

# Annual General Meeting: Managing Director's Presentation

November 2017



## *Forward-looking Statements and Resources*

**Summary of information:** This presentation contains general and background information about Melbana Energy's activities current as at the date of the presentation and should not be considered to be comprehensive or to comprise all the information that an investor should consider when making an investment decision. The information is provided in summary form, and should not be considered to be comprehensive or complete.

**Not financial product advice:** This presentation is not financial product, investment advice or a recommendation to acquire securities and has been prepared without taking into account the objectives, financial situation or needs of individuals. Before making an investment decision investors should consider the appropriateness of the information having regard to their own objectives, financial situation and needs, and seek legal, taxation and financial advice appropriate to their jurisdiction and circumstances.

**Disclaimer:** Melbana Energy and its related bodies corporate and each of their respective directors, agents, officers, employees and advisers expressly disclaim, to the maximum extent permitted by law, all liabilities (however caused, including negligence) in respect of, make no representations regarding, and take no responsibility for, any part of this presentation and make no representation or warranty as to the currency, accuracy, reliability or completeness of any information, statements, opinions, conclusions or representations contained in this presentation. In particular, this presentation does not constitute, and shall not be relied upon as, a promise, representation, warranty or guarantee as to the past, present or the future performance of Melbana Energy.

**Future performance:** This presentation contains certain forward-looking statements and opinion. The forward-looking statements, opinion and estimates provided in this presentation are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward-looking statements, including projections, forecasts and estimates, are provided as a general guide only and should not be relied on as an indication or guarantee of future performance and involve known and unknown risks, uncertainties and other factors, many of which are outside the control of Melbana Energy. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward looking statements or other forecast.

**Risks:** An investment in Melbana Energy is subject to investment and other known and unknown risks, some of which are beyond the control of Melbana Energy.

**Not an offer:** This presentation is not, and should not be considered as, an offer or an invitation to acquire securities in Melbana Energy or any other financial products and neither this document nor any of its contents will form the basis of any contract or commitment. This presentation is not a prospectus. Offers of securities in Melbana Energy will only be made in places in which, or to persons to whom it would be lawful to make such offers. This presentation must not be disclosed to any other party and does not carry any right of publication. Neither this presentation nor any of its contents may be reproduced or used for any other purpose without the prior written consent of Melbana Energy.

**No Distribution in the US:** This presentation is not an offer of securities for sale in the United States. Any securities to be issued by Melbana Energy have not been and will not be registered under the US Securities Act of 1933, as amended (the "US Securities Act") and may not be offered or sold in the United States absent registration or an exemption from registration under the US Securities Act. No public offer of the securities is being made in the United States and the information contained herein does not constitute an offer of securities for sale in the United States. This presentation is not for distribution directly or indirectly in or into the United States or to US persons.

**Monetary values:** Unless otherwise stated, all dollar values are in Australian dollars (A\$). The information in this presentation remains subject to change without notice.

**No distribution:** Distribution of this presentation may be restricted by law. Persons who come into possession of this presentation should seek advice on and observe any such restrictions. Any failure to comply with such restrictions may constitute a violation of applicable securities laws.

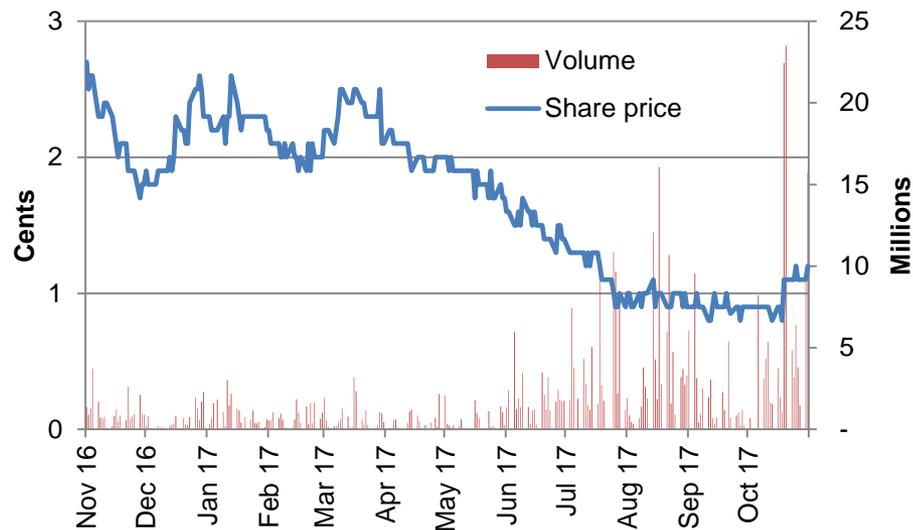
**Contingent and Prospective Resources:** The information in this presentation that relates to Contingent Resources and Prospective Resources for Melbana Energy is based on, and fairly represents, information and supporting documentation compiled by Peter Stickland, the Managing Director and Chief Executive Officer of Melbana Energy. Mr Stickland B.Sc (Hons) has over 25 years of relevant experience, is a member of the European Association of Geoscientists & Engineers and the Petroleum and Exploration Society of Australia, and consents to the publication of the resource assessments contained herein. The Contingent Resource and Prospective Resource estimates are consistent with the definitions of hydrocarbon resources that appear in the Listing Rules. Conversion factors: 6 Bscf gas equals 1 MMboe; 1 bbl condensate equals 1 boe.

