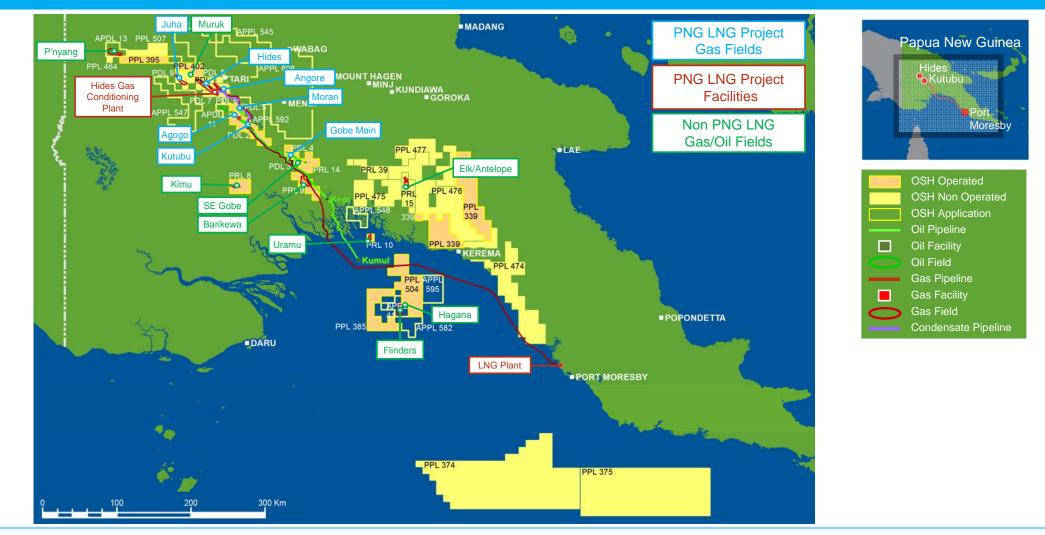
## Credit Suisse Australian Energy Conference June 2017 Oil Search



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## **Oil Search licence interests, PNG**



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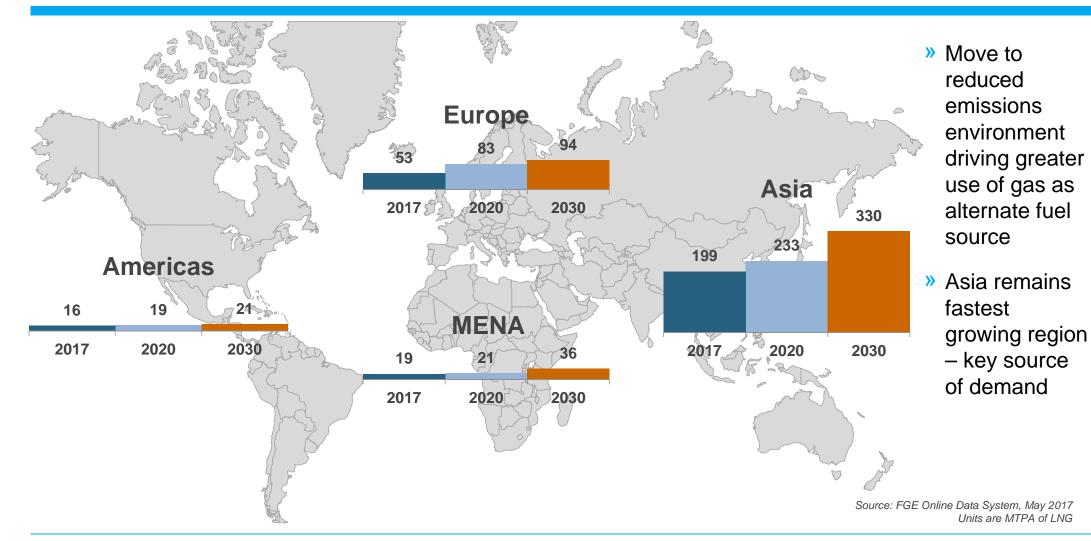
# Top tier production base with highly commercial growth projects



