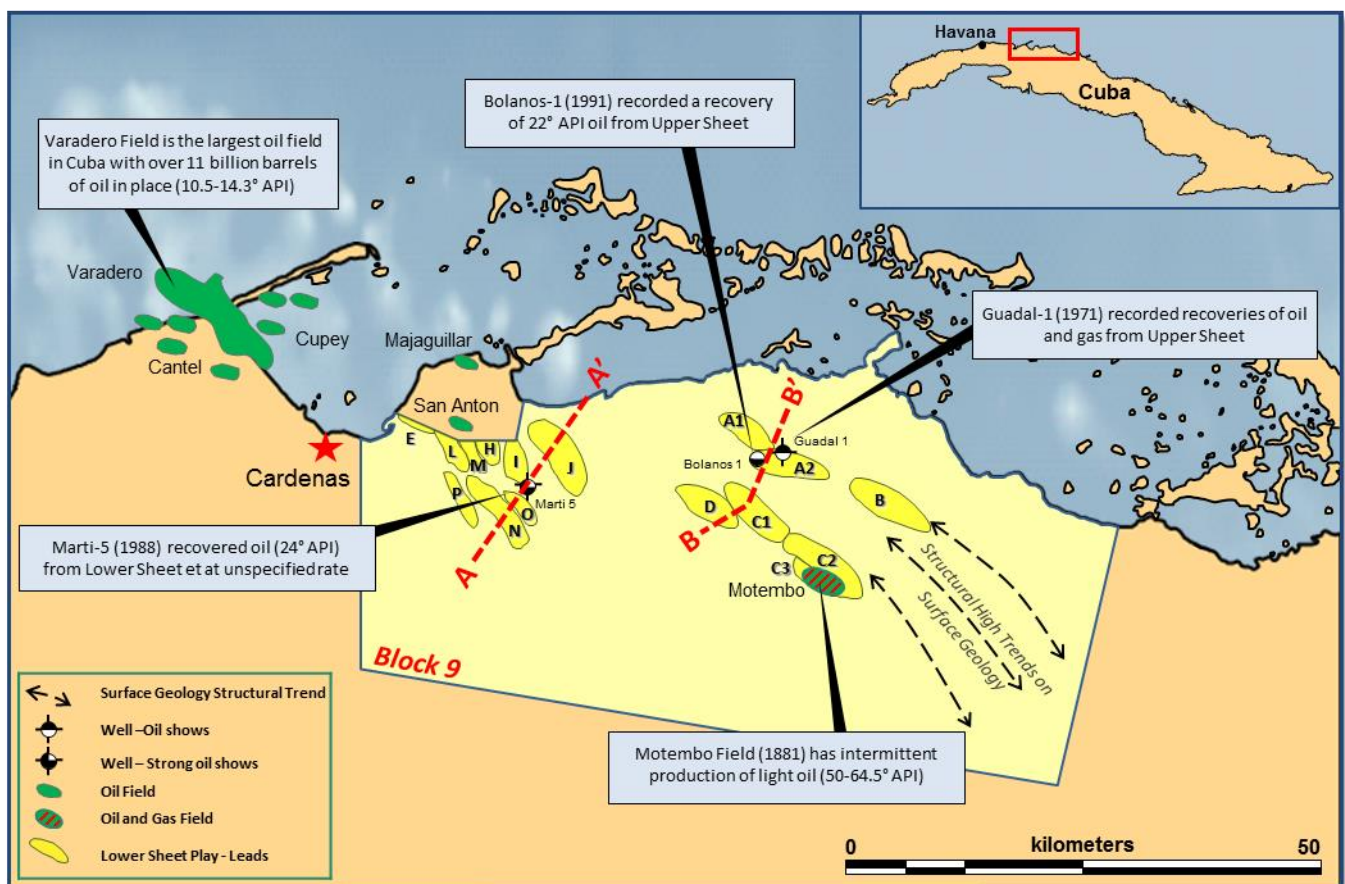
**Managing Director and Chief Executive Officer**

Attachments: Activity Summaries by Project Area

## Cuba

The Block 9 exploration period is split into four sub-periods with withdrawal options at the end of each sub-period. As an early mover into Cuba, Melbana is now one of the few western companies (and the only ASX listed company) with a footprint in the expanding Cuban hydrocarbon sector. The geology of the block has analogies to petroleum systems in which Melbana’s technical personnel have significant experience, and Melbana sees substantial potential in Cuba overall and Block 9 in particular. Melbana is working closely with the Cuban national oil company, CUPET, to explore and develop Cuba’s oil and gas resources.