# Company Overview

## Company Data

<b>Index</b>	S&P/ASX All Ordinaries
<b>ASX Ticker</b>	ASX:MAY
<b>Shares on issue</b>	~1,494m
<b>Options</b>	~187m
<b>Share Performance Rights</b>	5.33m
<b>Market Cap</b>	~\$21m (at 22 Nov)
<b>Cash (30/9/17)</b>	~\$6m
<b>Debt</b>	Nil
<b>Enterprise Value</b>	~\$15m

## 12 month share price performance



## Board

Peter Stickland

Managing Director & CEO

Andrew Purcell

Non-Executive Chairman

Michael Sandy

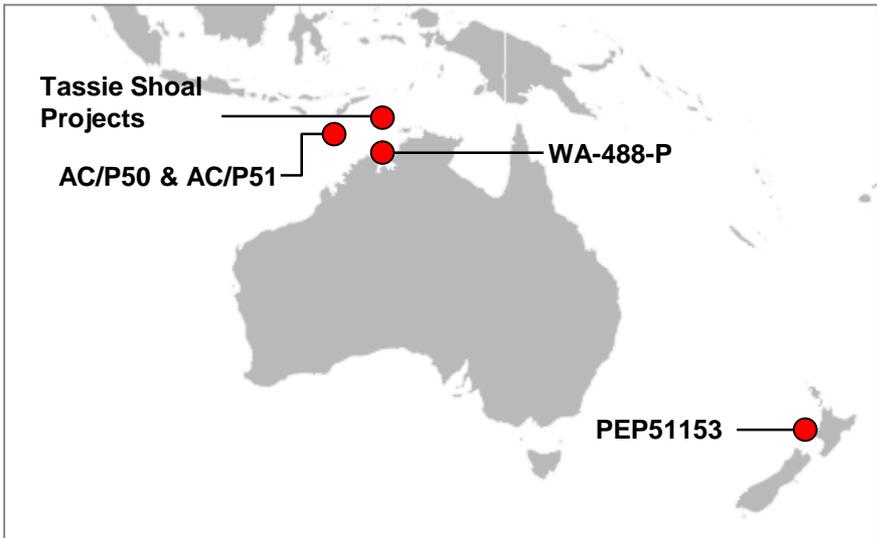
Non-Executive Director

# Melbana Project Summary



## Cuba

- Block 9 exploration potential of ~12.5 billion barrels of oil-in-place with recoverable Prospective Resources of 637 million barrels (100% share, unrisks Best Estimate)\*
- Proven oil trend, ~30km from giant 11 billion barrel oil-in-place Varadero field
- High graded Alameda-1 prospect potential of over 2.5 billion barrels oil-in-place and 130 million barrels of recoverable (100% unrisks, Best Estimate)\*
- **Targeting drilling up to 2 wells commencing in mid 2018**
- Cuban civil engineering consultancy firm engaged and survey of well sites commenced
- Farmout process underway
- Only ASX listed company with Cuban energy exposure



## New Zealand

- Operator advises high impact Pukatea-1 anticipated to commence drilling mid-January 2018 (Melbana 30% share)
- Prospective Resource of 12.4 million boe (unrisks Best Estimate, 100% share)\*, reservoir capable of rates up to 5,000 barrels per day

## Australia

- Beehive prospect located in WA-488-P is potentially the largest undrilled conventional target in Australia
- Negotiations underway which, if successful, would result in one or more parties farming into WA-488-P to fund future activities

**Cuba**

# Cuba Block 9 – An Overview

- Multi-billion barrel potential
- 100%\* interest in Block 9 PSC (2,380km<sup>2</sup> or 588,000 acres) located onshore in Cuba
- 25 year term in total (awarded in 2015)
- 8.5 year exploration period divided into 4 sub periods with minimum work program:
  - 1 (Sept 2015 to Nov 2017) – studies and seismic reprocessing – completed
  - 2 (Nov 2017 to Nov 2019) – drill one well, firm budget US\$4.55m
  - Bank guarantee is required for 50% of approved firm budget for each sub-period.
- Targeting drilling two wells commencing mid 2018.
- Cuban civil engineering consultancy firm engaged and survey of well sites commenced
- Further Farmout process underway, with data room opened in Melbourne Office



\*On 27 October 2017 Melbana terminated its commercial arrangement with Petro Australis Limited as Petro Australis failed to achieve pre-qualification to enable a timely application to the Cuban regulatory authorities for their acquisition of a 40% participating interest in the Block 9 Production Sharing contract. Petro Australis has stated that it proposes to continue to seek Cuban Regulatory pre-qualification and take up a participating interest in Block 9 PSC, however Melbana considers that Petro Australis' entitlement to any interest in Block 9 has lapsed.

