

### **Morgan Stanley Australian Next Leaders Conference**

September 2015





#### Disclaimer

This presentation contains forward looking statements that are subject to risk factors associated with oil, gas and related 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 delays or advancements, approvals and cost estimates.

All references to dollars, cents or \$ in this presentation are to Australian currency, unless otherwise stated. References to "Beach" may be references to Beach Energy Limited or its applicable subsidiaries.

Unless otherwise noted, all references to reserves and resources figures are as at 30 June 2015 and represent Beach's share.

#### **Competent Persons Statement**

The reserves and resources information in this presentation is based on, and fairly represents, information and supporting documentation prepared by, or under the supervision of, Mr Tony Lake (Reservoir Engineering Manager). Mr Lake is an employee of Beach Energy Limited and has a BE (Mech) degree from the University of Adelaide and is a member of the Society of Petroleum Engineers (SPE). The reserves and resources information in this presentation has been issued with the prior written consent of Mr Lake in the form and context in which it appears.

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# **Company Overview**

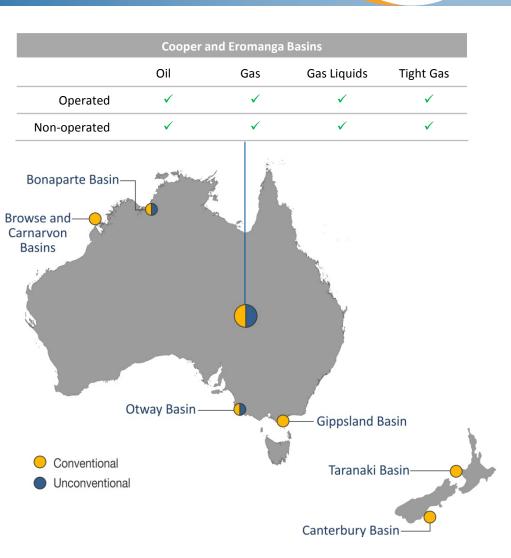


### **Company overview**



#### A re-aligned focus closer to home

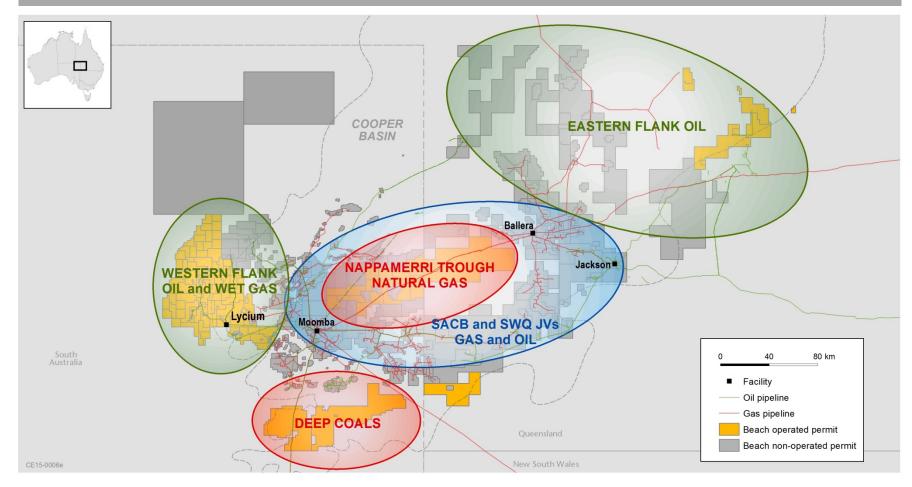
- Diversified hydrocarbon explorer and producer; core expertise in the Cooper and Eromanga basins
  - Australia's largest onshore oil producer
- Owner of strategic infrastructure linking key energy markets
- Executing strategy to become Australia's premier upstream oil and gas company
- Market capitalisation ~\$700 million<sup>1</sup>
- Fully funded FY16 exploration program anticipated



### Multi-play Cooper Basin acreage



#### Australia's most prolific onshore hydrocarbon basin, with gross acreage of c.50,000 km<sup>2</sup>



## Our refreshed vision, purpose and values

#### Vision

• To be Australia's premier multi-basin upstream oil and gas company

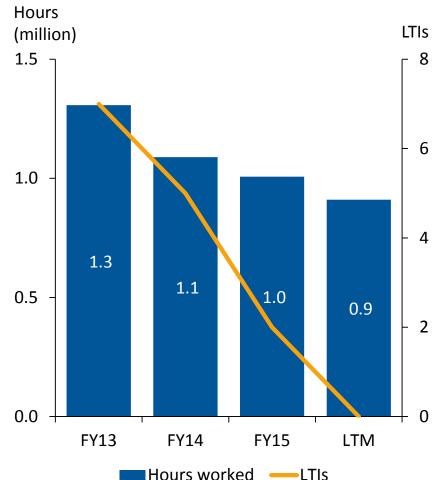
#### Purpose

• To deliver sustainable growth in shareholder value

#### Values

- Safety: Takes precedence in everything we do
- **Creativity**: Continuously explore innovative ways to create value
- **Respect**: For each other, our communities and the environment
- Integrity: Be honest with ourselves and others
- **Performance**: Strive for excellence and deliver on promises
- **Teamwork**: Help and challenge each other to achieve our goals

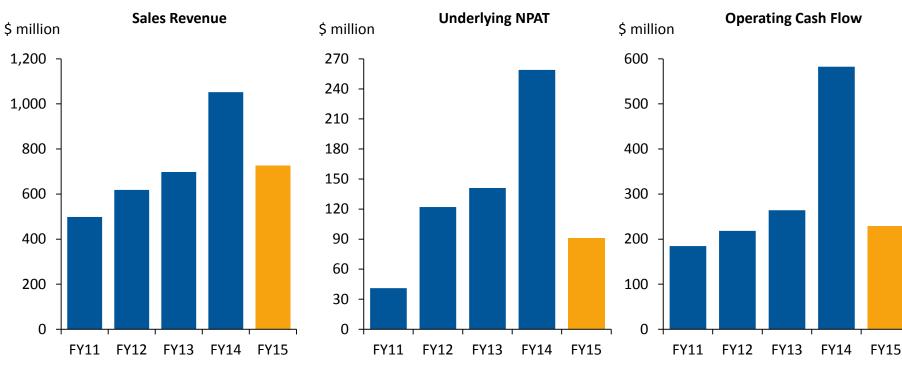
#### Hours Worked and Lost Time Injuries