Melbana has previously announced the first of three identified oil plays on Block 9 has been assessed by Melbana to contain exploration potential for 8.183 billion barrels of Oil-in-Place with a Prospective (Recoverable) Resource of 395 million barrels (unrisked Best Estimate, 100% basis)\* of potentially high quality light oil. The conventional “Lower Sheet Play” with 15 individual leads is one of three identified oil plays in Block 9. The Company continued its evaluation of existing exploration data and reprocessing of selected 2D seismic data covering the Company’s onshore Block 9 during the quarter and is currently in the process of finalizing the updated prospective resource assessment. An update to the Company’s assessment of the exploration potential is expected in 1Q 2017.



**Figure 1. Block 9 location map showing adjacent fields.**

During the quarter Melbana advised that its plans for the potential drilling of an accelerated initial program of up to two exploration wells in Block 9 were maturing, with a target of finalizing well proposals by the end of 1Q, 2017.

*\*Refer to Cautionary Statement in this report (Page 4) relating to estimates of prospective resources*

Lead Name	Chance of Discovery	Low	Best	High	mean
	%	MMstb	MMstb	MMstb	MMstb
A1	20	7	48	159	70
A2	25	7	64	222	96
B	16	9	85	290	125
C1	17	8	45	134	61
C2	18	8	54	162	74
C3	12	1	2	7	3
D	22	2	16	54	24
H	31	1	6	20	9
I	29	1	10	35	15
J	29	3	24	92	38
L	18	2	11	36	16
N	14	3	23	77	34
O	19	1	5	14	6
P	14	1	3	9	4
<b>Total (unrisked 100%)</b>		<b>53</b>	<b>395</b>	<b>1311</b>	<b>576</b>
<b>MEO Net Entitlement Interest</b>		<b>36</b>	<b>267</b>	<b>885</b>	<b>389</b>

**Table 1: Block 9 Prospective Resources Summary for Lower Sheet Play**

**\*Prospective Resources Cautionary Statement:** The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Future exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

During the quarter Melbana also announced that it had received an 8 month extension to the first exploration sub-period for Block 9 PSC to November 2017, with a corresponding reduction in the term of future sub-periods. The adjustment to the exploration sub-periods provides Melbana with additional exploration program flexibility.

### Indicative Activity Schedule

PSC	Block 9	2016				2017				2018															
		Mar Qtr	Jun Qtr	Sep Qtr	Dec Qtr	Mar Qtr	Jun Qtr	Sep Qtr	Dec Qtr	Mar Qtr	Jun Qtr	Sep Qtr	Dec Qtr												
Melbana Interest	100%*	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Operator	Melbana																								
Exploration Sub-Period		1												2											
Work program		Studies & Seismic Reprocessing												2D seismic acquisition											
Activities (indicative)																									
Data Gathering & Reprocessing		■																							
Resource assessment (lower sheet)		■				■																			
Resource assessment (other plays)		■																							
Mature drilling program																									
Potential seismic acquisition														■				■							
Potential drilling (timing uncertain)														■											

\* Subject to a conditional 40% option to be exercised no later than September 2017 held by Petro Australis Limited