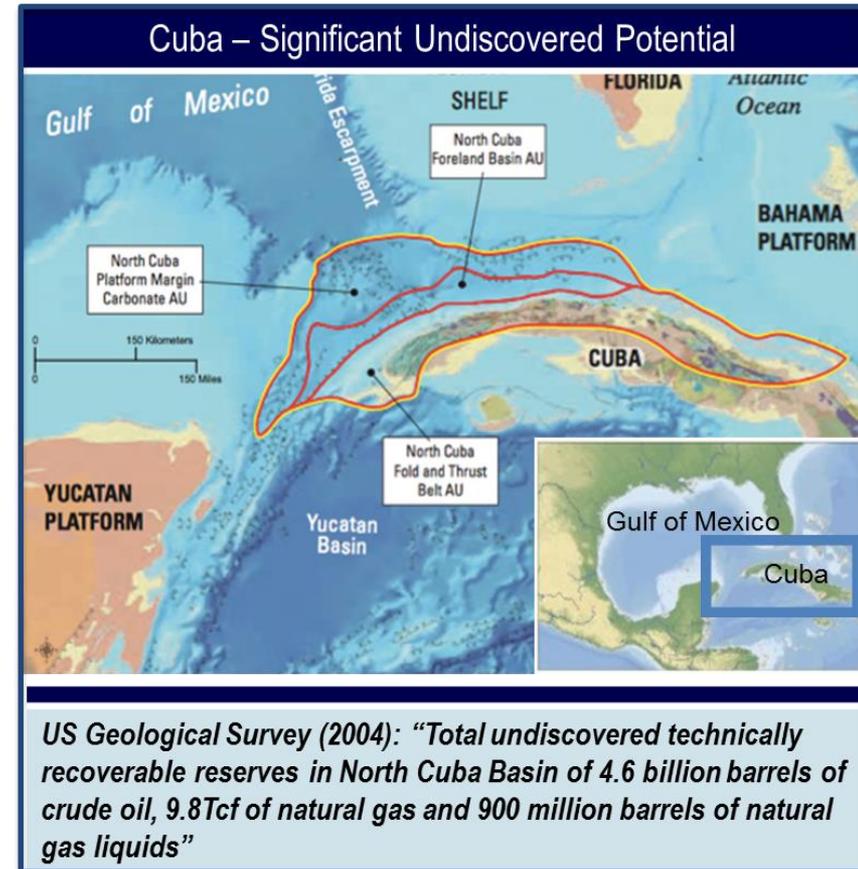
# Cuba Block 9 – An Oil Rich Region

## Cuba Prospectivity and Market

- Represents under-explored south-eastern margin of the Gulf of Mexico - one of the world's great petroleum mega provinces
- Limited application of modern exploration techniques due to 50+ year US embargo
- Cuba currently producing ~45,000 barrels of oil and 3 million cubic metres of gas per day
- Strong focus on growing production
- ~50% of oil imported (mostly from Venezuela)

## Block 9 Prospectivity

- Lightly explored but contains natural oil seeps and has several small discoveries
- Along trend from Varadero oil field (>11 billion barrels oil-in-place)
- Potential for Varadero type structures in Block 9
- Adjacent to TSX-listed Sherritt International's producing area (~14,500 barrels per day at operating cost of ~US\$7/bbl in Q2 2017)\*



\*Sherritt International Corporation Second Quarter 2017 Report

# Cuba Block 9 – Resource Assessment

## Exploration potential for over 12 billion barrels of oil-in-place

- Exploration potential of over 12.5 billion barrels of oil-in-place and Prospective Resources of 637 million barrels (unrisked Best Estimate, 100% basis)
- 19 individual leads identified in conventional plays
- Depths between 2,000 and 4,000 metres
- High potential multi-target Alameda prospect identified close to historical oil recoveries
- Recoverable volumes conservatively estimated using the historical 5% recovery factor for nearby Cuban fields
- Higher quality light crude oil potential in Block 9 demonstrated by historical oil recoveries
- Ongoing assessment may add further potential
- Additional secondary objectives in Upper Sheet and Shallow Tertiary plays