#### Beach's safety-first culture evidenced by 12 months of LTI-free operations

## **Financial overview**





#### **FY15 financial results**

- Sales revenue of \$728 million
- Underlying NPAT of \$91 million
- Operating cash flow of \$229 million
- Cash balance of \$170 million; net cash of \$20 million
- Undrawn \$150 million secured debt facility
- Full year dividends of 1.5 cents per share

## **Production profile**



#### Financial year ended 30 June 2015

- Production of 9.15 MMboe
  - 51% oil; 49% gas and gas liquids
- Operated oil production driven by:
  - Bauer facility upgrade;
  - Six of 10 Bauer Field development wells online; and
  - Flowlines at maximum capacity
- 121 wells completed
  - 88% overall success rate
  - 52% exploration success rate
  - 82% appraisal success rate

#### Financial year ending 30 June 2016

Production guidance of 7.8 – 8.6 MMboe

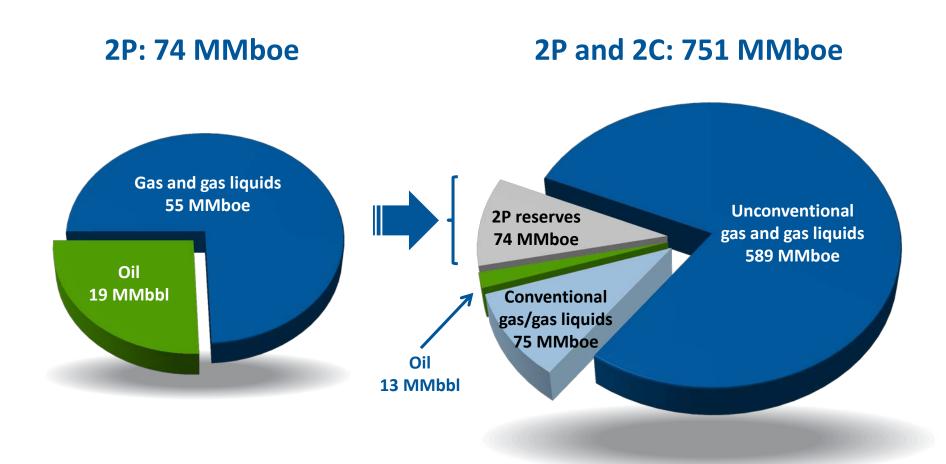
MMboe 10.0 9.6 9.1 7.8 - 8.6 8.0 8.0 7.5 Gas\* 4.4 Gas\* (25 PJe) 4.5 Gas\* (26 PJe) 3.9-4.3 Gas\* 6.0 (23-25 PJe) 4.3 Gas\* (25 PJe) 4.7 (27 PJe) 4.0 Oil Oil 4.6 Oil 5.2 2.0 3.9-4.3 Oil Oil 3.7 2.8 0.0 **FY12A FY13A FY15A FY16E FY14A** 



#### Actual and Forecast Production

### Reserves and contingent resources<sup>1</sup>





1. As per announcement to the Australian Securities Exchange on 24 August 2015; no new information has subsequently come to hand which would materially alter estimates or underlying assumptions

#### c. 100% 2P oil reserves replacement ratio in FY15

## FY16 capital expenditure guidance

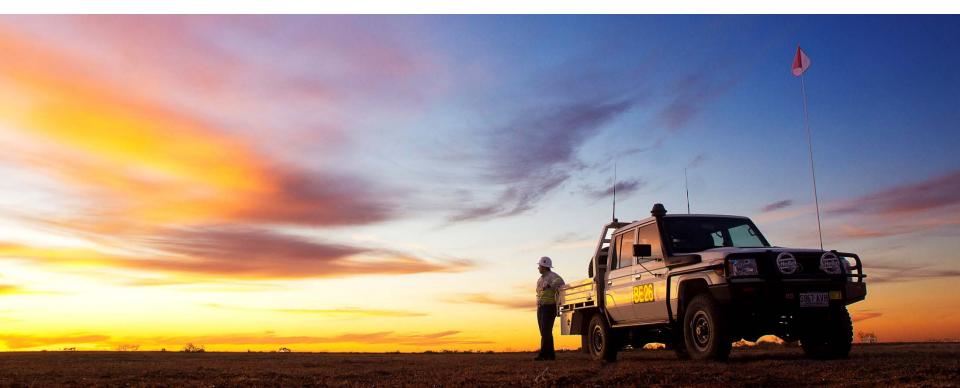


	Capital Expenditure (\$ million)	Expected Wells	Other Major Activities
DEVELOPMENT			
Cooper Basin	45 – 50	7 – 8	Bauer facility upgrade; Middleton gas compression
Cooper Basin (SACB and SWQ JVs)	145 – 160	28 – 30	Connection of Windorah-Marama area development
Total Development	190 – 210	Up to 38	
EXPLORATION			
Cooper Basin	30 – 35	10 - 12	PEL 87 / 424 seismic
Cooper Basin (SACB and SWQ JVs)	5 – 10	5 – 10	SACB JV coal fracs
Other Australia	5	2 <sup>1</sup>	Manta business case review
Unconventional	5	_	Bonaparte well test <sup>1</sup> ; NTNG review
International	5	_	New Zealand work programs
Total Exploration	50 – 60	Up to 24	
TOTAL	240 – 270	Up to 62	