- » 1Q17 PNG LNG production of 8.3 MTPA, 20% above nameplate:
  - Supported by material increase in OSH's PNG LNG Project reserves (1P up 50%, 2P up 12%) following independent certification in 2016
  - ExxonMobil marketing up to 1.3 MTPA of additional PNG LNG volumes
- » Continued strong performance from operated PNG oil fields
- » 10+ tcf of discovered undeveloped gas in Elk-Antelope and P'nyang:
  - Sufficient to support two additional PNG LNG-sized LNG trains
  - Discussions on LNG expansion underway between ExxonMobil, Total and Oil Search, focused on coordinated development
- Muruk gas discovery potentially significant new gas field, reduces uncertainty of several leads and prospects on-trend



# Continued Asian LNG demand growth in medium – long term



**Oil Search** 



## PNG well placed to capture market opportunities

#### Long-term LNG market fundamentals are strong:

- Number of LNG importing countries / LNG buyers growing:
  - Traditional exporters in market as buyers for domestic requirements
  - New buyers: Thailand, Singapore, Bangladesh, Vietnam, Pakistan, Philippines, Egypt, Jordan
- Additional supply required to replace expiring contracts with Asian buyers (>45 MTPA from Japan, >20 MTPA from Korea between 2017-2026)
- LNG usage expanding (eg in merchant shipping)
- FSRUs supporting demand growth, enabling faster delivery to markets

## LNG from PNG well positioned to capture market opportunities:

- Continued exceptional performance from PNG LNG Project
- Additional PNG LNG volumes being marketed following recertification
- 10+ tcf undeveloped resources with overlapping ownership interests
- Co-operation between PNG LNG, P'nyang and Elk-Antelope will result in competitive brownfield integrated development

## 10+ tcf undeveloped gas resources at Elk-Antelope and P'nyang – sufficient to underpin two PNG LNG-sized trains



- » Following 2016 appraisal programme, gross 2C contingent resource at Elk-Antelope increased to ~6.5 tcf (up from 5.3 tcf previously booked), with >5 tcf of 1C
- » Final appraisal well, Antelope 7/7ST1 completed in Feb '17. No change to resource numbers
- » Five-year extension of PRL 15 licence granted in Dec'16:
  - Terms of licence extension stipulate completion of pre-FEED and FEED by end 2018
- » P'nyang South 2 well scheduled to be drilled 2H17, well pad construction underway:
  - Aim to move 2C resource into 1C category (currently ~1.1 tcf), with potential to add to existing 2C of 3.5 tcf
  - Resource certification to follow well completion



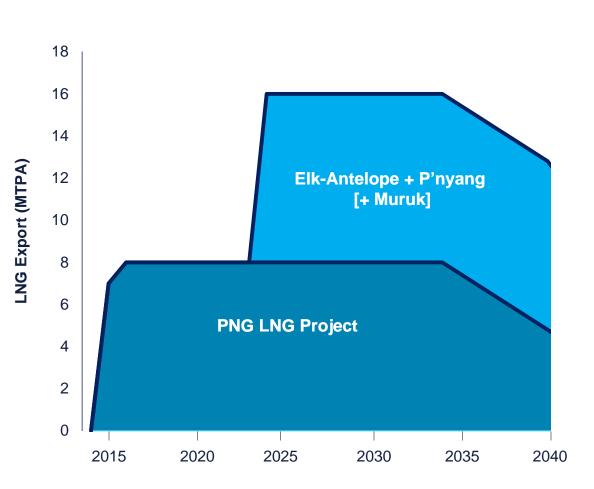
Gross Resource (~ tcf)*	1C	2C
Elk-Antelope	5.2	6.5
P'nyang	1.1	3.5
Total	6.3	( 10.0 )
* Upstream dry gas		X