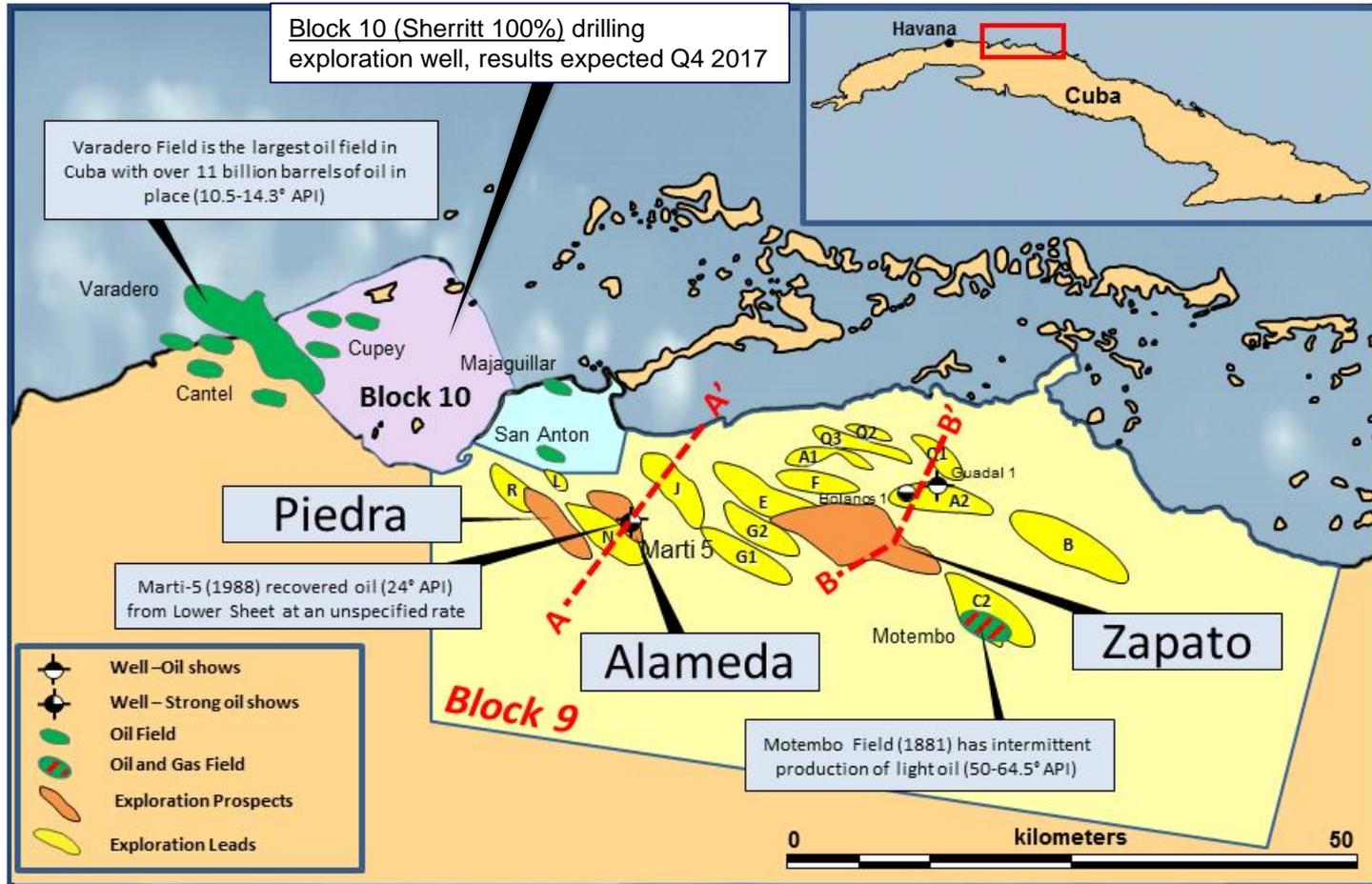


Block 9 Exploration Potential	Low	Best	High	Mean
	MMstb	MMstb	MMstb	MMstb
Oil-in-Place (unrisked, 100%)	1,181	12,746	44,151	18,518
Prospective Resources (recoverable, unrisked, 100%)	59	637	2,208	926

**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.

# Cuba Block 9 – 19 Leads in Conventional Play

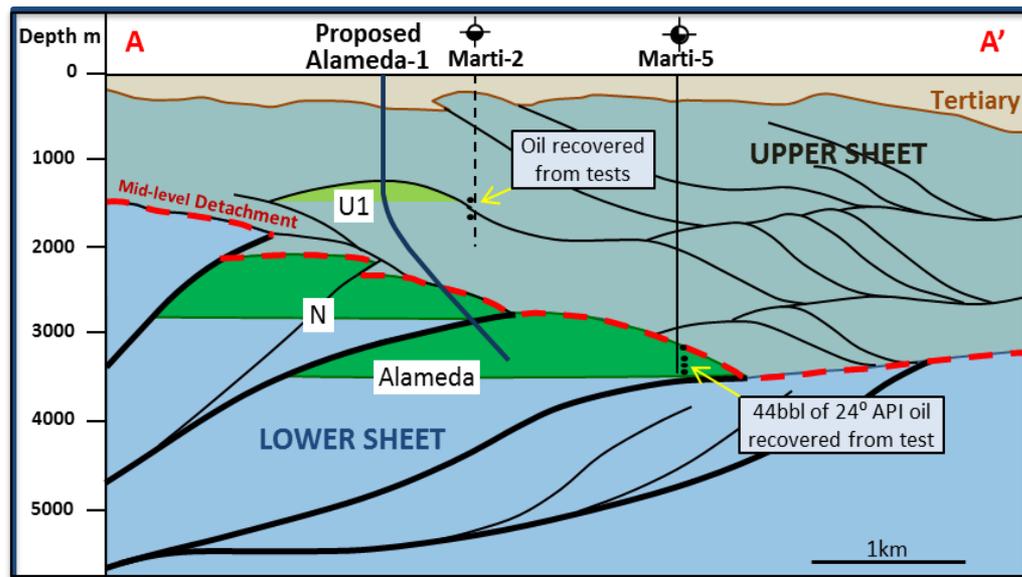
**Priority drill targets identified – Alameda, Zapato and Piedra**



# Cuba Block 9 – Alameda Prospect

## Multi-target exploration drilling opportunity close to historic oil recoveries

- Primary objective in depth range from 3,000 to 3,700 metres
- Marti-5 (drilled 1988) recovered lighter oil (24°API) and had oil shows over a 850 metre gross interval from the Alameda objective
- 32% chance of success at primary objective
- Two shallower secondary objectives
- Combined exploration potential of over 2.5 billion barrels oil-in-place and 130 million barrels of recoverable oil on an unrisked, Best Estimate 100% basis
- Alameda-1 targeting up dip of known oil at two levels
- Currently designing well to test Alameda with potential for drilling in mid-2018
- Estimated 80 days to drill from commencement of drilling



**Alameda Recoverable Prospective Resources (100%, MMstb)**

Objective	CoS*	Low	Best	High	Mean
U1	17%	2	25	93	38
N	22%	4	41	129	56
Alameda	32%	3	65	214	91

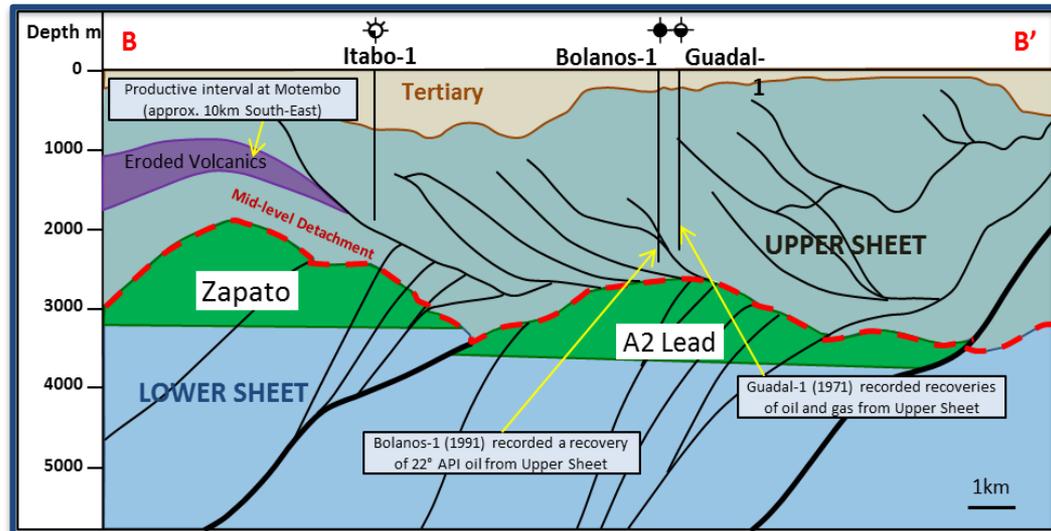
**Prospective Resources Cautionary Statement** - The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Future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

