

# Petroleum Analyst Presentation

Karratha, Western Australia

12 December 2006



# Disclaimer

The views expressed here contain information derived in part from publicly available sources that have not been independently verified. No representation or warranty is made as to the accuracy, completeness or reliability of the information. Any forward looking information in this presentation has been prepared on the basis of a number of assumptions which may prove to be incorrect. This presentation should not be relied upon as a recommendation or forecast by BHP Billiton.

Nothing in this release should be construed as either an offer to sell or a solicitation of an offer to buy or sell shares in any jurisdiction.

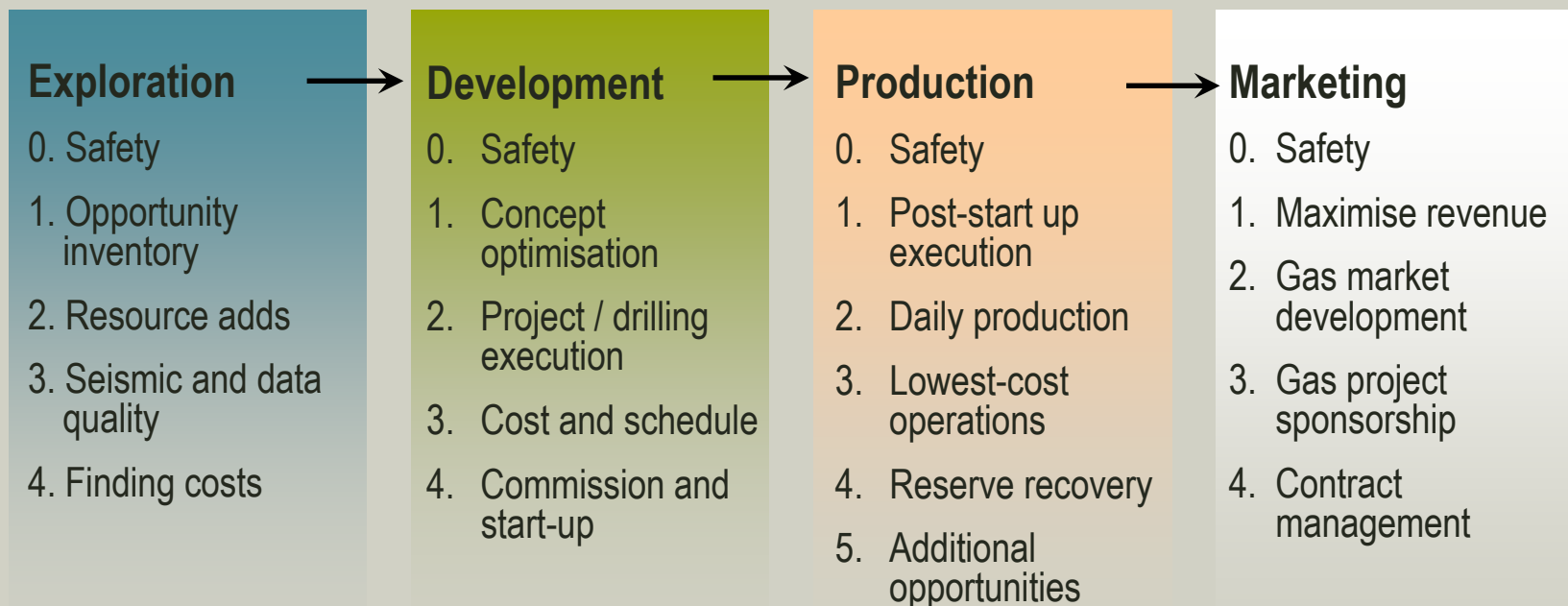
# Agenda

- Introduction and Objectives
- Overview of Australian Operations and Businesses
- North West Shelf Operations
- North West Shelf Expansion
- NWS Gas Market
- Projects and Opportunities
- Summary

# Objectives

- How Petroleum is now working
- Provide an update on our Australian operations
- Update you on the status of our high-value Australian projects in progress
- Give you a view of the additional depth of our Australian opportunities

# How Petroleum is now working - Functional Organisation



## Worldwide Presidents

**Steve Bell**

**Nigel Smith**

**David Walker**  
**Mike Weill**

**Rebecca McDonald**  
**Alex Green**

# Organisational Advantages

- Clear accountability – clear focus of management and the organisation
- Emphasises functional excellence in execution
- Common approach and measurement across entire portfolio
- Top talent touches all similar problems
- Measure against milestones, adjust activities, measure again
- Lowest cost per barrel
- Drive for year after year functional improvement leads to overall business performance improvement

# Key Messages

- North West Shelf Project is a world class asset and material to Petroleum's business
- NWS Project in a significant growth phase and well positioned in the market
- This has been recognised by a significant capital investment program
- Strong record of project delivery under current market conditions
- Robust gas market
- Acting on other gas opportunities

# Producing Assets Australia

Nigel Smith  
President Development

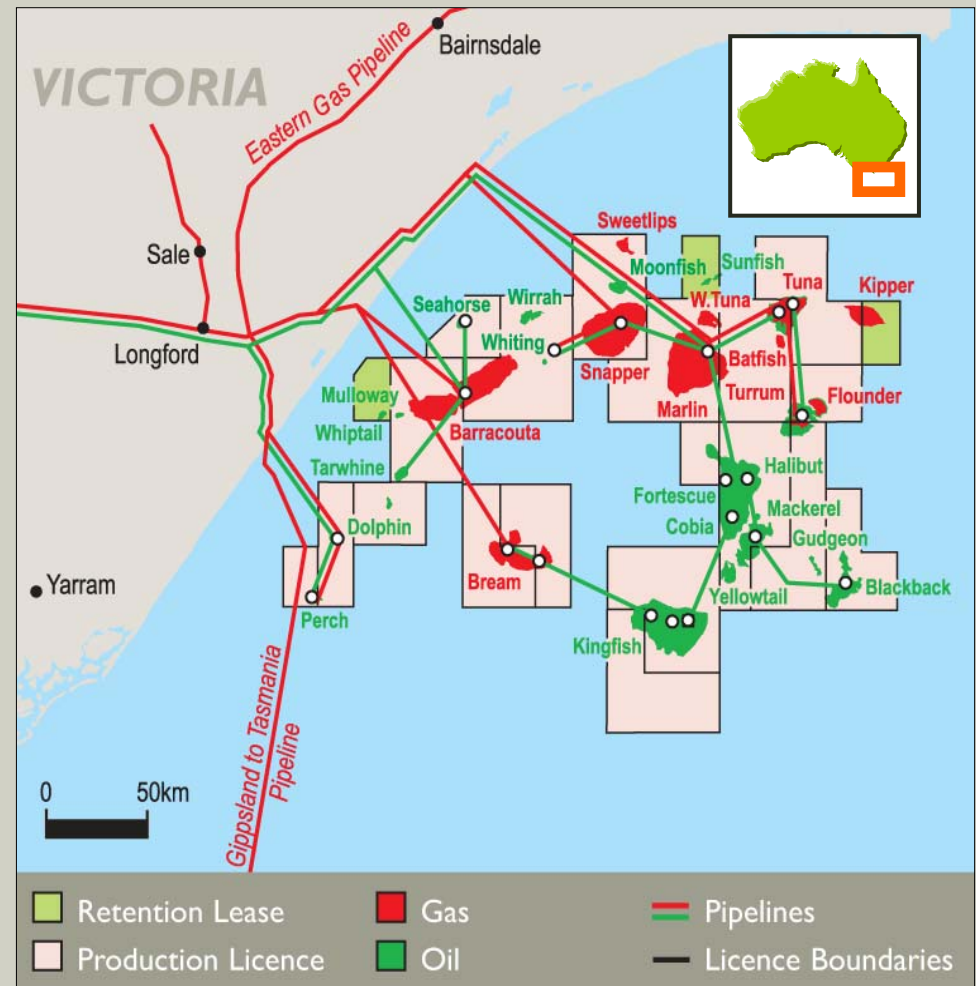
12 December 2006





# Bass Strait, Victoria

- Oil and gas
- One of BHP Billiton's most profitable assets
- Producing since 1969
- 20 producing fields
- 21 offshore structures
- Seeking additional reserves
- BHP Billiton: 50% (non-operated)