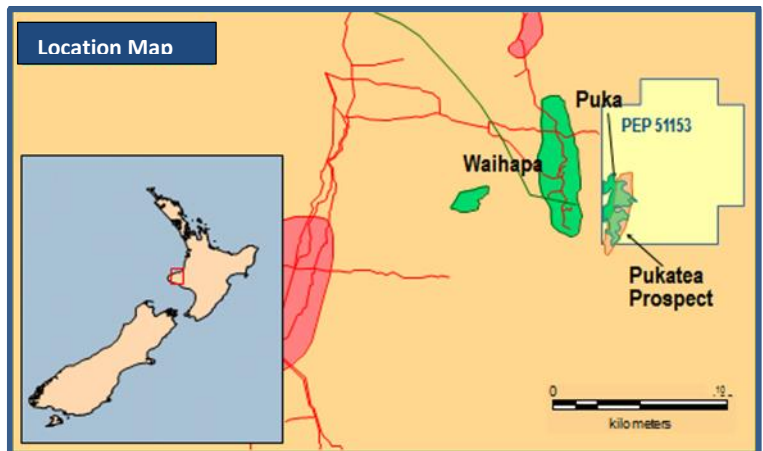
## New Zealand: Taranaki Basin

### PEP51153 (Melbana 30%, TAG 70% & Operator)

Melbana holds a 30%, non-Operator interest in PEP51153, located in the productive onshore Taranaki Basin of New Zealand. PEP51153 contains the Pukatea prospect (formerly Shannon).

During the quarter, the joint venture approved plans to drill Pukatea-1, with drilling expected to commence in Q3/Q4 2017. The Pukatea prospect is a high impact exploration opportunity, targeting the highly productive conventional Tikorangi Limestone reservoir.

During the quarter PEP51153 Joint Venture significantly upgraded the prospective resources attributable to the Pukatea prospect which are estimated to range from 1.3 to 40 million barrels (Low-High estimates) with a Best Estimate of 12.4 million barrels of oil equivalent\* (see the following table). The chance of success for Pukatea has also been revised upward from 16% to 19%.



Melbana believes the regional setting provides solid indicators of Pukatea's potential prospectivity. The uplift in prospective resources assessment is based on the Operator's analysis of Pukatea and the adjacent Waihapa field (~3km from Pukatea), which is an important analogue having produced in excess of 23MMboe with initial well rates of ~5,000 barrels per day. The Pukatea prospect is located up dip and above the lowest known oil in the Waihapa field. The Douglas well drilled in 2012 at the edge of the Pukatea prospect encountered oil shows and 145m of reservoir interval, implying over 350m of updip potential at the Pukatea location. Furthermore, PEP51153 also contains the shallower Puka oil accumulation, which was discovered in 2012 and has previously produced from two wells under extended production test at 100bpd, but is currently shut-in.

Pukatea Prospective Resource Summary is set out in the table below:

100% MMboe*	COS**	Low	Best	Mean	High
Pukatea -100%	19%	1.3	12.4	17.1	40

\* **Prospective Resources Cautionary Statement:** *The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Future exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.*

\*\* **COS** means "Chance of Success"

The Pukatea prospect is proximal to existing infrastructure and has a number of low cost alternative development paths. The Pukatea-1 well is planned to be drilled from the existing Puka production pad where three wells have previously been drilled. TAG operates the nearby Cheal production complex, approximately 5km from the Pukatea prospect location and according to latest publicly available data released by the Operator, produces at approximately 1,000 Barrels of oil equivalent (BOE) per day.

Melbana believes oil and gas economics in the Taranaki basin can be robust in the current price environment. Tag Oil (TSX: TAO) reported in its latest financial reports netbacks on its production for the six months ended 30 September of CAN\$24.11 per BOE .



The minimum work program for PEP51153 is as follows:

Period	Work Commitment
No later than 23 March 2017	Acquire, process and interpret a minimum of 28.5km of gravity data across the permit
No later than 23 February 2018	Drill one well to a location and depth agreed between the permit holder and the Chief Executive; OR Surrender the permit

PEP51153 expires on 23 September 2018.

### Indicative Activity Schedule

Permit Melbana Interest Operator	PEP 51153 30% Tag Oil	2016				2017																			
		Mar Qtr		Jun Qtr		Sep Qtr		Dec Qtr																	
		J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Permit Year		8				9				10															
<b>Work program</b>		Gravity Survey								1 well															
<b>Activities (indicative)</b>																									
Acquire gravity survey														■											
Drill Well Pukatea-1																						■			