Sufficient resources to underpin two PNG LNG-sized trains

# Major cost savings from cooperative LNG expansion

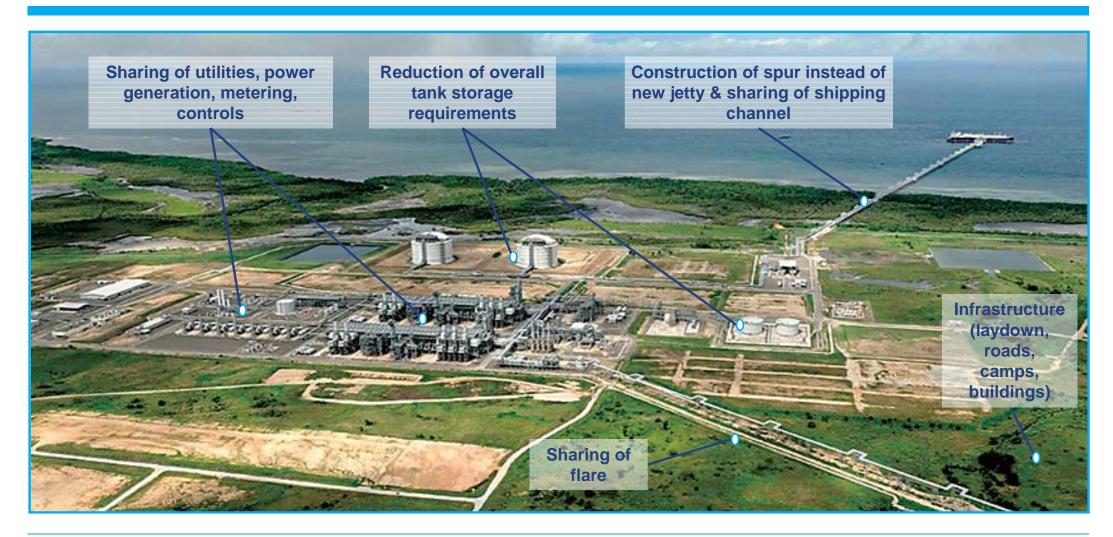


- » Discussions on LNG expansion underway between ExxonMobil, Total and Oil Search
- » Oil Search, partners and Government have confirmed intent to pursue coordinated development
- Targeting alignment on commercial model in 2H17, when Oil Search and partners intend to present development concept to newly elected government
- » Significant cost benefits of LNG expansion integration:
  - » Potential downstream capex savings of US\$2-3bn and opex savings of US\$125m pa
- » Maintains two major operators in PNG