1. Otway conventional wells and Bonaparte well test both subject to farm-down

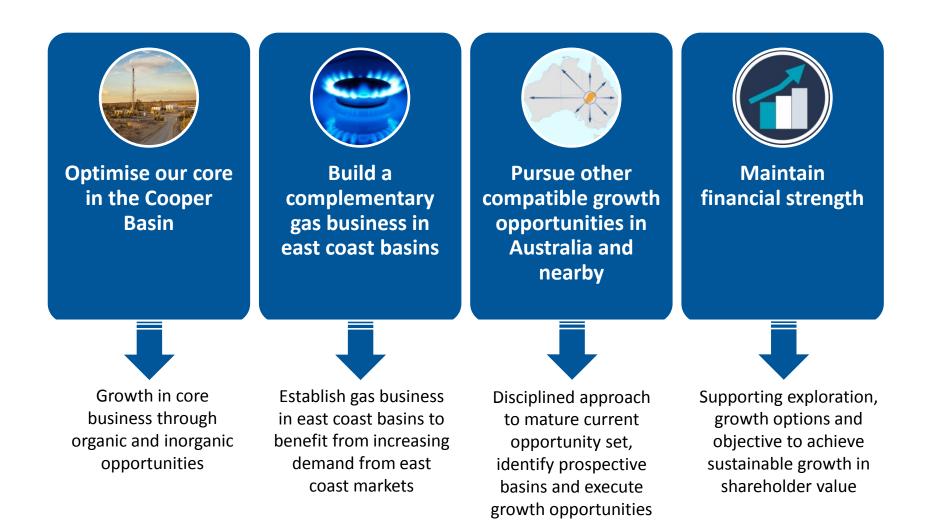


# **Strategic Outlook**



### Four-pillar strategy

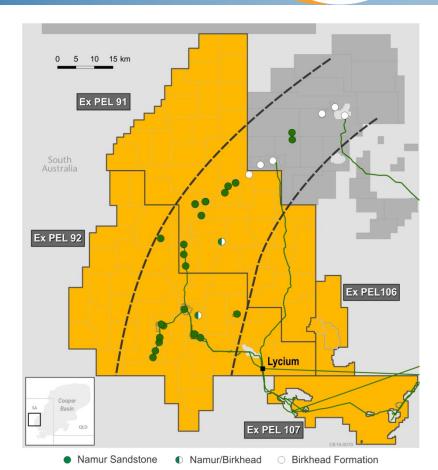




#### Roadmap to deliver step-change in production and 2P reserves

### Broad opportunity set in Cooper Basin

- Maximise returns from existing assets
  - Safety improvements
  - Operating efficiencies
  - Facility upgrades and optimisation
- Re-invigorate exploration
  - Comprehensive basin analysis
  - Unlock new play types
  - Technological advancements
- Basin adjacencies
  - Consolidation
  - Farm-ins
  - Gazettal opportunities



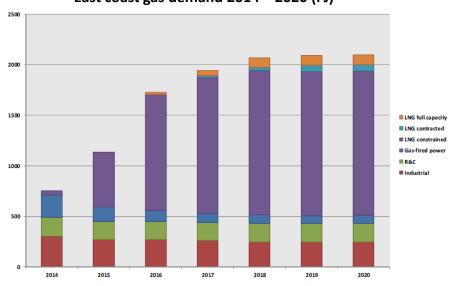
Re-focus on secondary targets is one

aspect of re-invigorating exploration

**BEACH** ENERGY

### Compelling east coast gas market thematic

- Three Queensland LNG plants at various stages of completion
  - QCLNG first cargo in January 2015
  - GLNG and APLNG first cargo expected in H2 CY15<sup>1</sup>
- Potential coal seam gas feedstock shortfall for LNG export requirements
- Domestic gas shortage expected as LNG production ramps up
- Beach well positioned as an independent upstream gas supplier
  - Quality existing acreage accessing multiple markets
  - Prime unconventional acreage with step change potential



East coast gas demand 2014 – 2020 (PJ)<sup>1</sup>

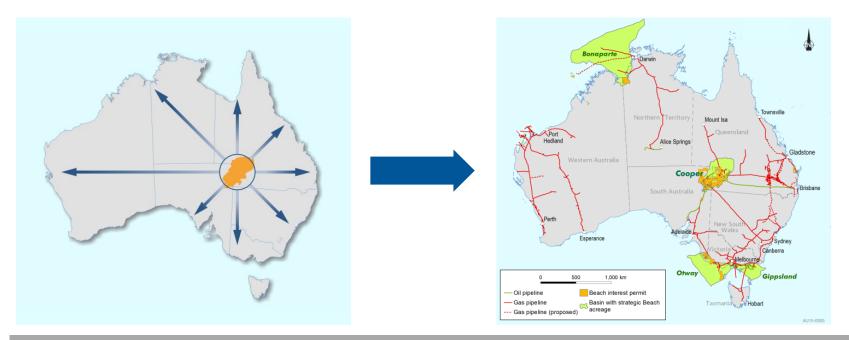
1. Source: EnergyQuest, March 2015

Transformational change for the Australian east coast gas market; higher gas prices driven by offshore LNG demand and increased finding and development costs

### Multi-basin production



- Existing footprint beyond Cooper Basin provides established platform for expansion
  - Otway, Gippsland and Bonaparte basins; New Zealand
- Inorganic opportunities may include farm-ins, joint ventures and acquisitions

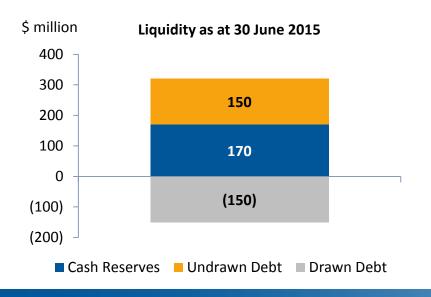


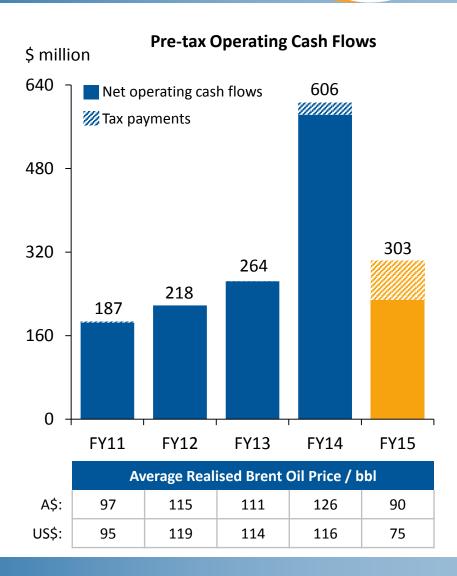
Multi-basin production a core element of Beach's vision

## **Robust financial position**



- Operating cash flows of \$303 million in FY15 (pre-tax)
  - Underpinned by high margin
     Western Flank oil operations
- FY15 cash flows framed FY16 capital expenditure program
- Year-end liquidity of \$320 million