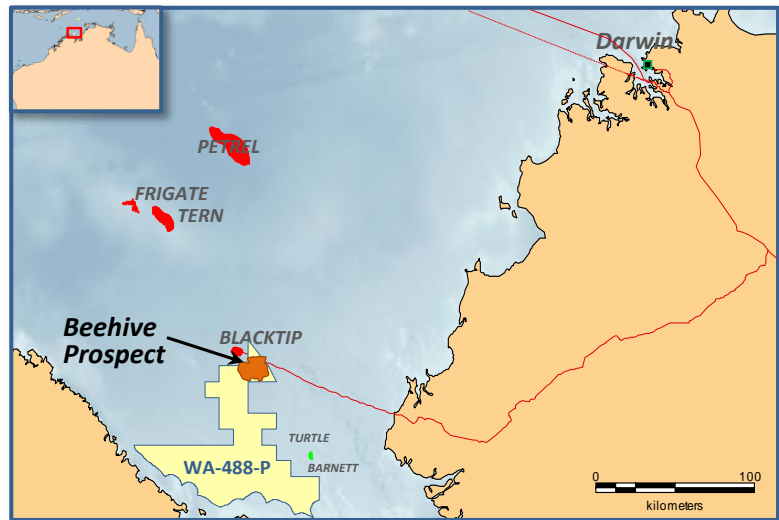
## Bonaparte Gulf: Petrel sub-Basin

### WA-488-P (Melbana 100%)

WA-488-P is located in the southern Bonaparte Gulf and covers an area of 4,105 km<sup>2</sup>. The permit was awarded to Melbana in May 2012 as part of the acreage Gazettal Round.

Leveraging the 2011 Ungani-1 oil discovery in Carboniferous aged reservoirs in the nearby Canning Basin, Melbana has identified the giant Beehive prospect, a new play type within the Bonaparte basin.

During the quarter, Melbana was granted a 16 month extension to the work program for WA-488-P. Permit Year 2 is now extended to 21 March 2018. The timeframe within which to drill the Beehive-1 exploration well has also been deferred commensurately.



The additional time will provide an

opportunity for Melbana to undertake a further 330km of 2D seismic broadband reprocessing and additional studies, including a stratigraphic interpretation study and an analogue field study.

A formal farm out process was also underway during the quarter and discussions were progressed with potential farminees. The potential drilling of Beehive is subject to a successful farm-out.

### Indicative Activity Schedule

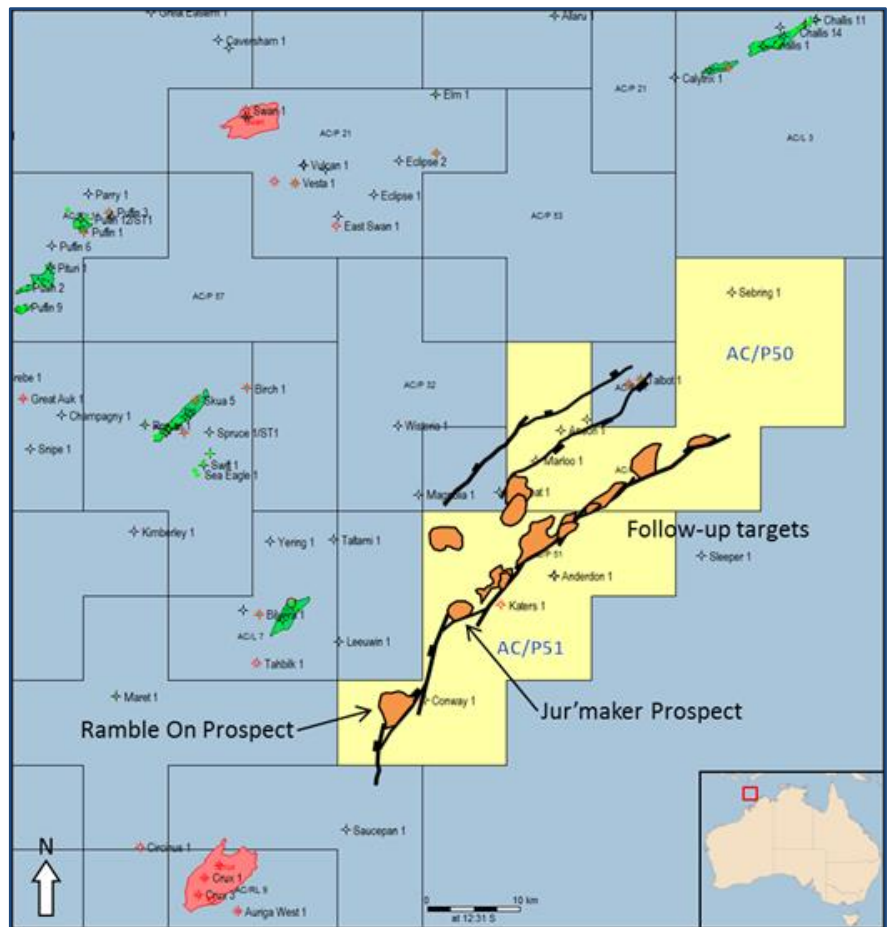
Permit	WA-488-P	2016				2017				2018															
		Mar Qtr	Jun Qtr	Sep Qtr	Dec Qtr	Mar Qtr	Jun Qtr	Sep Qtr	Dec Qtr	Mar Qtr	Jun Qtr	Sep Qtr	Dec Qtr												
Melbana Interest	100%	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Operator	Melbana	Permit Year																							
Work program		2												3											
Activities		Seismic Repro & Inversion												1 well											
Reprocess 2D seismic & Inversion		Inversion																							
Partial sale process																									
Reprocess 2D seismic & studies																									
Potential drilling of Beehive-1*																									