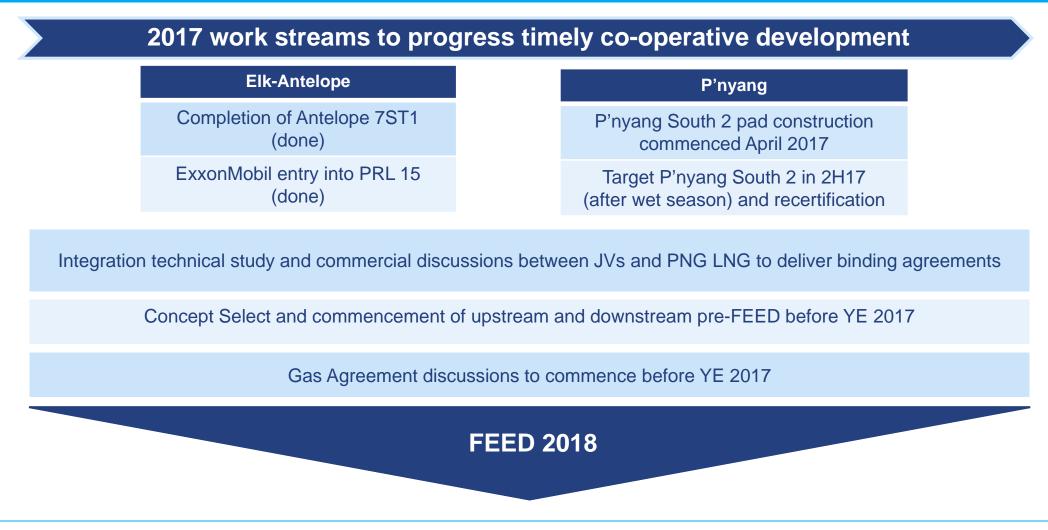


## **Opportunities for sharing at PNG LNG plant site**





## Gas commercialisation activities in 2017

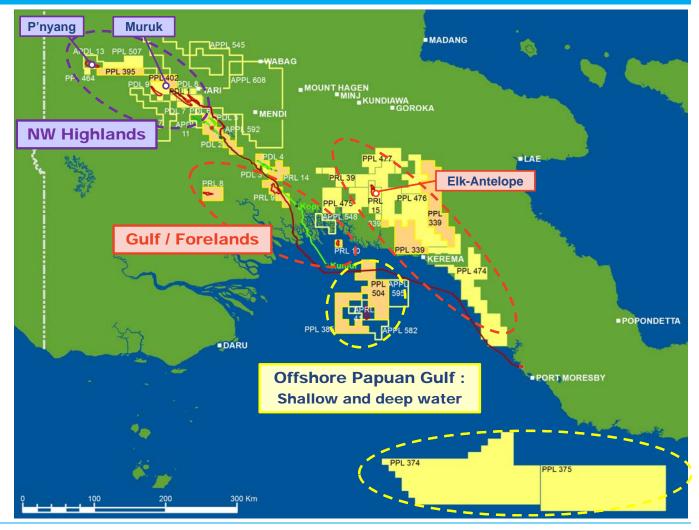


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## Significant remaining exploration upside in PNG

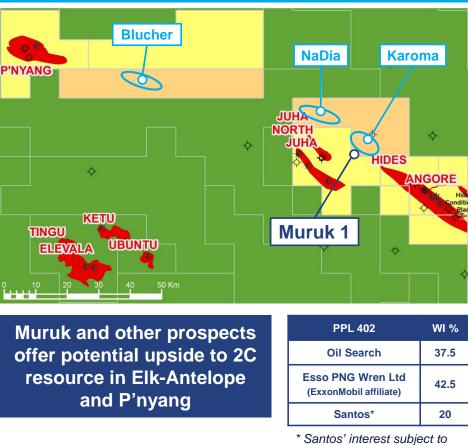
- » PNG-wide prospectivity review completed in 2016:
  - Estimated >7bn boe is yet to be found, with >90% gas
- » Materially expanding PNG acreage:
  - Three key areas NW
    Highlands, Gulf/Forelands,
    offshore Gulf
  - Focus on gas expansion and delineating remaining oil
  - Strong portfolio, including several game changers



## Material gas potential at Muruk and along Hides-P'nyang trend



- » Gas discovered at OSH-operated Muruk well in Dec '16
- » Muruk 1ST3 successfully drilled through Toro in May'17:
  - Entire Toro gas saturated, reservoir similar to Hides
  - No gas:water contact penetrated
- » Production test successfully completed in June:
  - Confirmed very good quality reservoir with high deliverability
  - Due to tubing limitations, well produced at maximum equipment-constrained rate of 16 mmscf/day on 32/64" choke
  - Well now being P&A'd
- » Data from Muruk drilling programme will assist in designing potential appraisal programme in 2018
- » Favourably located (~21km NW of Hides)
- » De-risks exploration leads and prospects along Hides to P'nyang trend:
  - Combined unrisked potential mean resources of 4-6 tcf
  - Targets to be confirmed by seismic in 2017 for drilling in 2018+



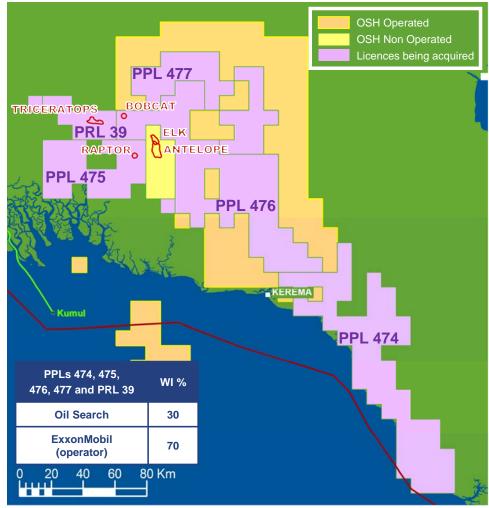
\* Santos' interest subject t regulatory approval



