Woodside Energy: A Brief Overview

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Crowne Plaza Riverwalk, San Antonio

Bob Davis
Principal Petroleum Systems Analyst
23rd October 2008
Woodside’s HQ

Woodside Energy Ltd.
Perth, Western Australia
Key facts

- Australia’s largest publicly traded pure exploration and production company
- Incorporated in 1954 as Woodside (Lakes Entrance) Oil Co.
- Named after the Victorian town near its original oil leases
- 1962-1963; offered 1/3 shares to Shell and Burmah Oil Company of Australia; Shell Energy Holdings Australia largest share holder (34.27%)
- Now one of World’s leading producers of liquefied natural gas (LNG)
- Market capitalisation: ~A$35 billion (~US$29 billion) as at 09/30/2008
- Operator of Australia’s largest resource project (NWS Venture)
- Key focus areas: Australia, USA, Africa, South America
## Key performance statistics

### 2007*

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production (MMBOE – Three-year rolling average)</td>
<td>70.6</td>
</tr>
<tr>
<td>Revenue (A$ million)</td>
<td>A$400</td>
</tr>
<tr>
<td>Net profit after tax (A$ million)</td>
<td>A$103</td>
</tr>
<tr>
<td>Proved + probable reserves (million barrels of oil equivalent)</td>
<td>1688</td>
</tr>
<tr>
<td>Reserves replacement ratio</td>
<td>334%</td>
</tr>
<tr>
<td>Finding costs (A$ a barrel – three-year rolling average)</td>
<td>A$4.59</td>
</tr>
</tbody>
</table>

* 2007 annual report

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Woodside head office Perth, Western Australia

DRIMS #4502508 | woprd9 | October 2008
Global portfolio

- Exploration interests in 11 countries
- Developments underway in three continents
- Production from three continents
- Markets in five countries

United States

Africa and Middle East

Australia and Asia

- Woodside Offices
- Exploration interests
- Developments: existing and planned
- Major Woodside Customers
**Sales profile**

**Woodside 2007 Production**  
(million barrel of oil equivalent per year)

<table>
<thead>
<tr>
<th>Net share</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LNG</td>
<td>17.1</td>
</tr>
<tr>
<td>Domestic gas</td>
<td>18.8</td>
</tr>
<tr>
<td>Condensate</td>
<td>9.4</td>
</tr>
<tr>
<td>Oil</td>
<td>22.4</td>
</tr>
<tr>
<td>LPG</td>
<td>2.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>69.7</strong></td>
</tr>
</tbody>
</table>

- Production dominated by gas, but nearly three-quarters of revenue from liquids
- More than three-quarters of 2P reserves are dry gas

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**Production**

<table>
<thead>
<tr>
<th>Component</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural gas*</td>
<td>54%</td>
</tr>
<tr>
<td>Oil</td>
<td>32%</td>
</tr>
<tr>
<td>Condensate</td>
<td>14%</td>
</tr>
</tbody>
</table>

Strong performance from a number of assets, particularly Enfield, boosted production by 4% this year.

**Revenue**

<table>
<thead>
<tr>
<th>Component</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural gas*</td>
<td>32%</td>
</tr>
<tr>
<td>Oil</td>
<td>49%</td>
</tr>
<tr>
<td>Condensate</td>
<td>19%</td>
</tr>
</tbody>
</table>

Record production and high commodity prices drove a 5% increase in revenue in 2007 (including Mauritania).

**Reserves (Proved + Probable)**

<table>
<thead>
<tr>
<th>Component</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry gas</td>
<td>81%</td>
</tr>
<tr>
<td>Oil</td>
<td>10%</td>
</tr>
<tr>
<td>Condensate</td>
<td>9%</td>
</tr>
</tbody>
</table>

Over 80% of Woodside’s proved and probable reserves are dry gas. 86% of Woodside's contingent resources are gas, with just over 10% condensate and 4% oil.
Success in gas

**Australian natural gas**
- First natural gas from North West Shelf to Western Australia customers in 1984
- North West Shelf Venture supplies ~600 terajoules a day to Western Australia, Australia’s largest gas consuming state

**Liquefied natural gas**
- Long-term contracts:
  - Japan – 11.3 Mtpa
  - China – 3.3 Mtpa
  - Korea – 0.5 Mtpa
Woodside has significant gas reserves across diverse portfolio

Australia’s gas resource ownership*

(*By companies’ country of origin)
Australia’s LNG projects

**Ichthys**
- **Browse**
  - Operator ~76%
  - INPEX
- **North West Shelf**
  - Operator ~50%
- **Pluto**
  - Operator 90%
- **Gorgon**
  - Operator 50%