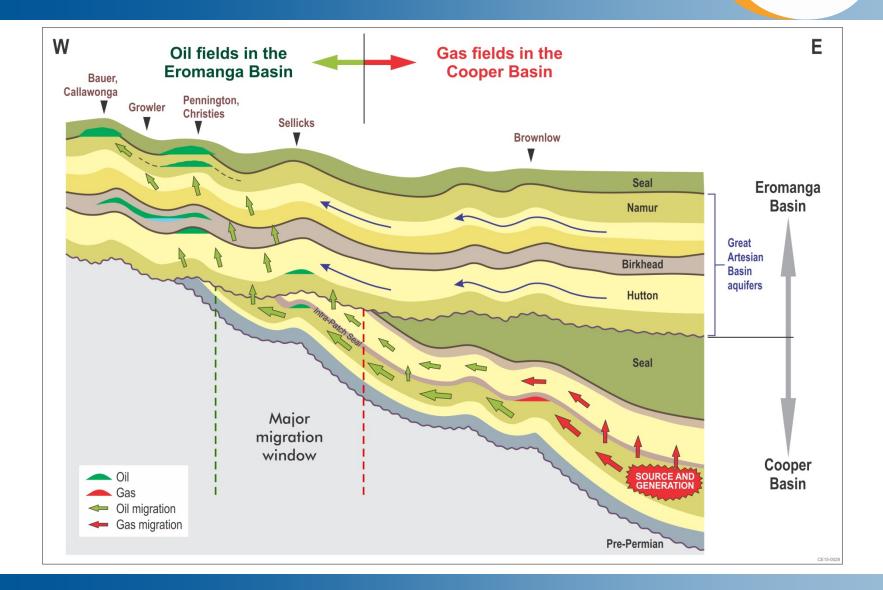


# **Cooper Basin: Western Flank**



### Western Flank oil migration path



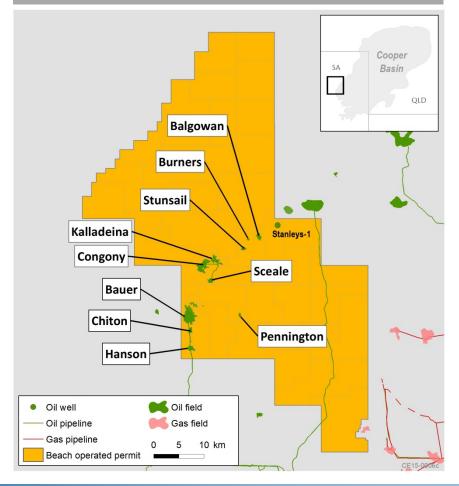


### Ex PEL 91



- Beach 40% and operator, Drillsearch 60%
- FY15 gross production of 4.1 MMbbl (11,263 bopd)
- FY15 successes include:
  - Balgowan and Burners discoveries, confirming north-eastern extension of fairway;
  - Ten development wells in the Bauer Field, adding 2.7 MMbbl of net 2P reserves; and
  - Bauer facility expansion to 75,000 bfpd (+25,000 bfpd)
- Solidus 3D and associated re-processing ongoing (900 km<sup>2</sup>)

#### Retention licences 151 to 172 granted



### **Bauer Field evolution**



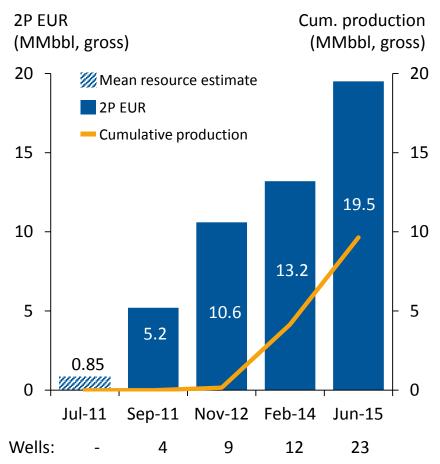
#### July 2011

- Bauer-1 targeted closure of 0.7 km<sup>2</sup> area and 6.0 metre height
- Mean prospective resource of 850 kbbl
- Mapped on Modiolus 3D seismic

#### June 2015

- 23 wells drilled, including two four-well pads
- 19.5 MMbbl 2P estimated ultimate recovery (gross)
- 75,000 bfpd handling capacity from associated infrastructure
- Approximate average peak flow rate from first 15 wells of 3,200 bopd

#### **Bauer Field**

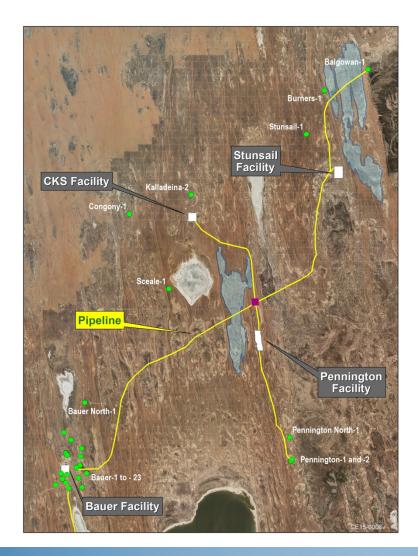


## Ex PEL 91 activities in FY16



- Facility commissioning
  - Stunsail and Pennington facilities, each with 20,000 bfpd handling capacity
  - Pipelines to Bauer-Lycium network
- Facility upgrades
  - Bauer facility upgrade to 133,000 bfpd (+58,000 bfpd), subject to approvals
- Seven-well drilling campaign
  - Bauer and Hanson fields
  - Mix of exploration, appraisal and development wells

Gross production in excess of 12,000 bopd expected into 2016



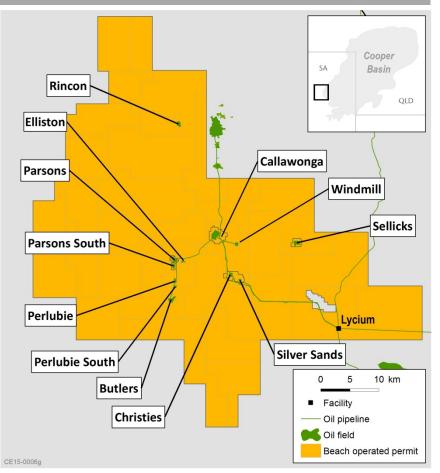
### Ex PEL 92



- Beach 75% and operator, Cooper Energy 25%
- FY15 gross production of 1.5 MMbbl (4,110 bopd)
- FY15 successes include:
  - Two-well appraisal / development campaign in Callawonga Field;
  - Additional flowlines and separator cleaning campaign; and
  - Inversion of existing 3D seismic
- Four-well exploration / development campaign planned for FY16

Seismic reprocessing and inversion to drive future exploration / appraisal drilling

#### Retention licences 85 to 104 granted



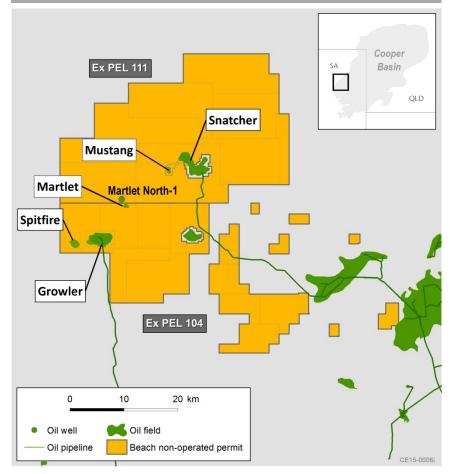
# Ex PEL 104 / 111



- Beach 40%, Senex 60% and operator
- FY15 gross production of 1.6 MMbbl (4,502 bopd)
- FY15 successes include:
  - Martlet-1 and Martlet North-1 Namur
     Sandstone oil discoveries; and
  - Production growth, with strong performance from Spitfire Field
- Historical focus on Birkhead Formation, but Namur discoveries provide a new play
- Up to four exploration / appraisal wells planned for FY16