# Minerva, Victoria

- Gas and condensate
- First production January 2005
- Two subsea wells, onshore gas plant
- Max gross sales gas production rate: 150 Tj/d
- BHP Billiton: 90%, Operator



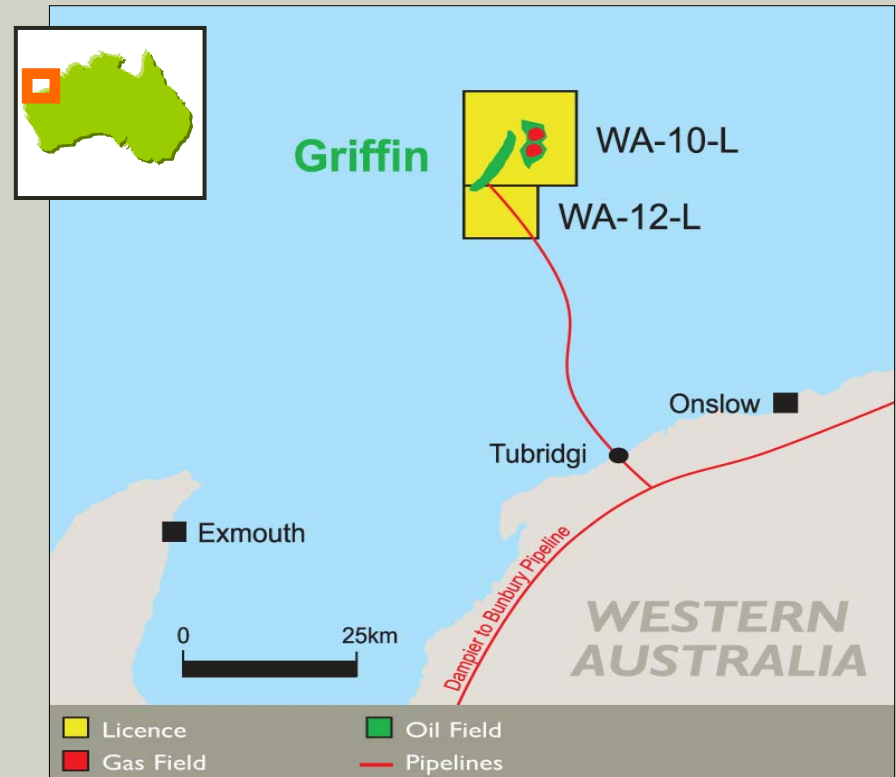
# Eastern Australia Gas

- Largest equity gas producer in south eastern Australia FY06
- Minerva and Gippsland Basin gas supplies the following markets:
  - 100% Tasmania
  - >90% Victoria
  - ~25% South Australia
  - ~20% NSW
  - ~10% Queensland
- BHP Billiton remains the most significant holder of gas resources in south eastern Australia



# Griffin Venture, Western Australia

- Located 62 kilometres offshore on the North West Shelf
- Oil and gas from Griffin, Chinook and Scindian fields are produced via the Griffin Venture, a floating production, storage and offloading facility (FPSO)
- Gas is piped to shore into domestic gas pipeline, and sold into the WA market
- Oil sold predominately to the Asian spot market
- BHP Billiton 45%, Operator
- Discovered: 1989
- First production: 1994
- End of field life 2013, though could be extended to 2017



# North West Shelf Project

Gregor McNab  
General Manager North West Shelf

12 December 2006

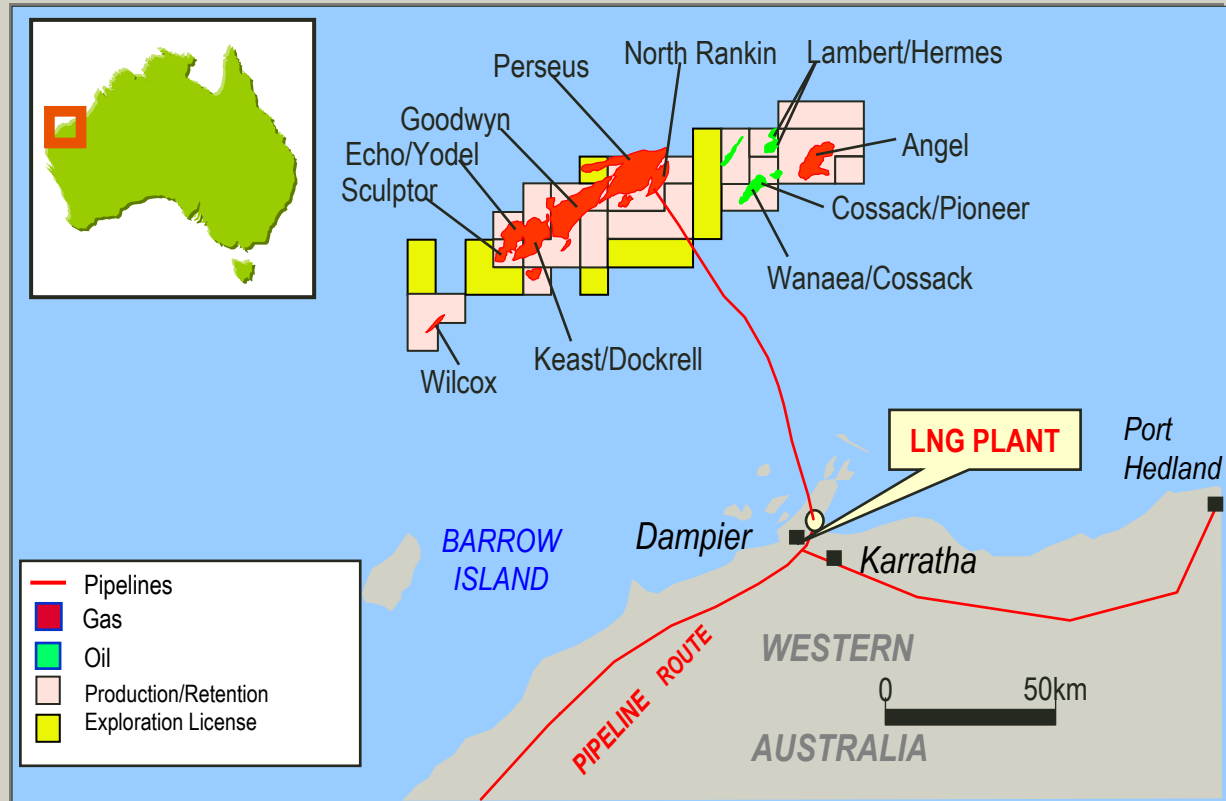


# North West Shelf Project, Western Australia



# North West Shelf, WA

- Australia's largest resource development
- Developed in two major phases:
  - Domestic gas
  - LNG
- Domestic gas: supplies natural gas to the WA market
- LNG phase: supplies LNG gas for export to Japan, China and Korea
- Crude oil, condensate and LPG are also produced and exported by the Venture
- BHP Billiton ~16.7%, non-operator