## Farm-in to onshore Papuan Gulf Basin

- » OSH acquired 30% interest in PPLs 474, 475, 476, 477 and PRL 39 from ExxonMobil in May\*:
  - ExxonMobil acquired these licenses on completion of its purchase of InterOil in 1Q17
  - Materially enhances OSH's exploration portfolio
- » Licences adjacent to Elk-Antelope and contain Triceratops, Bobcat and Raptor discoveries
- » OSH has identified range of leads and prospects and will operate seismic acquisition programme over high-graded areas in 2017/early 2018, on behalf of ExxonMobil
- » Builds on existing strong relationship with ExxonMobil in PNG LNG and Papua LNG Projects

<sup>\*</sup> OSH's acquisition is subject to due diligence, execution of binding agreements, conditions precedent and regulatory approvals



## Small scale LNG (ssLNG)

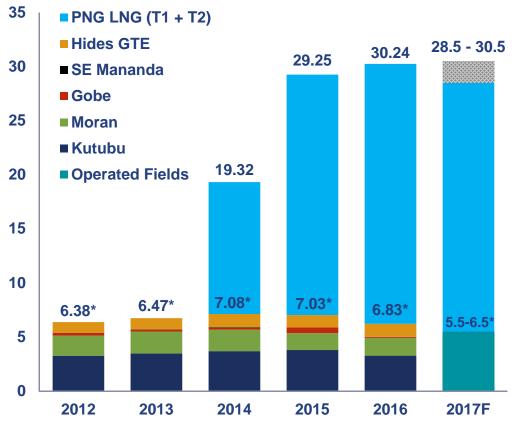


- Opportunity exists to commercialise smaller undeveloped gas resources from Gulf, Western and Highlands Provinces through smaller scale LNG development (0.5 – 1.5 MTPA)
- » Likely to require combination of in-country and regional end users:
  - Potential for supply to capture fuel requirements for mines and east coast of PNG
  - Regional LNG supply prospects for power generation
- » Oil Search to appraise Barikewa and Kimu fields in 2017 and Uramu in 2018, to confirm resource base for potential ssLNG:
  - Partnering strategy to facilitate development



 $(\mathcal{A})$ 

## 2017 production forecast remains at 28.5 – 30.5 mmboe Oil Search



#### OSH Net Production (mmboe)<sup>1,2</sup>

2. Gas:oil conversion rate from 2014 onwards: 5,100 scf = 1 barrel of oil equivalent (prior 6,000 scf/boe)

#### » 2017 production forecast similar to 2016:

- Further improvements from PNG LNG to offset decline from mature oil fields
- Forecasts include PNG LNG routine compressor maintenance in May'17 and Oct'17 and two week shut-down of oil fields for maintenance in May

#### » Beyond 2017:

- Planning for Angore tie-in and HGCP modifications in 2018:
  - Production optimisation benefits in 2019 (~8.5 MTPA)
- Two new LNG expansion trains would result in >50% increase in OSH production

<sup>1.</sup> LNG sales products at outlet of plant, post fuel, flare and shrinkage

<sup>\*</sup> Oil Search operated production, including SE Gobe gas sales to PNG LNG Project



## **Robust financial metrics**

- 2016 operating cash flow of >US\$550m or US\$18.15/boe
- Solid balance sheet. Cash of >US\$ 1 billion, available credit facilities of US\$750 million, liquidity of US\$1.77bn at end 1Q17
- » Total debt of US\$3.94 billion, all relating to PNG LNG project finance facility:
  - » Mortgage-style repayment profile to 2026
- » Refinancing of US\$500 million corporate facility nearly complete:
  - Strong interest from bank market, facility to be expanded to US\$600 million.
  - » Improved terms

#### 2016 Cash flows



#### Cash and Corporate Facilities available



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## **Social Responsibility**

- » Operating and political stability essential for long-term sustainability
- » Comprehensive strategy to manage current and emerging ESG risks
- » OSH recognised globally for its in-country sustainable development outcomes and managing local/community issues:
  - Provision of health services, women's empowerment and education, directly and through Oil Search Foundation
  - Partnerships on key infrastructure development on behalf of PNG Government, funded by Infrastructure Tax Credit Schemes
  - Capacity development of State enterprises and landowner companies
- Provision of reliable, competitively priced power that can improve PNG's development and contribute to PNG emissions reduction targets, by reducing reliance on heavy fuel oil/diesel:
  - Markham Valley Biomass Project in FEED
  - Tari power grid
  - Small-scale LNG under consideration