Recent Namur Sandstone discoveries present new play type to be pursued

### Retention licences 136 to 150 granted

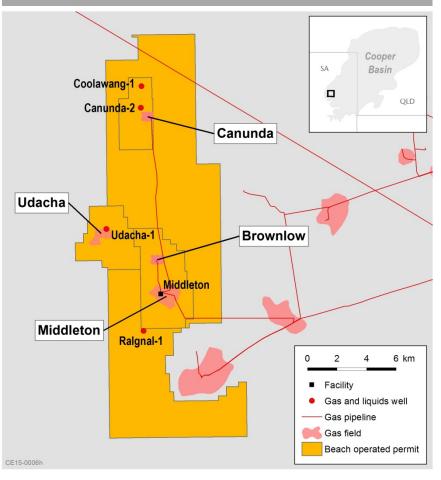


### Ex PEL 106



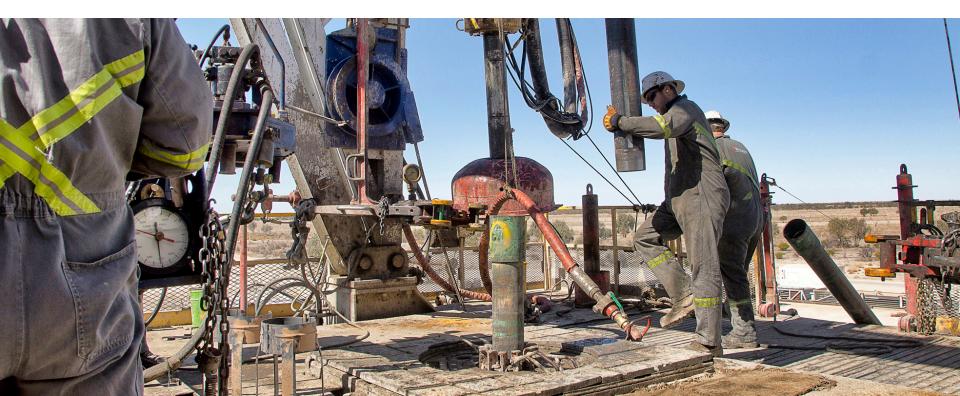
- Beach 50% and operator, Drillsearch 50%
- FY15 gross production of 0.7 MMboe (1,794 boepd)
- Two of five exploration wells cased and suspended in FY15
- Planned FY16 activities include:
  - Two exploration wells;
  - Well completions and testing;
  - Four existing wells online; and
  - Compression project at Middleton
- Gas sales agreement with SACB JV to March 2016

#### Retention licences 129 and 130 granted





# **Cooper Basin: Eastern Flank**

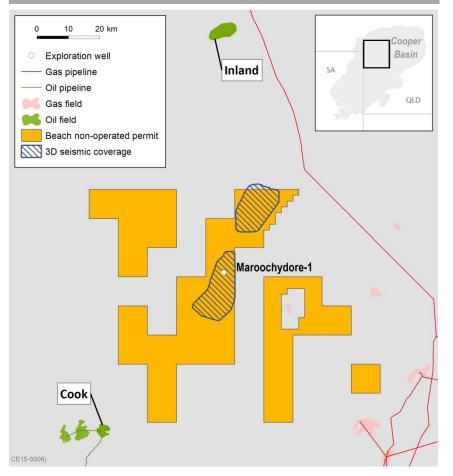


### ATP 924: Maroochydore-1



- Farming-in 45% with Drillsearch
- Located ~250 kilometres north-east of Moomba
  - Enviable address between Inland and Cook oil fields
- Targeting Jurassic oil and Permian gas reservoirs on large structural ridges
- Agreement to drill up to two wells and acquire 3D seismic covering 150 km<sup>2</sup>
  - Acquisition, processing and interpretation of Hurron 3D seismic complete
- Maroochydore-1 exploration well to be drilled in early Q2 FY16

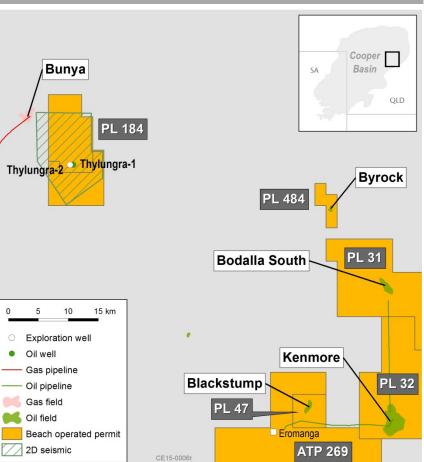
### Enviable address between existing fields



## PL 184: Thylungra-2



- Beach 80.4% and operator, Australian Gas Fields 19.6%
- Thylungra-1 drilled in 1995; encountered oil shows in the Hutton Sandstone and Basal Jurassic Formation (BJF)
- Thylungra-2 to be drilled 15 metres up-dip of Thylungra-1
  - Targeting Hutton Sandstone, with BJF a secondary target
  - Also testing gas potential of Toolachee and Patchawarra formations
  - Structure well defined on 2D seismic
- Drilling in Q2 FY16 targeted



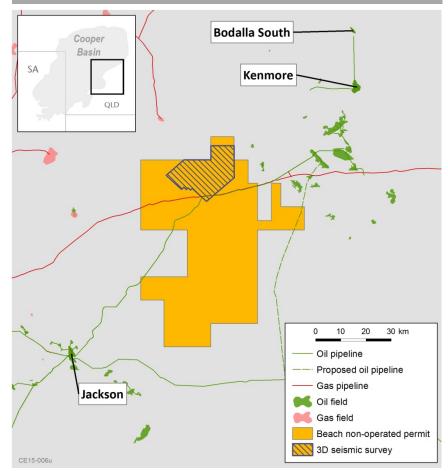
#### Targeting Hutton Sandstone oil

## ATP 732



- Farming-in 50% with Bengal Energy
- Enviable address proximal to longproducing oil fields
- Nassarius 3D seismic covering 306 km<sup>2</sup> acquired in 2014
- Seismic processing complete and interpretation underway
  - Excellent data quality
- Targeting Birkhead / Hutton reservoirs beneath and adjacent to meteorite disturbance
- Drilling in Q4 FY16 targeted