**Bayu Undan**
- **Darwin Hub**
  - Operator 56.7%
  - ConocoPhillips

**Sunrise**
- **Darwin Hub**
  - Operator 33%

**Existing LNG Hub**
**Proposed LNG Hub**
**Operating LNG Project**
**Proposed LNG Project**

Karratha Gas Plant, North West Shelf Venture, Western Australia
North West Shelf Venture

Australia’s largest resource development since 1984
1/6th BP, Chevron, MIMI, Shell, BP, Woodside (operator)
> 200 cargoes/year, mainly to Japan, China and South Korea
Onshore gas processing facility Karratha, 1200 km NW of Perth
Producing ~ 2.4 Bcf/day = 16.3MTA (2008)
44% of total Australian oil (39%) and gas (49%) production
Remaining reserves: ~22 Tcf of gas
Pluto LNG Project

- Dry gas resource of 5.0 Tcf for the Pluto and nearby Xena fields
- 180km off WA coast
- 90% Woodside owned
- Site works started Jan 2007
- 15-year sales agreements with Tokyo Gas and Kansai Electric
- Phase 1: single LNG train
- Adjacent to, but separate from NWSV gas processing plant at Karratha
- Forecast production of 700–800 mmcf/d; 4.3 MTPA
Australian oil
Enfield oil project

- Discovered by Woodside in 1999
- 60% Woodside (operator): 40% Mitsui
- ~ 50 km north of Exmouth, Western Australia, WD 400–550 m
- FPSO Nganhurra* – process capacity 100,000 bbl/d, storage capacity 0.9 mmbbls, double-hull, disconnectable
- First oil produced July 2006
- Initial production 70,000 bopd, now stabilised at ~ 40,000 bopd
- Estimated 2P reserves ~ 73.5 mmbbl

* nyun-goo-rah = “we all” in Baiyungu language
Vincent oil project

- Discovered by Woodside in 1998
- 60% Woodside (operator): 40% Mitsui
- ~ 50 km north of Exmouth, 10 km NE of Enfield, WD 350–400 m
- FPSO *Maersk Nguijima–Yin* – process capacity 120,000 bbl/d, storage capacity 1.9 mmbbls, double-hull, disconnectable
- First oil produced August 2008
- Current production ~ 32,000 bopd
- Estimated 2P reserves ~ 73 mmbbl

*nnh-jeema-yen = “to dream” in Thalanyji language*
OceanWay LNG proposal

Description:
- Over 25 miles offshore California
- Specially-built carriers, regasification onboard, no need for permanent offshore surface facilities

Status:
- Deepwater Port application lodged 18 Aug 2006. Approval anticipated 2008
- Positive community feedback – minimal environmental impact and security risks

Project benefits:
- Allows access to large, highly liquid North American market
- Offers competition and flexibility to traditional Asian buyers
Woodside Energy (USA) Inc.

- Fully owned subsidiary of Woodside Energy Ltd., established in 1999
- Formed management alliance with Explore Enterprises of Louisiana in 2004 (dissolved February 2008)
- Offices in Covington (LA) and Houston
- Acquired Gryphon Exploration Co. in 2005 for $297MM - producing gas assets
- 2007 production from Northern GoM
  - 13.5 Bcf and 200,000 bbl condensate
  - 10 operated fields; interest in 7 more
- Two DW oil startups in 2008
  - Powerplay (Anadarko GB-302)
    - 6000 bopd/16 mmscfd
  - Neptune (BHP AT-573-575/617/618)
    - 50000 bopd/37 mmscfd
Exploration: acreage position 10/2008

- 159 leases
  - 48 Gryphon (7 state, 41 federal)
  - 111 Woodside (96 DW, 32 operated)
Production: Gulf of Mexico shelf gas

- 10 production platforms in water depths ranging from 26 ft to 262 ft
- Average net daily production (2007)
  - 37 mmscfd
  - 550 bcpd
Production: Gulf of Mexico DW oil

- **Powerplay (GB-302)**
  - 45% Anadarko (operator)
  - 35% Newfield
  - 20% Woodside

- **Powerplay Field:**
  2,400 ft Water Depth

- **Neptune Field:**
  6,200 ft Water Depth

- **Neptune (AT-573/574/575/617/618)**
  - 35% BHPB (operator)
  - 30% Marathon
  - 20% Woodside
  - 15% Maxus

- Neptune Field:
Neptune project

- Multi-well 50,000 bopd subsea development from multiple drill centers in 6000 ft+ WD, tied back to stand alone tension leg platform above toe of slope.
Neptune topsides

- On stream 6th July 2008
- Capacity reached 21st July 2008
- Producing from 5 of 6 wells, peak 57 kbopd
Summary

- Australian mid sized independent E&P company
- Long history of domestic and international success
- World leader in LNG production
- Strong balance sheet
- Decades of production growth ahead
- Relatively recent entry into GoM
- Gas production from shelf in 2005
- Active player in deep water
- First DW oil production 2008

Thankyou