\* Chance of Success

# Cuba Block 9 – High Potential Zapato Prospect

## Multiple structures with hundred million barrel exploration potential

- Zapato Prospect is a large structure targeting fractured carbonate objective
- Close to the shallower Motembo oil field which historically produced high quality light crude, demonstrating working oil system
- Crest of structure at approximately 2,000 metres with nearly 1,000 metres vertical relief
- Independent of Alameda-1 results
- Preliminary drilling design undertaken for potential early drilling in first half 2018
- A2 Lead is a large structure supported by two nearby shallow wells that recovered oil from the upper sheet above the deeper A2 lower sheet target



### Zapato & A2 Recoverable Prospective Resource (100%, MMstb)

	CoS*	Low	Best	High	Mean
Zapato	25%	5	71	297	118
A2 Lead	21%	9	69	213	93

**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.

\* Chance of Success

# Cuba Block 9 – field work commenced

## ***Local contractors undertake initial site surveys of Alameda-1 well location***

- Cuba Block 9 PSC field work commenced
- Survey completed of Alameda-1 well site, camp site and access road
- Benign surface conditions encountered at well site locations
- Appointed drilling planning coordinator
- Initiated field work with experienced local Cuban contractors
- Currently undertaking the engineering design for the surface facilities associated with the well
- Initiated permitting process, including environmental approvals required to begin exploration drilling targeted for mid-2018

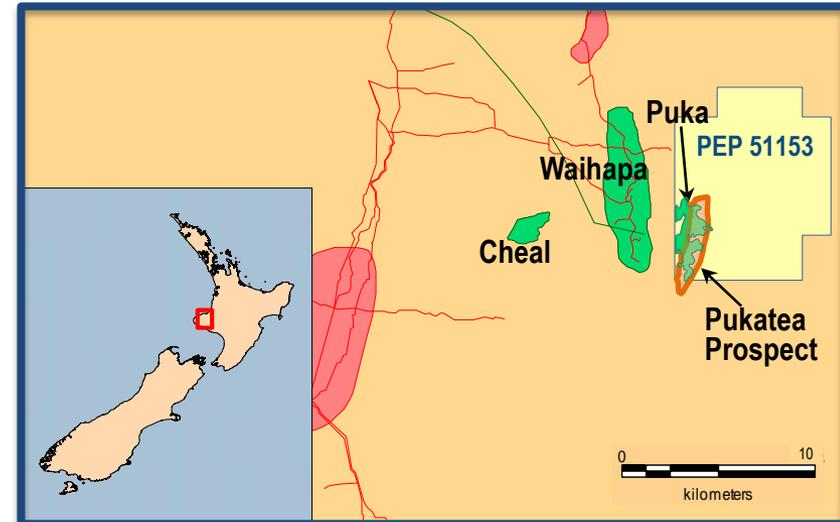




**New Zealand**

# Onshore New Zealand – PEP51153 Overview

- Melbana has 30% interest in PEP51153, operated by TAG Oil Ltd (“TAG” 70%)
- Located onshore in New Zealand <10km east of TAG’s producing Cheal field
- Independent expert values TAG’s 2P reserves in nearby fields at ~A\$20/barrel\* on NPV10 basis
- Contains the high impact Pukatea prospect
- Prospective resources 12.4 (Best Estimate) to 40 million barrels (High Estimates, both 100% share)
- Close to existing infrastructure with multiple low cost alternative development paths for any discoveries
- NZ fiscal terms amongst best in the world
- Robust natural gas market in the North Island of NZ

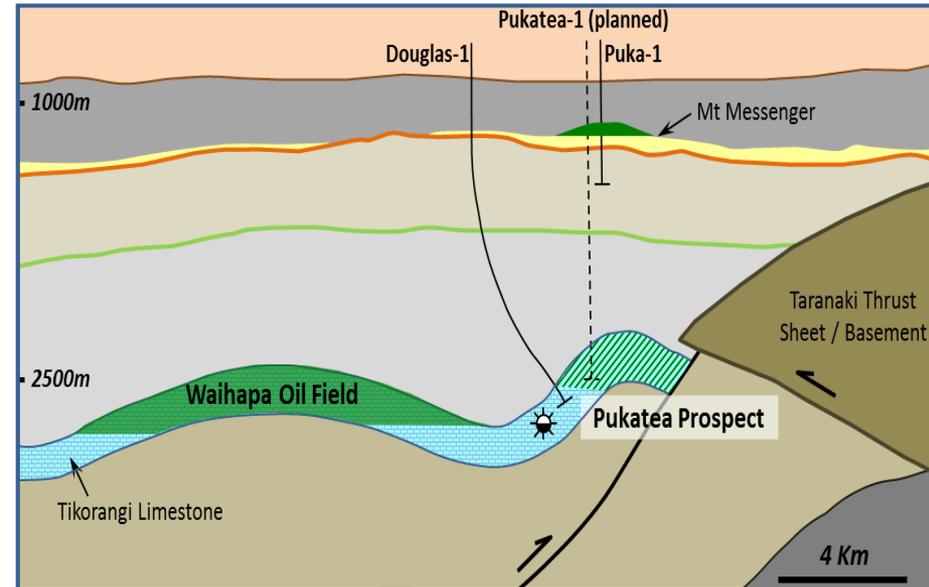


\* TAG Oil media release of 20 June 2017

# Onshore New Zealand – Pukatea-1 (Melbana 30%)

## High impact Pukatea oil prospect – recent improvements in market conditions improves economics

- Prospective resources estimated to range from 1.3 to 40 million barrels (Low-High estimates, 100% share)
- Targeting a highly productive conventional reservoir in the Tikorangi Limestone directly below the Puka oil pool
- Production capability from the Tikorangi Limestone proven at the adjacent Waihapa oil field with individual initial rates up to 5,000 barrels/day and produced in excess of 23 MMstb of oil to date
- Good reservoir and oil shows demonstrated by 2012 Douglas-1 well drilled down-dip at the edge of the Pukatea prospect, with more than 350m of up-dip potential
- Civil works completed and rig secured
- Operator advises that drilling anticipated to commence mid-January 2018.
- Anticipate ~30 days to reach objective
- Melbana's share of costs has reduced to less than A\$2M (excl. testing), due to well design optimisation and favourable exchange rate movements