## Ashmore Cartier Region, Timor Sea: Vulcan Sub-Basin

### AC/P50, AC/P51 (Melbana 100%\*)

AC/P51 contains the Ramble On prospect, a new play type that has proven analogues in other Basins. This prospect is on trend with the recently reported West-1 (Auriga) discovery near Crux gas/condensate field, resulting in renewed industry interest in the region.

Previously, Melbana had announced that it had executed an agreement with Rouge Rock which granted Rouge Rock an option to acquire a 45% interest in the AC/P50 and AC/P51 Exploration Permits (“Permits”). In exchange for the grant of the option, Rouge Rock will undertake and fund the remaining primary statutory work program for each permit consisting of seismic reprocessing and other technical activities (“Reprocessing Work”).



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Subject to completing the Reprocessing Work, Rouge Rock may exercise its option by providing notice to Melbana prior to 18<sup>th</sup> May, 2018, at which point it will acquire a 45% interest in the Permits.

During the quarter the 3D seismic Reprocessing Work proceeded consistent with the required timeline.

Both permits are also subject to an option to acquire a 5% interest in each permit currently held by Far Cape Energy Pte Ltd (“Far Cape”). Far Cape is the successor to Red Rock Pte Ltd which was granted this option in 2010 at the time Melbana acquired AC/P50 and AC/P51. Under this option agreement, Melbana will carry Far Cape’s participating interest in the first well should Melbana elect to drill a well in either of the permits.



## Indicative Activity Schedule

Permit	AC/P50	2016								2017																			
		Mar Qtr		Jun Qtr		Sep Qtr		Dec Qtr		Mar Qtr		Jun Qtr		Sep Qtr		Dec Qtr													
		J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D				
Melbana Interest	100%*																												
Operator	Melbana																												
Permit Year		1				2								3															
<b>Work program</b>		Studies				Reprocessing								Studies															
<b>Activities</b>																													
Seismic Interpretation																													
Partial sale process		■																											
Reprocessing						■																							
Partial sale process														■															

Permit	AC/P51	2016								2017																			
		Mar Qtr		Jun Qtr		Sep Qtr		Dec Qtr		Mar Qtr		Jun Qtr		Sep Qtr		Dec Qtr													
		J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D				
Melbana Interest	100%*																												
Operator	Melbana																												
Permit Year		1				2								3															
<b>Work program</b>		Studies				Reprocessing								Studies															
<b>Activities</b>																													
Seismic Interpretation																													
Partial sale process		■																											
Reprocessing						■																							
Partial sale process														■															

\*Subject to option granted for 50% (in total) participating interest for both permits

## Tassie Shoal Gas Processing Projects

### (Melbana 100%)

Industry is expected to seek opportunities to collaborate to secure lowest cost and efficient resource development in Australia, especially as titleholders with stranded discoveries are under resource tenure pressure. The unique concept of the Tassie Shoal Projects represents an opportunity for collaboration with Melbana to develop a commercialization path for the significant, discovered but undeveloped resources in the region, for the benefit of all stakeholders.