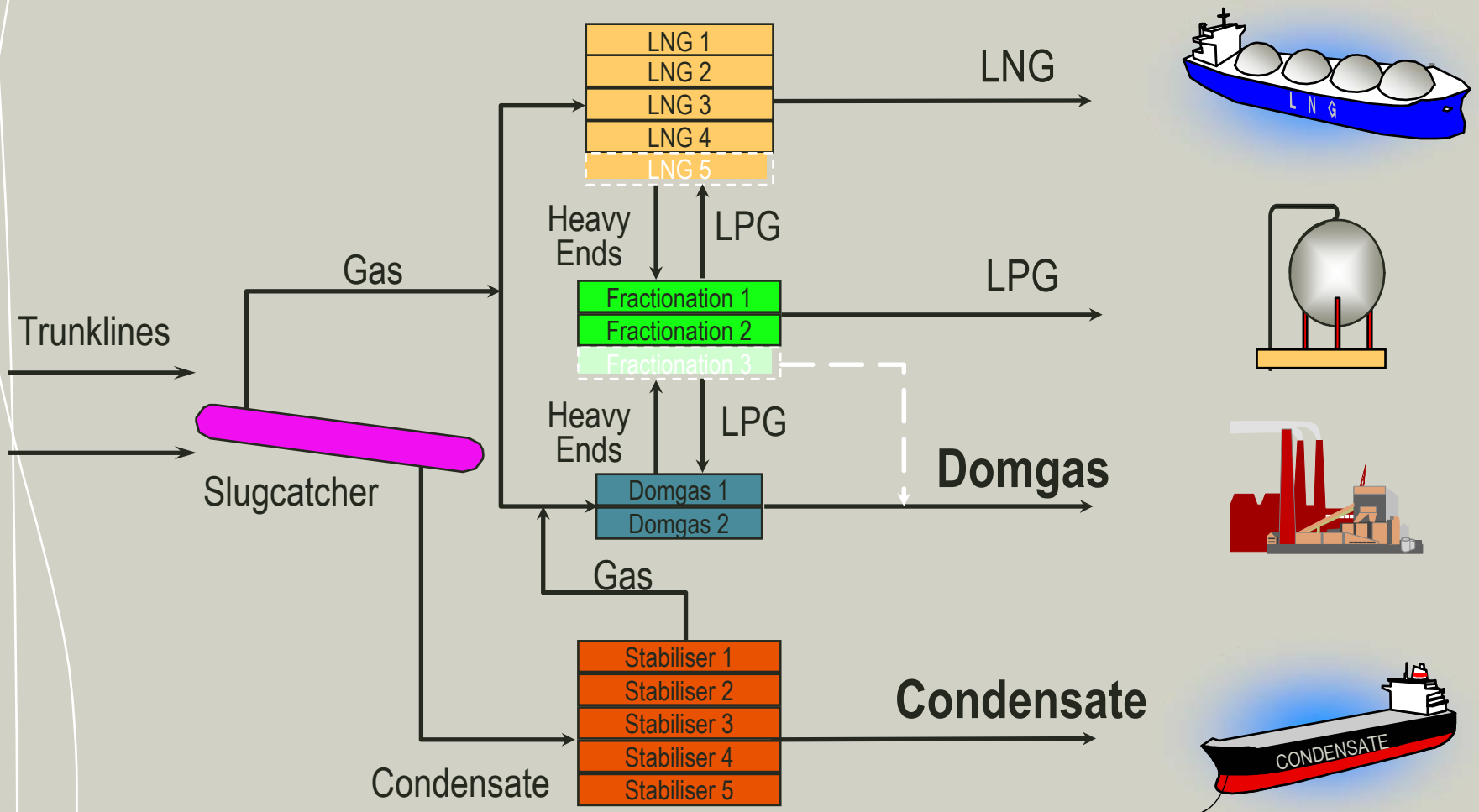
# NWS Production and EBIT FY 2006

<u>Net production FY06</u> (BHP Billiton Share)		<u>Gross (total) Production FY06</u>	
Oil	4.0 MMbbl	Oil	23.9 MMbbl
Condensate	5.1 MMbbl	Condensate	34.3 MMbbl
LNG	1.94 Mt	LNG	11.68 Mt
LPG	145,100 tonnes	LPG	872,000 tonnes
Domestic Gas	16.0 Bcf	Domestic Gas	182.2 Bcf

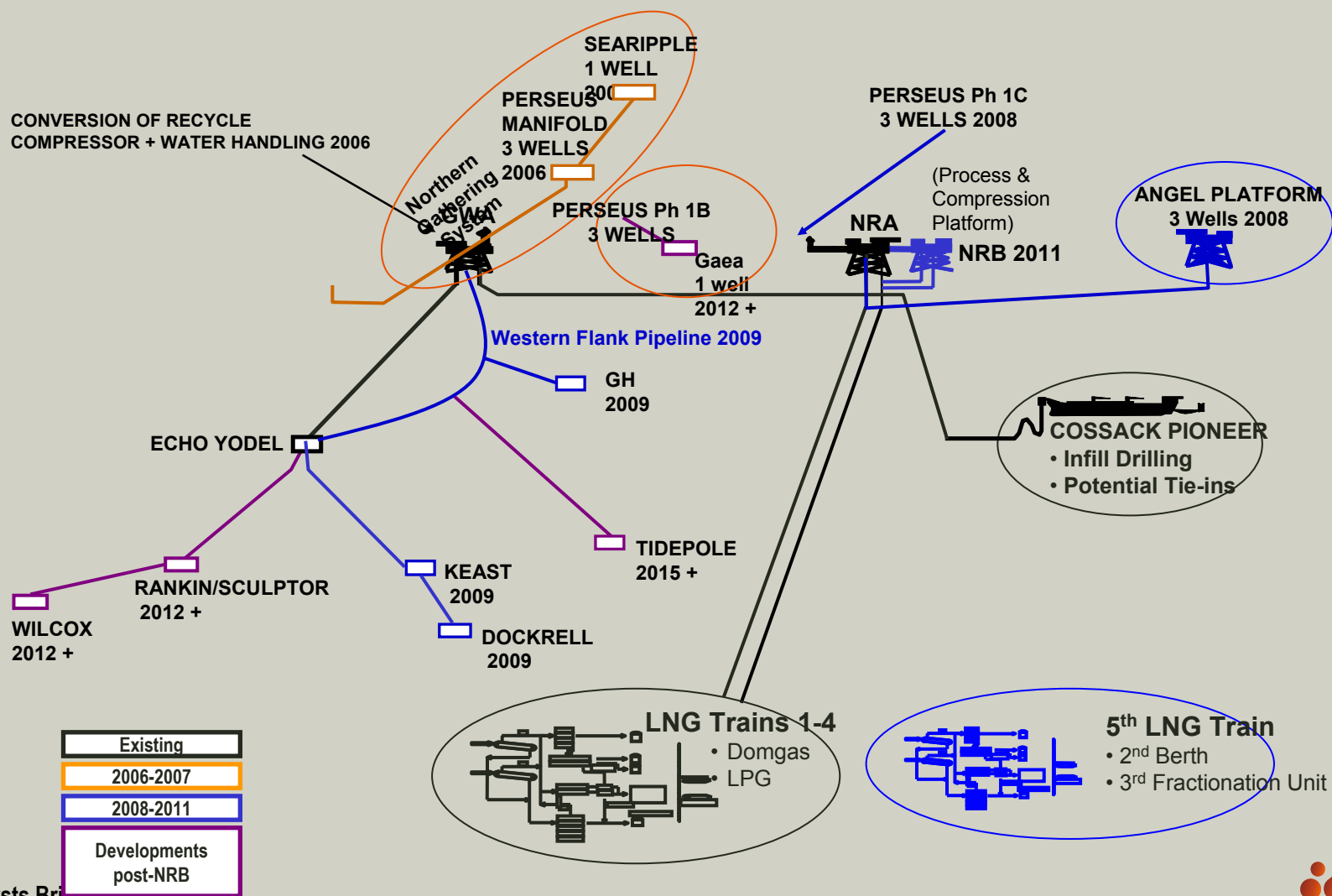
<b>NWS Revenue US \$ Million</b>	<b>EBITDA</b>	<b>Depn &amp; Amortisation</b>	<b>EBIT</b>	<b>Net operating assets</b>	<b>Capex</b>
1,266	1,007	81	926	990	215