### Prospective Resources (MMboe, 100%)

	CoS*	Low	Best	Mean	High
Pukatea	19%	1.3	12.4	17.1	40

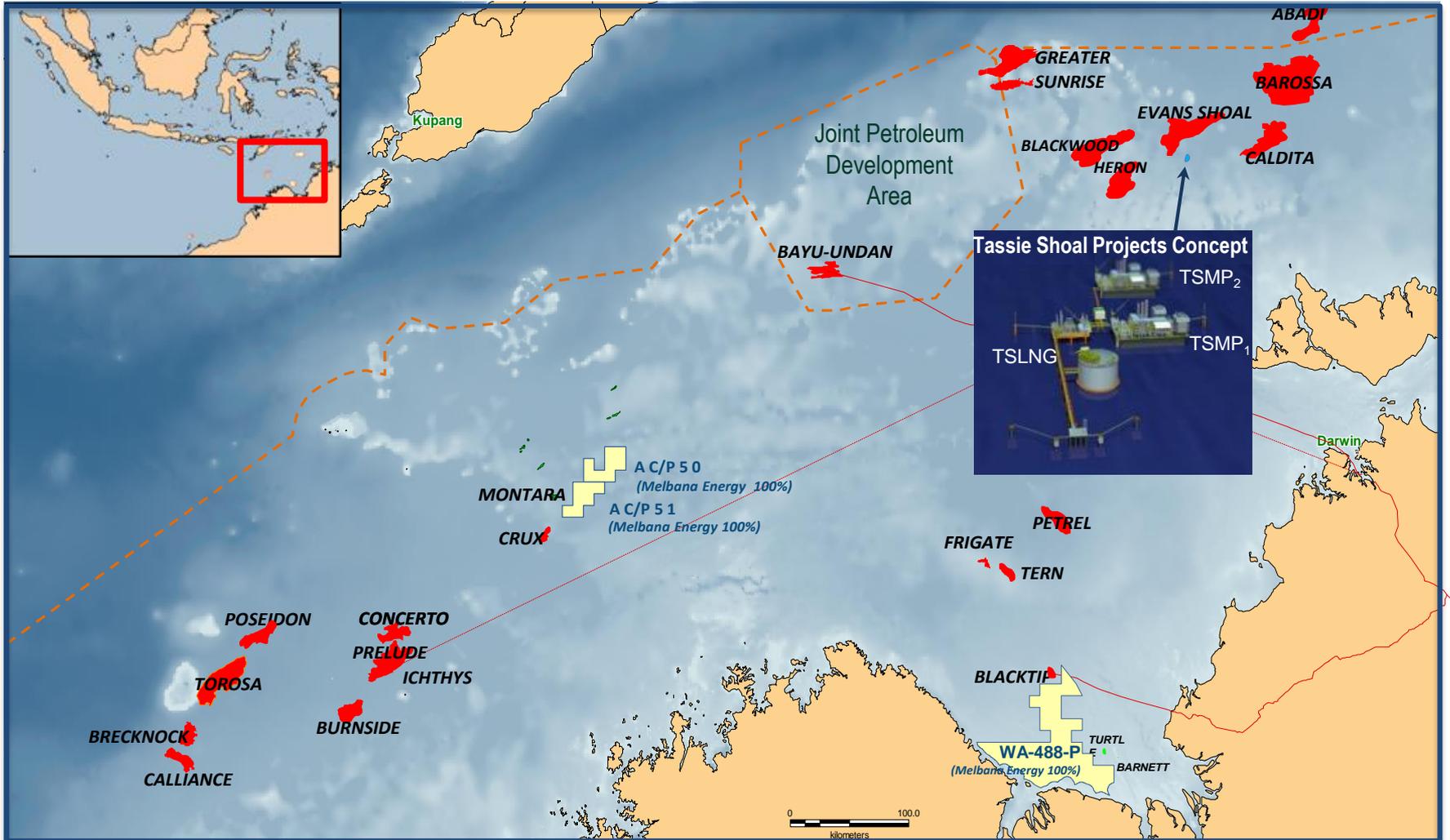
**Prospective Resources Cautionary Statement** - The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Future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