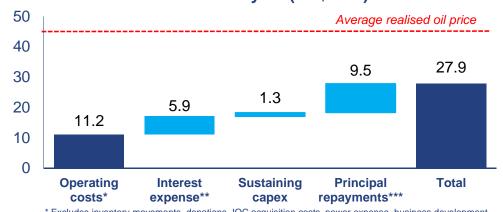


## Summary – unprecedented platform for growth Oil Search

- » 2016 Strategy Refresh highlighted potential to deliver top quartile returns for next 5-7 years
- » Delivery of LNG expansion, underpinned by development of Elk-Antelope and P'nyang gas fields, key to ongoing high-returning growth
- » Strong platform to deliver:
  - Upgrade in PNG LNG Project reserves supports expanded capacity, additional marketing of 1.3 MTPA underway (taking contracted volumes to 7.9 MTPA)
  - Strong resource base with 10 tcf+ in P'nyang and Elk-Antelope available for expansion
  - Cooperative development discussions underway, strong support from all stakeholders
- » Building excellent exploration portfolio complementary to gas commercialisation
- » Comprehensive in-country community-based programmes, underwriting stable operations
- » Further organisational optimisation with succession planning
- » Underpinned by strong balance sheet and ample liquidity to pursue growth

## **Appendix 1: Summary financials**





2016 Cash flow break-even analysis (US\$/boe)

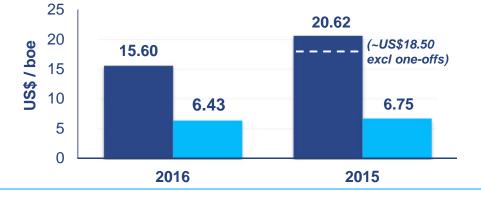
\* Excludes inventory movements, donations, IOC acquisition costs, power expense, business development costs, other expenses and rig operating costs

\*\* Includes interest from finance leases

\*\*\* Includes payments for finance leases

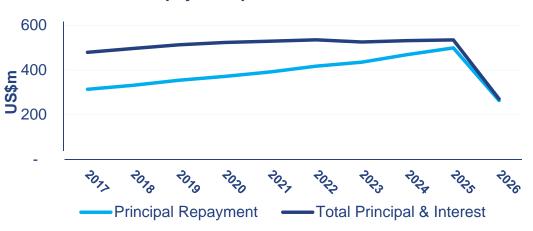
#### **Unit production costs**

■ PNG Oil & Gas ■ PNG LNG



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Indicative annual repayment profile



#### Dividend per share (US cents)





### **Appendix 2: 2017 guidance summary**

2017 Capital Cost Guidance (US\$380 – 480m)



\* 2017 exploration and appraisal budget revised from US\$250-300m to US\$270-320m as a result of May-17 farm-in to onshore Papuan Gulf Basin acreage, additional drilling and testing of the Muruk well, partially offset by re-phasing of other exploration activities

**Production** 2017 Guidance<sup>1</sup> Oil Search operated  $5.5 - 6.5 \text{ mmboe}^{2,3}$ **PNG LNG Project:** I NG 101 – 104 bcf 600 - 650 mmscf Power Liquids 3.0 - 3.5 mmbbl **Total PNG LNG Project**  $23 - 24 \text{ mmboe}^2$ **Total Production** 28.5 - 30.5 mmboe **Operating Costs** Production costs US\$8 - 10 / boe Other operating costs<sup>4</sup> US\$135 - 145 million Depreciation and amortisation US\$12 - 13 / boe

<sup>1</sup> Numbers may not add due to rounding.

<sup>2</sup> Gas volumes have been converted to barrels of oil equivalent using an Oil Search specific conversion factor of 5,100 scf = 1 boe, which represents a weighted average, based on Oil Search's reserves portfolio, using the actual calorific value of each gas volume at its point of sale.

<sup>3</sup> Includes 2.8 – 3.0 bcf (net) of SE Gobe gas sales exported to the PNG LNG Project (OSH – 22.34%).

<sup>4</sup> Includes Hides GTE gas purchase costs, royalties and levies, selling and distribution costs, rig operating costs, corporate administration costs (including business development)

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