# North West Shelf Project - Scope



# NWS Planned Onshore & Offshore Development Projects – to be amended



# Phase V - LNG expansion

Modules Arrive

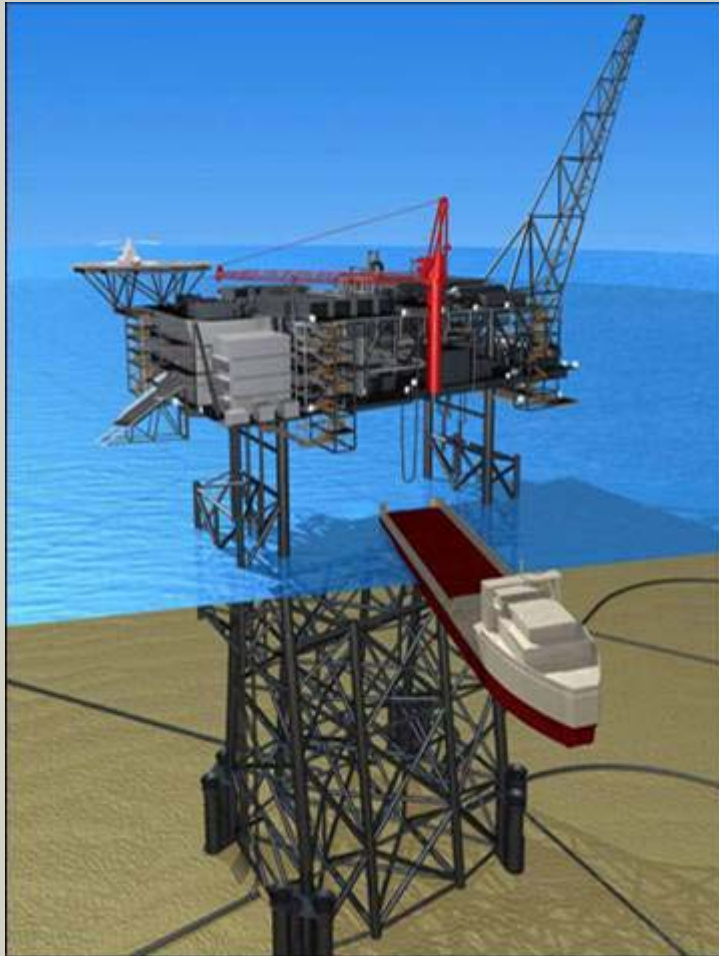


1<sup>st</sup> Module Placement



- Capital cost BHP Billiton share US\$300 million (Operator's estimate)
- Expect
  - mid-2008 commissioning
  - Q4 2008 first shipment
- Total system capacity (Trains 1-5) expected to be ~16.3 mtpa
- Civil construction for placement of first modules completed
- 1st Module placed on 7 Oct 2006, on schedule

# North West Shelf Project - Angel



- Capital Cost BHP Billiton share US\$200 million
- Detailed design approximately 90% complete
- Fabrication of topsides and substructure underway
- Timing of project aligned to maximise sales of LNG from Train 5 (Q4 2008)

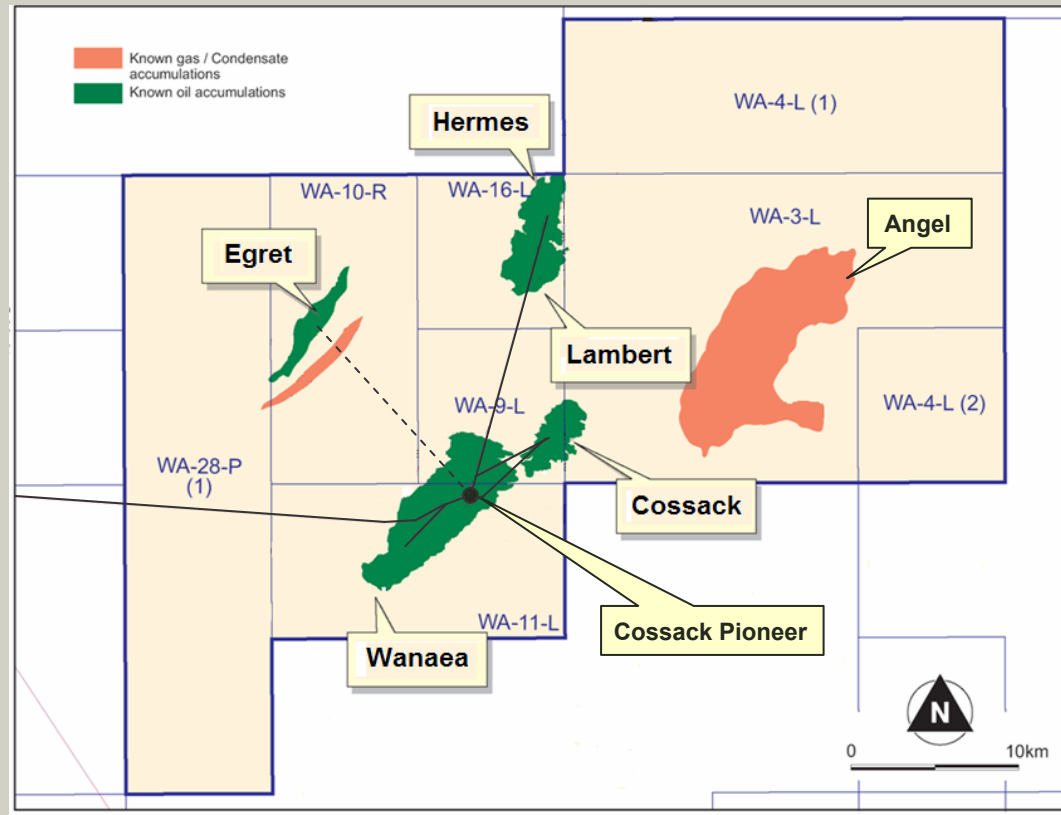
## **Angel project includes:**

- Not normally manned platform
- 50 km pipeline to North Rankin A
- 3 subsea wells and flowlines
- Power and control from North Rankin A

# North West Shelf Project – Oil



Cossack Pioneer



- Cossack Pioneer production in excess of 100,000 bbl/d (100%)
- 1 potential infill well in 2007
- Studies continuing for future infill opportunities including Egret tie-in to Cossack Pioneer