#### Proximal to long-producing oil fields





# **Cooper Basin: Other Operated Assets**

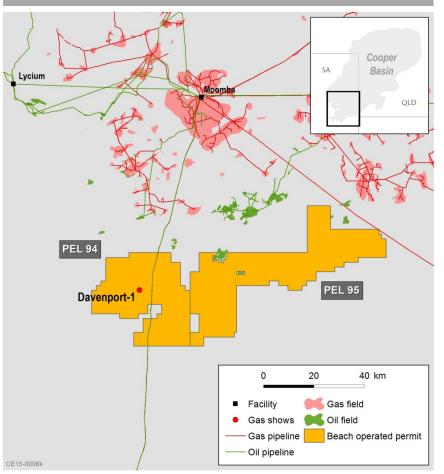


## Deep Coals: PEL 94 / 95



- PEL 94: Beach 50% and operator, Strike Energy 35%, Senex Energy 15%
- PEL 95: Beach 50% and operator, Strike Energy 50%
- Targeting deep coals at 1,500 metres –
   2,000 metres depth in PEL 94
- Well costs of ~\$3 million
- Davenport-1 gas exploration well:
  - Fracture stimulated over a lower zone in the VU Patchawarra coal; upper VM3 Patchawarra coal perforated
  - Fracture stimulation flow-back indicated good permeability
  - Proven gas content in core
  - Testing to continue in FY16

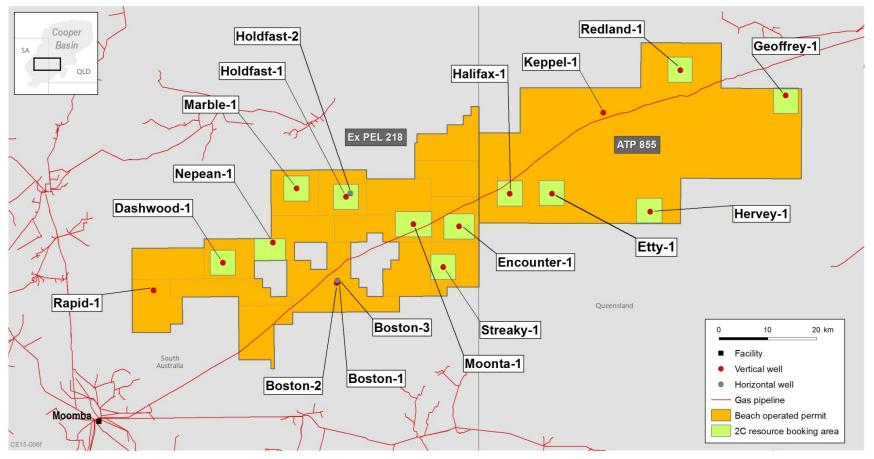
#### New play type in south of Cooper Basin



### Nappamerri Trough Natural Gas



#### An aerially extensive resource, with permits covering more than 800,000 acres

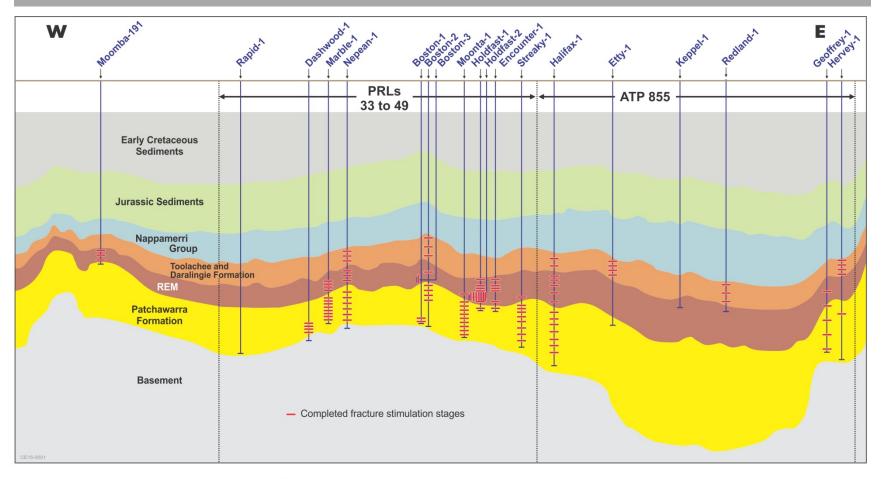


Ex PEL 218 (PRLs 33 to 49) - Beach 100%; ATP 855 - Beach 64.9% and operator, Icon Energy 35.1%

### NTNG Permian cross-section



#### *In excess of 1,000 metres of gas saturated section across entire permit areas*



## NTNG Stage 1 exploration phase



#### Stage 1 exploration phase complete – all technical objectives met

	Key Objectives	Key Highlights
1.	Geographically and vertically delineate target zones	<ul> <li>18 wells drilled across permits</li> </ul>
2.	Test fracture stimulation techniques and technologies for optimal design	<ul> <li>16 wells fracture stimulated</li> </ul>
3.	Identify and prioritise play types for future appraisal activities	<ul> <li>Daralingie Formation and Patchawarra Sand plays identified</li> </ul>
4.	Flow gas and test deliverability	<ul> <li>All stimulated wells flowed gas to surface</li> </ul>
5.	Increase 2C contingent resource booking	✓ 495 MMboe contingent resources <sup>1</sup>

1. As announced to the Australian Securities Exchange on 21 August 2015; no new information has subsequently come to hand which would materially alter estimates or underlying assumptions



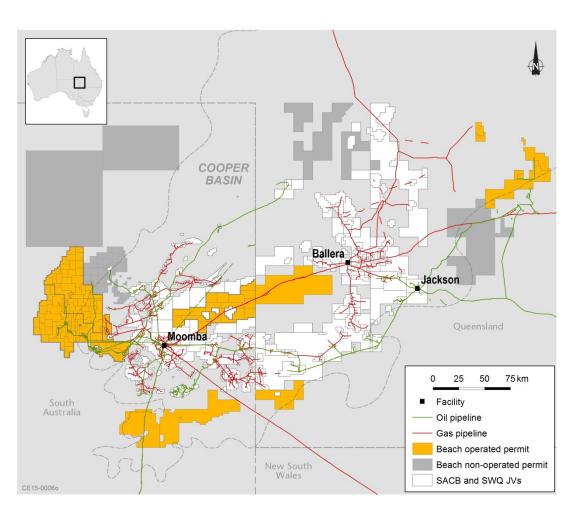
# **Cooper Basin: Delhi (SACB and SWQ JVs)**