\* Chance of Success

## Other Assets

# Northern Australia Acreage and Projects

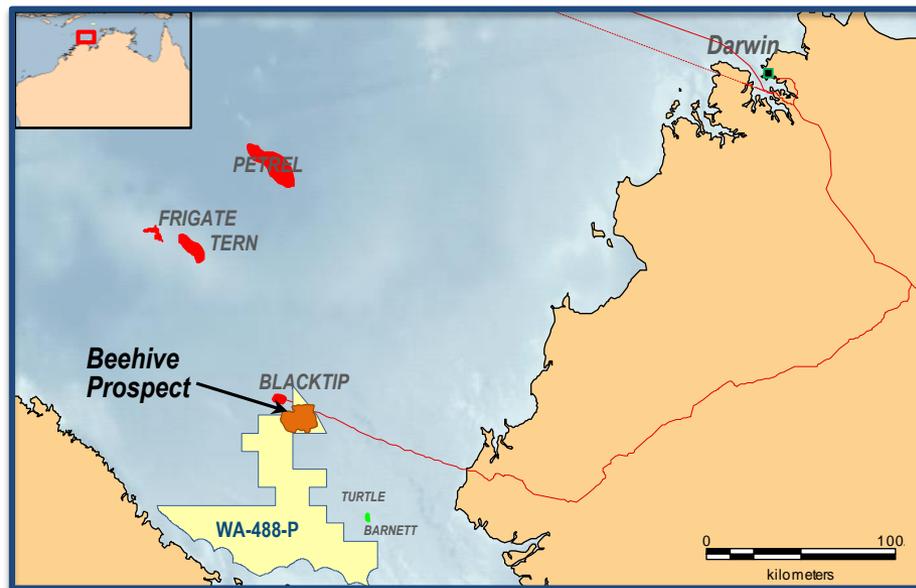
## Discrete upstream projects adjacent to proven hydrocarbons



# Australia – WA-488-P & the Beehive Prospect

## ***Beehive - One of the largest undrilled hydrocarbon structures in Australia***

- Beehive is a significant, multi billion barrel oil prospect located on WA-488-P
- Beehive Prospective Resources estimated to range from 97 to 2,033 million barrels (Low-High estimates)
- Potentially the largest undrilled oil prospect offshore Australia
- Shallow water, suitable for lower cost jack-up drilling rig
- Developable by FPSO or pipeline
- Recent 2D seismic broadband reprocessing and seismic inversion substantially enhanced characterisation of Beehive Prospect
- Completed expanding 2D seismic reprocessing across rest of Beehive Prospect
- Farm down negotiations underway which, if successful, would result in one or more parties farming into WA-488-P to fund future field activities



### Prospective Resources (MMboe, 100%)

Beehive	CoS*	Low	Best	Mean	High
Carboniferous objective	16%	97	558	940	2033

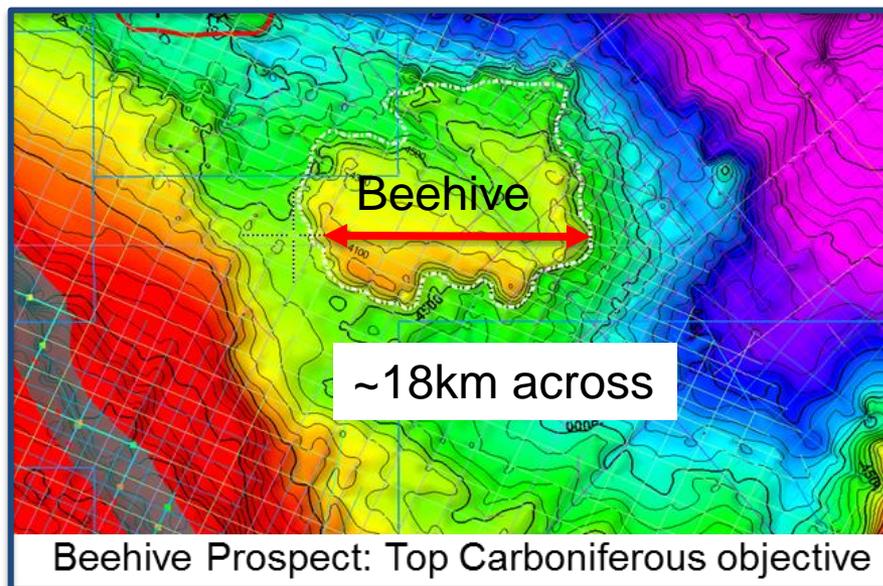
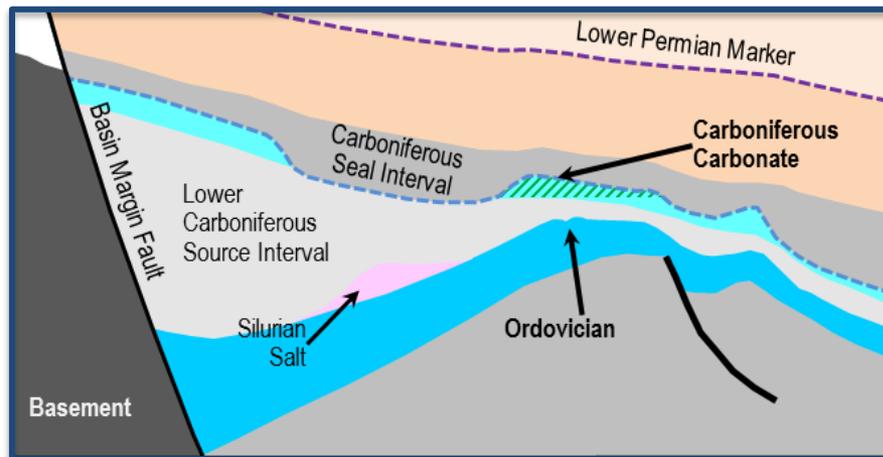
**Prospective Resources Cautionary Statement** - The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Future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