# North West Shelf Project - Marketing

Ian Mumford  
Manager LNG Marketing NWS

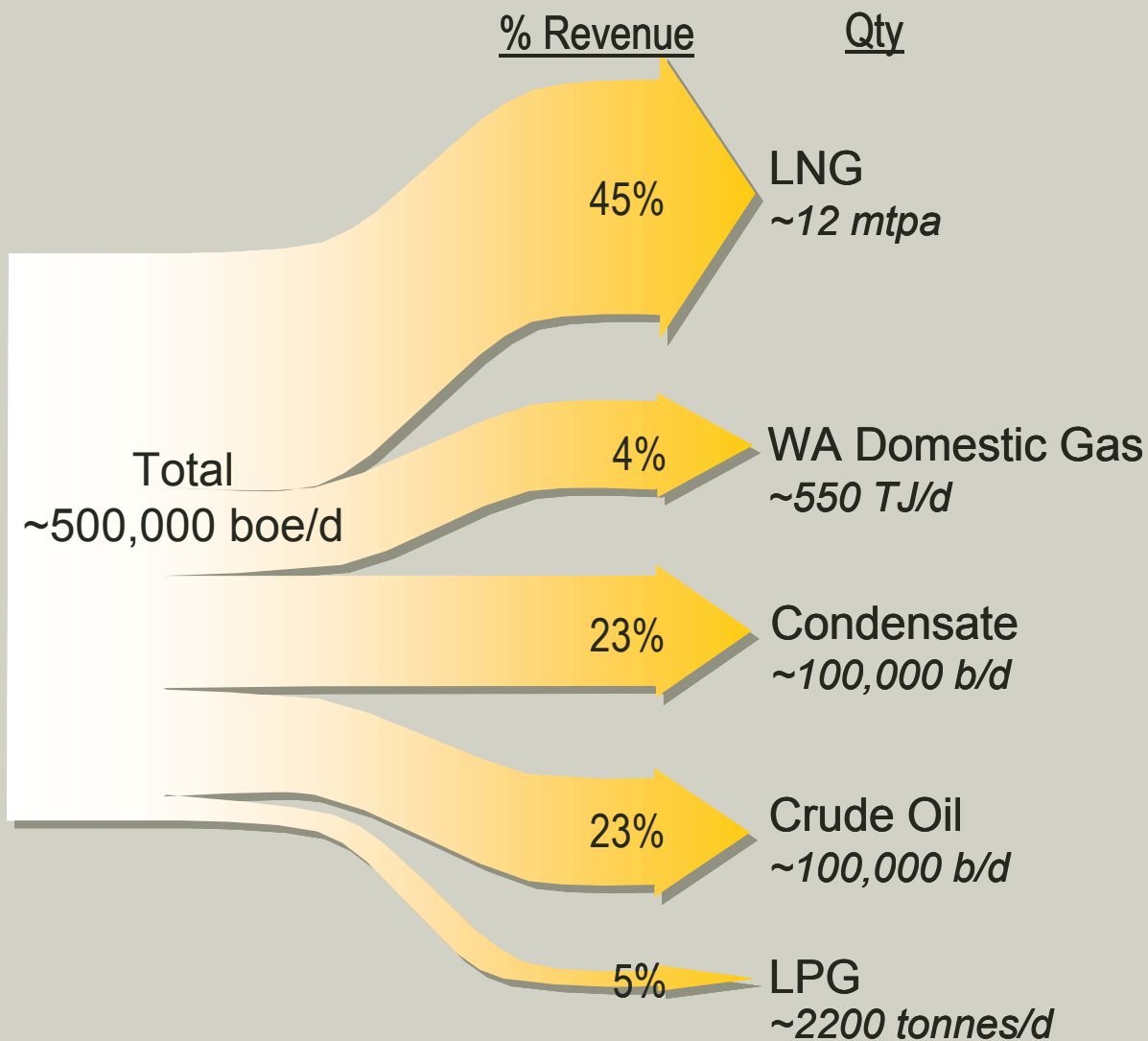
12 December 2006





# North West Shelf Project

Production, Products & Markets (100% Equity Basis)



# North West Shelf Project - BHP Billiton Customers



## LNG Customers

- 10 Japanese Buyers (Tokyo Electric, Chubu Electric, Kansai Electric, Chugoku Electric, Tohoku Electric, Kyushu Electric, Tokyo Gas, Osaka Gas, Toho Gas, Shizuoka Gas)
- Kogas
- Dapeng Guangdong LNG
- Shell Eastern

## Domestic Gas Customers

- Gas and Power utilities – Verve Energy, Alinta, Kwinana Power Partnership
- Mining Companies - Alcoa, BHP Billiton, Rio Tinto

## LPG Customers

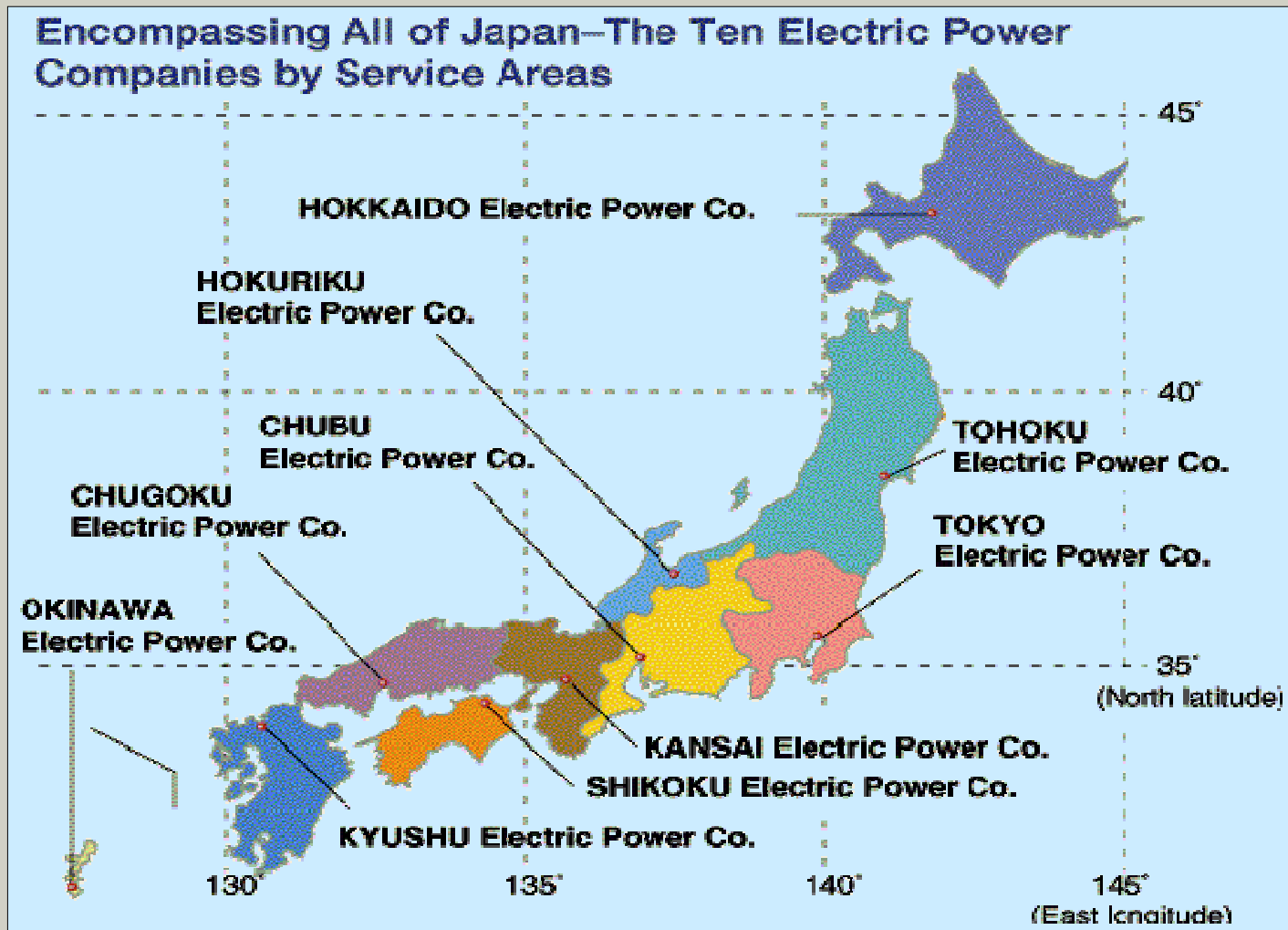
- Japan buyers
- Spot sales

## Condensate & Crude Oil Customers

- Refiners in Australia, Singapore and north Asia



# North West Shelf Project - Japan Market



# North West Shelf Major LNG Markets



# Western Australia - Pipeline Infrastructure



- Major gas fields (Carnarvon Basin) are far from South West markets
- Single pipeline connects gas fields with markets
  - Dampier to Bunbury Gas Pipeline – NWS to Perth and South West (1540 km; 560 TJ/day)
  - Goldfield Gas Transmission (NW Australia to Kalgoorlie (1380 Km; up to 164 TJ/day)
  - Pilbara Pipeline - NWS to Pt Hedland (237 km; up to 170 TJ/day)
  - Parmelia – Dongarra to South of Perth (415 km; up to 120 TJ/day)
- No interstate pipeline connection
- Major pipelines subject to open access
  - Regulated tariff