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## Delhi – SACB and SWQ JVs

- Significant acreage with strategic infrastructure
- Gross joint venture area of ~26,800 km<sup>2</sup> (~6.6 million acres)
- ~6,000 kilometres of flowlines
- Primary processing and transportation facilities
- Upside from shale and basin centred gas plays
- Beach ownership interests:
  - SACB JVs  $^{\sim}17\%$  and  $^{\sim}20\%$
  - SWQ JVs  $\sim$ 20% to  $\sim$ 40%

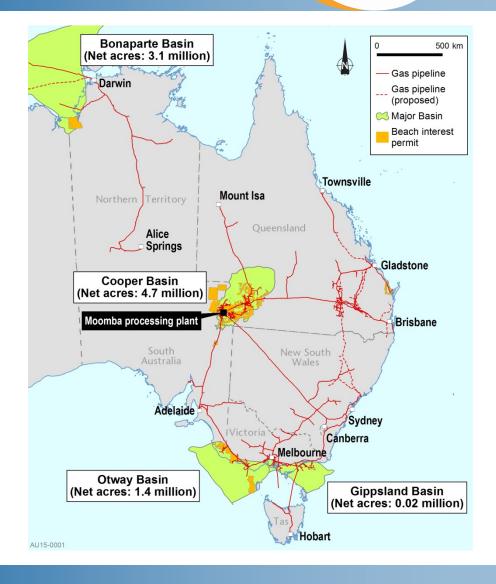




# Strategic infrastructure servicing key markets



- Strategic infrastructure interlinking key energy markets
- Moomba facility (Beach 20.21%) daily processing capacity of:
  - 375 TJ gas;
  - 35 kbbl oil / condensate; and
  - 600 tonnes LPG
- Moomba to Port Bonython flowlines
  - ~48 kbbl daily capacity (oil and gas liquids)
- Gas storage capacity of ~75 PJ
- Working with joint venture partners to drive asset operating efficiencies and assess monetisation options



# Key Delhi gas transactions



Origin gas sales agreement



- Signed April 2013
- 139 PJ over eight years; potential to extend to
   173 PJ over ten years
- Supply commenced 1 July 2015
- Transitional GSA for 2.3 PJ to 30 June 2015
- PEL 106B SACB JV raw gas sales agreement
  - Signed March 2013
  - Minimum of 10 Bcf



- Chevron Nappamerri Trough joint venture agreement
  - Partnered for NTNG Stage 1 exploration
  - Significant investment by Chevron in program
  - All Stage 1 technical objectives met

High value opportunities

Exposure to oil linked gas prices with other parameters

**Quality counterparties** 

**Diversified options** 

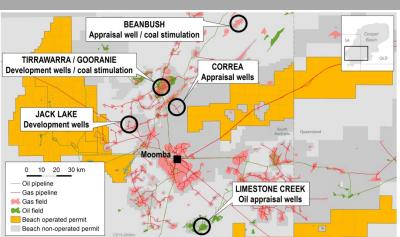
Positioned for future growth

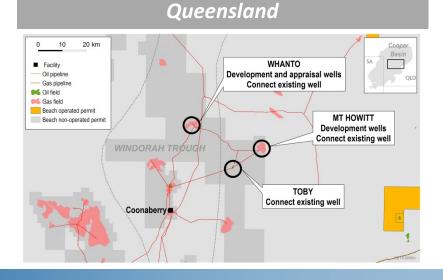
2P reserves bookings underpin contracts

# Delhi drilling program



- Reduced drilling activities in FY16, with c.40 wells planned
  - Three rigs currently drilling
- More appraisal / near-field exploration activities relative to past infill drilling
  - SACB JVs: Focus on liquids-rich fields;
     Permian source rock plays
  - SWQ JVs: Focus on under-appraised and low CO<sub>2</sub> content fields
- Infrastructure upgrades include connection of stranded fields in Queensland
- FY16 capital expenditure of c.\$160 million
  - Approximately one quarter allocated to maintenance expenditure





#### South Australia



# **Appendix**





	FY14	FY15	Change	
Sales volumes (MMboe)	10.8	10.5	(2%)	
Sales revenue (\$ million)	1,052.1	727.7	(31%)	
Operating cash flow (\$ million)	582.6	228.5	(61%)	
NPAT (\$ million)	101.8	(514.1)	(605%)	
Underlying NPAT (\$ million)	259.2	90.7	(65%)	
Cash balance (\$ million)	411.3	170.2	(59%)	
Total dividends (cps)	4.0	1.5	(63%)	

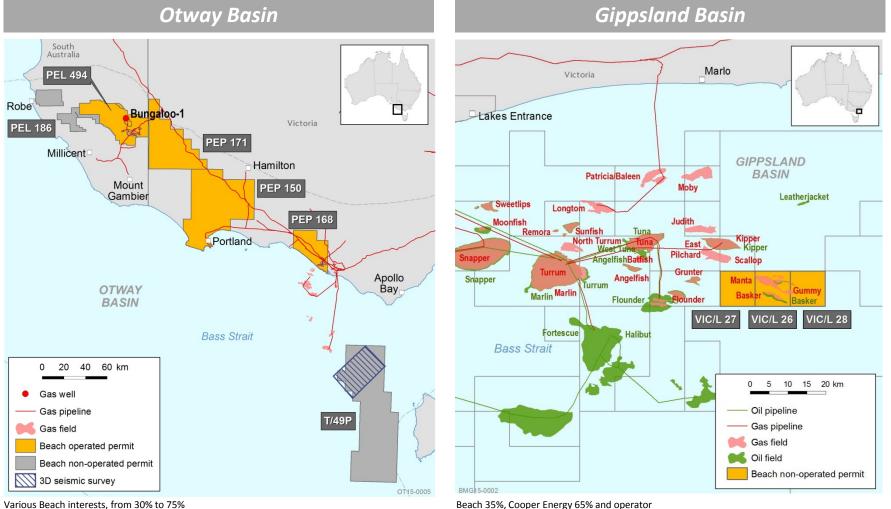
# FY15 production by area



	Area	FY14	FY15	Change
Oil (kbbl)	Cooper / Eromanga basins	5,148	4,490	(13%)
	Egypt	61	132	117%
	Total oil	5,209	4,622	(11%)
Sales gas and ethane (PJ)	Cooper Basin	21.0	22.1	5%
	Egypt	_	0.1	_
LPG (kt)	Cooper Basin	48.6	44.3	(9%)
Condensate (kbbl)	Cooper Basin	405	361	(11%)
	Total gas / liquids (kboe)	4,392	4,524	3%
Total oil, gas and gas liquids (kboe)		9,601	9,146	(5%)