\* Chance of Success

# Australia – Beehive Prospect

## *Beehive – a feature of enormous scale*

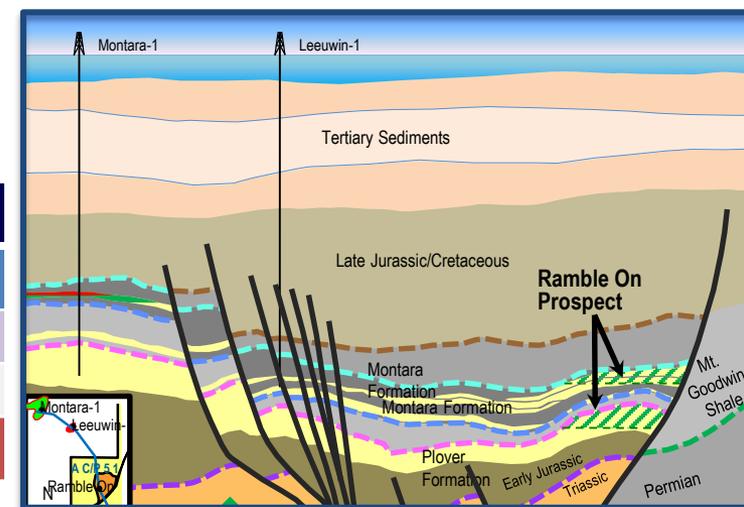
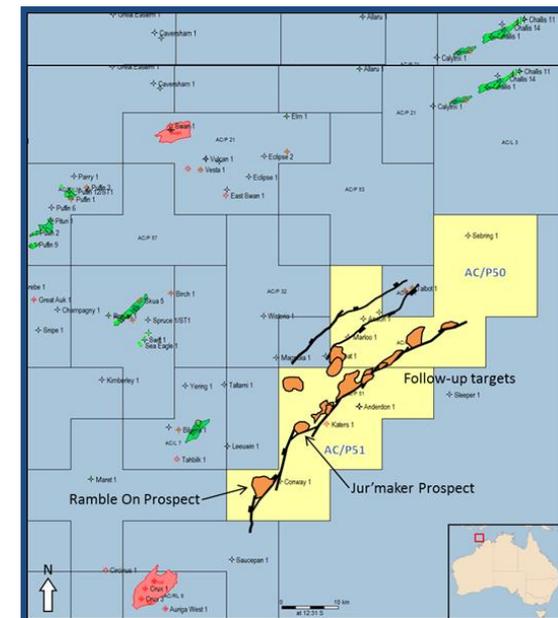
- Located in ~40 metres water depth
- Target depth 4,000 – 4,500m
- Prospect reservoir is an isolated carbonate platform of Carboniferous age.
- Enormous feature:
  - Carbonate platform is 18km across (approx. same as Melbourne CBD to Airport)
  - Mapped closure ~140km<sup>2</sup>
  - Vertical relief ~400 metres



# AC/P50 & AC/P51 (Melbana 55%\*): Multiple oil targets

## Improved seismic data quality: additional prospectivity

- Identified material Ramble On and Jur'maker oil prospects in proven petroleum system defined on modern 3D seismic data
- Suitable for lower cost jack-up drilling rig
- 3D seismic reprocessing completed (Melbana free carried)
  - Significant improvement in data quality
- Rouge Rock Pty Ltd exercised option to farm in for 45% interest in both permits
- Near term activities:
  - Updating prospectivity on reprocessed seismic data
  - Seek to farm out in 2018
  - Future drilling potential if farmout successful



### Prospective Resources (100%)\*\*

Ramble On	CoS	Low	Best	Mean	High
Oil Scenario (MMstb)	9%	8	39	56	130
Gas Scenario (Bscf)	2%	29	162	461	1,136
<b>Total (MMboe)</b>	<b>11%</b>	<b>8</b>	<b>38</b>	<b>63</b>	<b>150</b>

\* Subject to option by Far Cape Pte Ltd for a 5% carried participating interest in first well in either permit

\*\*See Prospective Resources Cautionary Statement on page 8

# Investment Highlights

## Cuba

- ✓ Only ASX listed company with Cuban energy exposure
- ✓ Block 9 exploration potential increased 50% to >12 billion barrels of oil-in-place and Prospective Resources of >600 million barrels (unrisked Best Estimate, 100% share)\*
- ✓ Priority drill targets identified:
  - Alameda Prospect
  - Zapato and Piedra Prospects
- ✓ Targeting drilling of up to 2 wells commencing in mid 2018
- ✓ Further Farmout process commenced, data room open

## New Zealand

- ✓ High impact Pukatea-1 prospect expected to commence drilling mid-January 2018
- ✓ Pukatea has a Best Estimate Prospective Resource of 12.4 million boe\* (unrisked, 100% share)

## Australia

- ✓ Beehive prospect located in WA-488-P is potentially the largest undrilled target in Australia
- ✓ Farm down negotiations underway which, if successful, would result in one or more parties farming into WA-488-P to fund future field activities

## *Multiple potential catalysts to support a significant re-rating*

### **CUBA BLOCK 9 PSC**

- Multiple high impact exploration drill targets identified
- Up to two wells to be drilled commencing mid 2018
- Drill program planning underway
- Potential farmout transaction

### **NEW ZEALAND PEP51153**

- Pukatea-1 drilling anticipated to commence mid-January 2018
- High leverage and near term production in success case

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

- Possible completion of farmout
- If farmout successful, potential drilling of Beehive in late 2018/19



[www.melbana.com](http://www.melbana.com)

# Tassie Shoal Projects (Melbana 100%)

## ***Shallow water, innovative low cost development paths for regional stranded gas***

- Region has substantial undeveloped low and high CO<sub>2</sub> gas that needs a viable development solution
- Melbana Energy has developed the concepts and obtained environmental approvals for siting Methanol and LNG production plants on Tassie Shoal
- Tassie Shoal Methanol Plants (TSMP) and Tassie Shoal LNG (TSLNG) dramatically reduce capital costs compared to alternatives
  - Fixed to seabed
  - Offshore modular construction lowers costs
  - Costs of long pipelines to shore avoided
  - Avoids floating facility complexity
- Long-dated Federal and State Government Environmental approvals (valid to 2052)
- Pre-FEED engineering studies completed
- Established relationships with key technology providers
- Significant potential value by acquiring or processing third party discovered but stranded gas and converting such gas into LNG or methanol for sale to international markets