# North West Shelf LNG Marketing

- All 2006/07 LNG production capacity sold under term contracts
- Market conditions are strong
- NWS significant competitive advantage with Train 5 in 2008
- Very good progress made with Japanese & Korean buyers to re-contract unsold capacity from 2009
- Binding Heads of Agreements & Sale and Purchase Agreements expected to be executed in 2006/07

# North West Shelf LNG Shipping

- The NWS owners currently sell ~12 mtpa of LNG to north Asian markets
- LNG is sold on Ex-ship (delivered) and FOB terms
- The NWS project owners control a fleet of 9 LNG carriers for Ex-ship sales
- These ships are dedicated to NWS trade
- Round voyage of ~21 days between Withnell Bay and Japan
- LNG cargo size 125-135,000 m<sup>3</sup>

# Summary

- Long-life reserves
- In the process of securing Heads of Agreement for remaining uncontracted LNG volumes
- Pipeline of significant onshore and offshore projects over next 5 years
- Significant value capture through managing, growing and sustaining production
- Strong market conditions

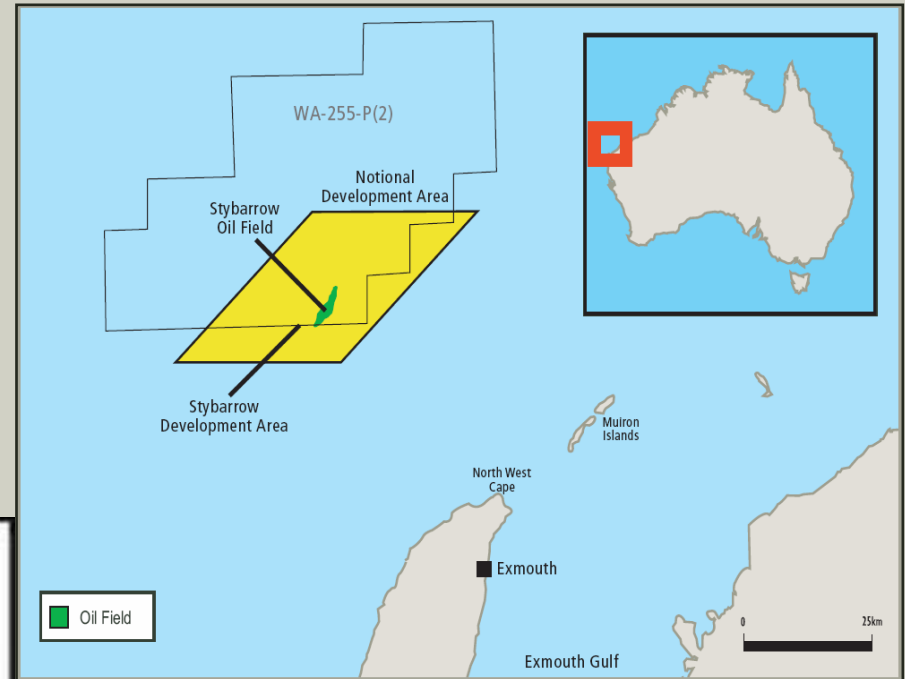
# Projects and Opportunities

12 December 2006



# Execution: Stybarrow (50% BHP Billiton – Operated)

- Capacity: 80,000 bbl of oil/day  
40 mmscf/day gas
- 100 million barrels of oil (includes Eskdale)
- At 850m depth, deepest development offshore Australia
- Sanction November 2005

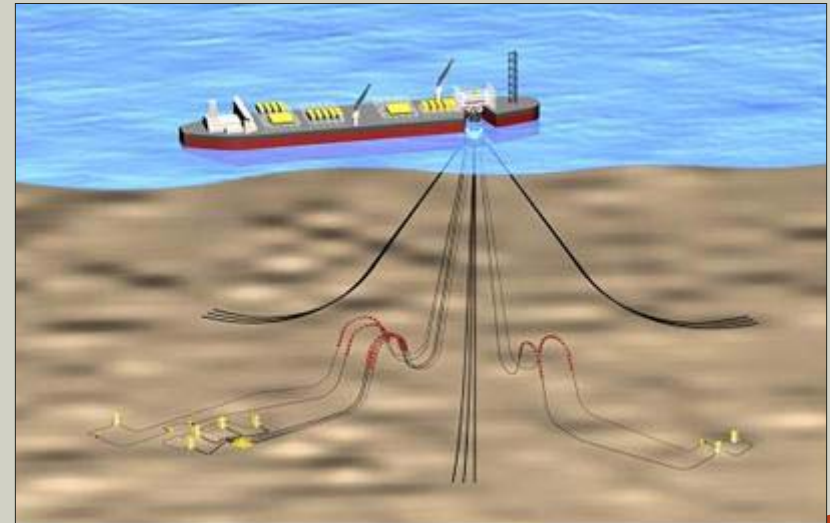
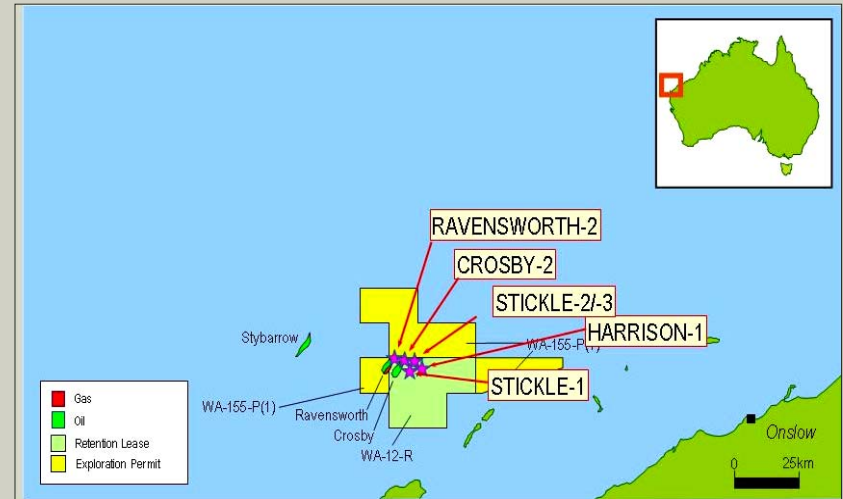


- Commenced FPSO hull fabrication January 2006
- Development drilling September 2006, in progress
- First production Q1 CY 2008



# Feasibility: Pyrenees (~63% BHP Billiton - Operated)

- FPSO and subsea development
- 200m depth
- Sanction scheduled mid 2007
- First production planned for the first half of 2010