### Other Australian interests

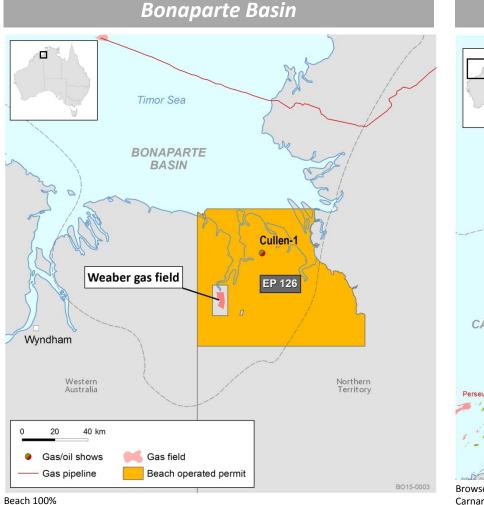




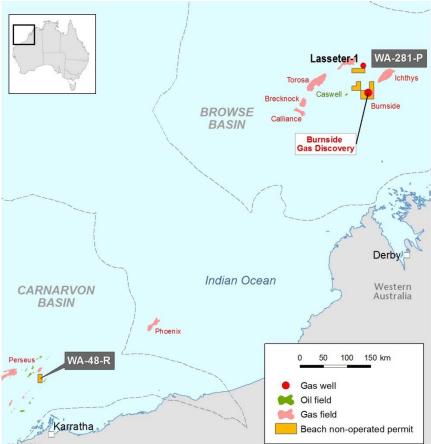
Various Beach interests, from 30% to 75%

### **Other Australian interests**





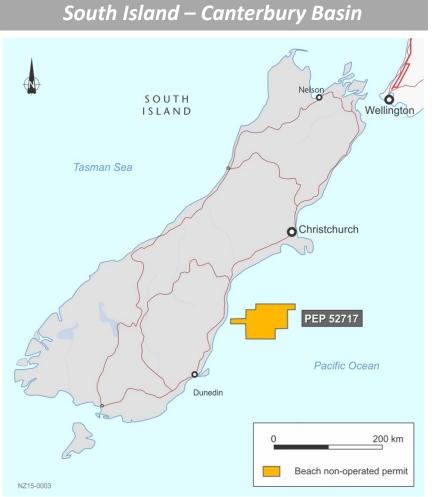
#### Browse and Carnarvon Basins



Browse Basin: Beach 7.34%, Santos 47.83% and operator, Chevron 24.83%, Inpex 20.0% Carnarvon Basin: Beach 10.0%, Santos 37.33% and operator, APACHE 34.03%, Eni 18.66%

### **New Zealand**





Beach 50%, NZOG Energy 50% and operator

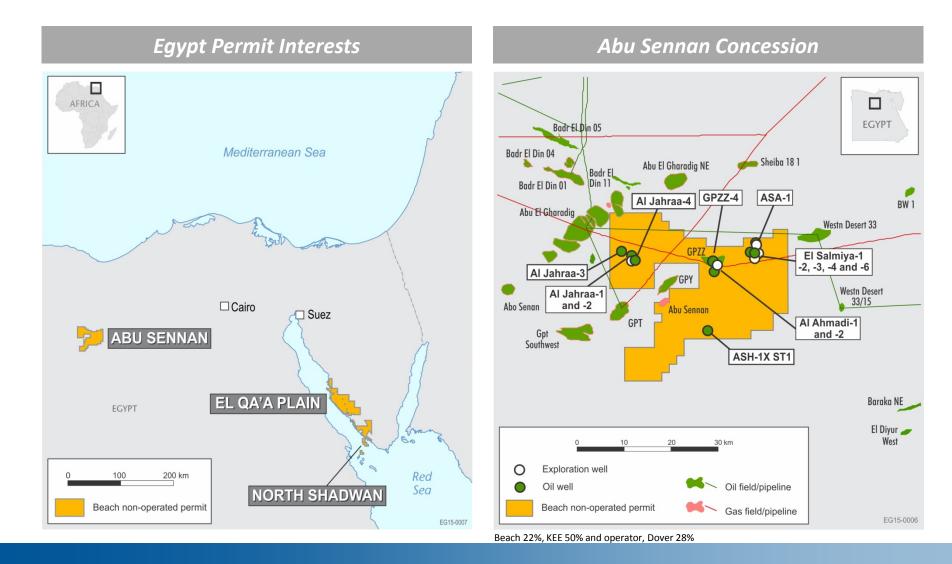
North Island – Taranaki Basin



PEP 57080: Beach 50%, Todd Energy 50% and operator PEP 52181: Beach 25%, NZOG Energy 35% and operator, TAG 40%

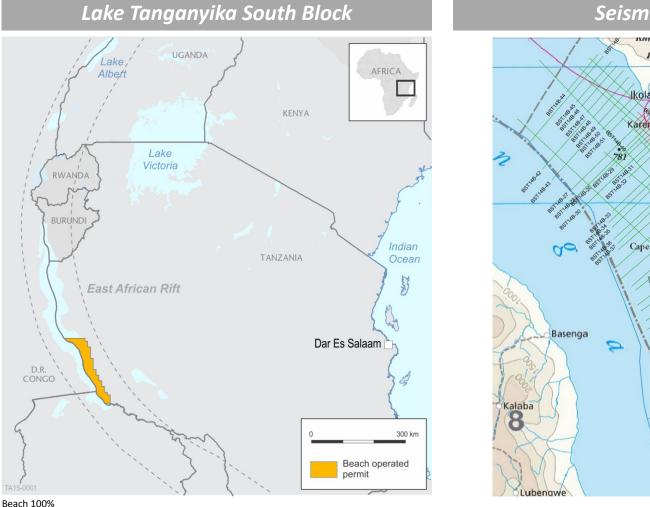
# Egypt – Sale process underway



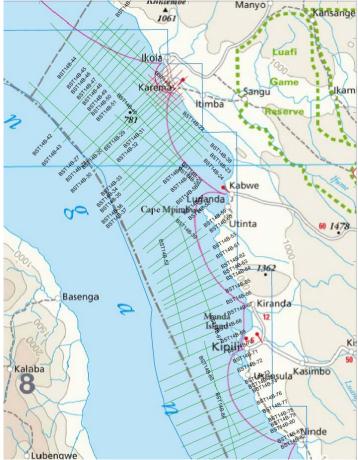


### Tanzania – Farm-down underway





#### Seismic Surveys



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### **Contact information**



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