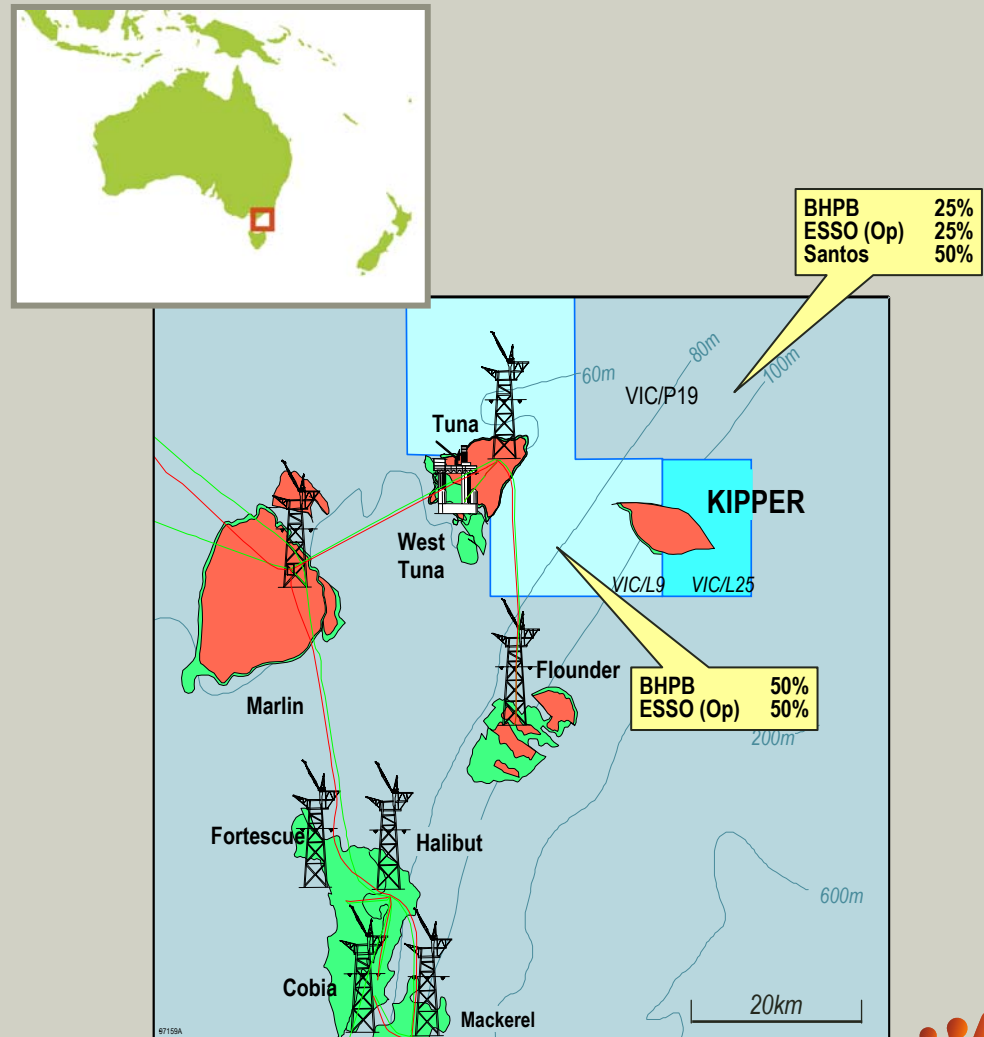


# Feasibility: Kipper Field – Bass Strait

- Production Licence Vic/L25 granted 17 July 2006
- BHP Billiton, Esso Australia and Santos agreed on the key terms and conditions including the processing of the gas
- The project is now in Front End Engineering and Design (FEED)

## Net unit interests

- 32.5% BHP Billiton
- 32.5% Esso Operator
- 35 % Santos



# Pre-feasibility: Scarborough, Western Australia

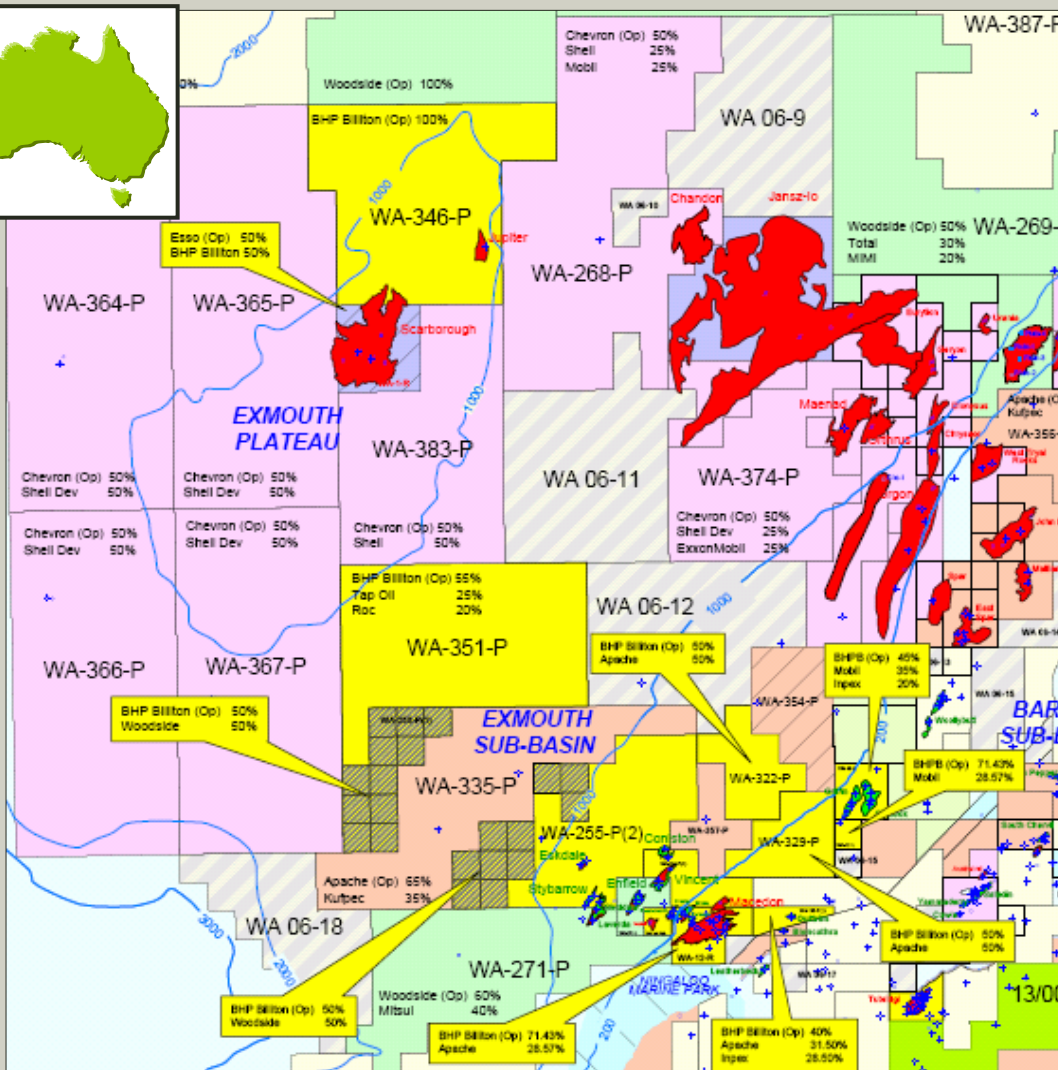


- Onshore development option being considered
- Initial gas supply will be from Scarborough ~ 8 Tcf (BHP Billiton 50%, Exxon Mobil 50% - operator)
- Other BHP Billiton owned gas in the vicinity includes Macedon and Jupiter + exploration potential
- Exxon Mobil and BHP Billiton discussing optimum development plans for Scarborough
- Target market either Asia or US West Coast

# Australian Exploration Focus Areas



# Exmouth Exploration Opportunities

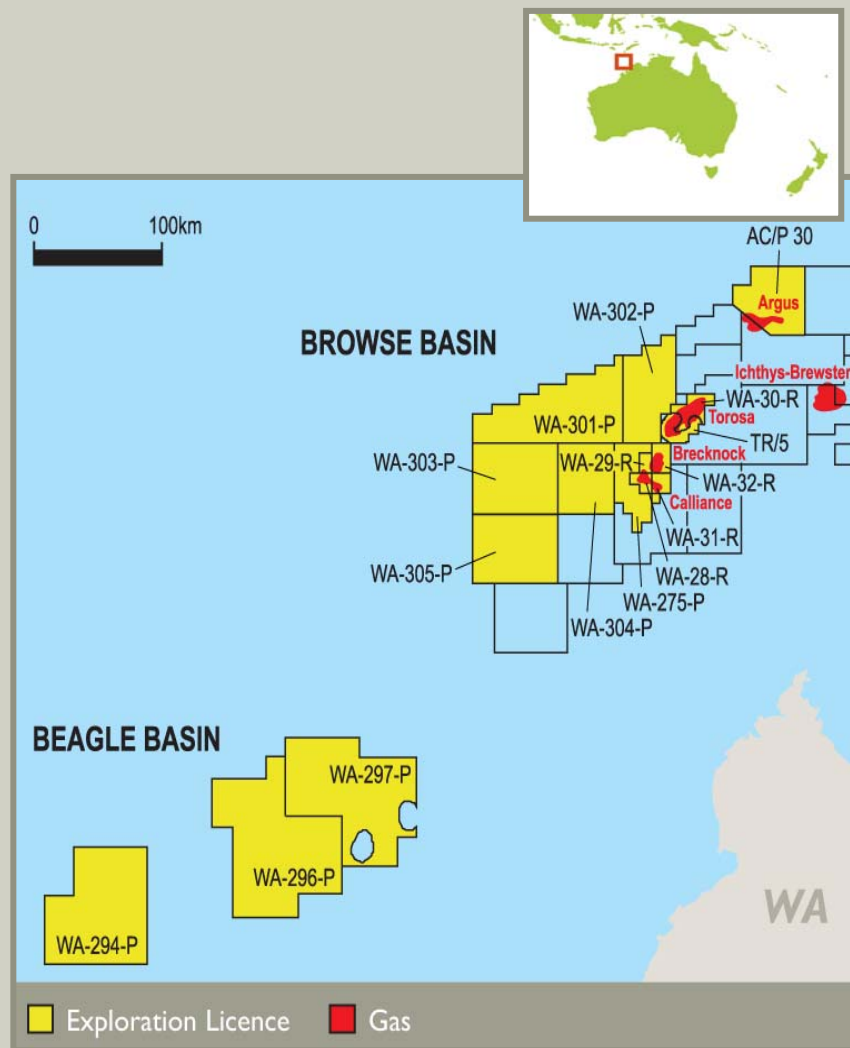


- Exmouth Basin (close to BHP Billiton operated oil assets in operation and development phase)
- Exmouth Plateau (close to Scarborough) - Thebe prospect in WA 346-P to be drilled next year

## BHP Billiton Interests

- Operated
- Non-operated

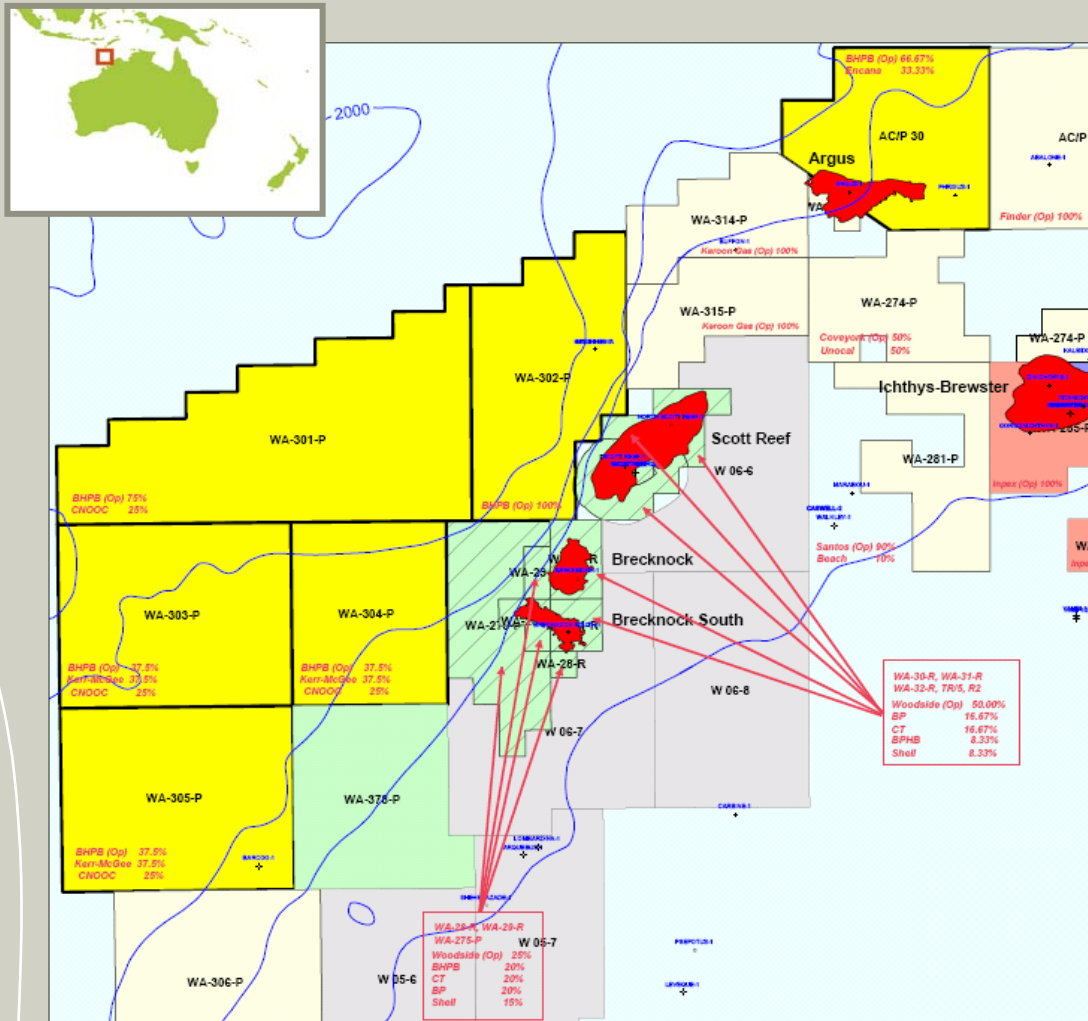
# Opportunity: Browse LNG



- Browse basin approx 400kms north west of Broome
- Woodside (Operator – Browse LNG) estimates:
  - ~ 20 Tcf of gas
  - ~ 300 MMbbl condensate
- BHP Billiton ~ 10% equity interest in gas resource will be determined following exploration and appraisal results
- Concept selection studies underway by Operator
- First LNG 2012-14 - Operator's estimate



# Browse Area Exploration Opportunities



- BHP Billiton total acreage holding in the Browse Basin is ~34,700 square kilometres
- Acreage has potential to add significant gas volumes
- Significant exploration and appraisal program

## BHP Billiton Interests

- Operated
- Non-operated

# Summary

- Petroleum a core business for BHP Billiton
- North West Shelf Project continues to be an outstanding asset
- LNG market conditions are strong:
  - Japan, GDP growth & nuclear difficulties
  - Korea, fuel substitution and growth
  - Delays in regional greenfield LNG projects
  - Market prices improving
- Moving forward on recognised oil and gas opportunities in the region
- Operating in a positive oil and gas market
- Major capital investment in Petroleum's Australian projects and assets
- Continuing to seek opportunities with a focus on sustained value creation





# bhpbilliton