# A Brief Profile of BHP Billiton and the Oil and Gas Industry for Energy 27

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### Overview of Today's Session

- Overview of the BHP Billiton Group
- Highlights from the Petroleum CSG
- Changes and Challenges to the Industry
- Questions and Comments



### BHP Billiton – A Structure Driven by Customer Needs

#### **Petroleum**

Aluminium



**Base Metals** 



**Carbon Steel Materials** 



Diamonds & Spec Prod Energy Coal





**Stainless Steel Materials** 

















### With Outstanding Assets in Each Customer Sector Group

**Energy Coal Operations in Sth** Africa, Australia, US, Colombia

Base Metals

Copper, Silver

Lead, Uranium

Petroleum Oil Gas LNG

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**Operating Excellence** and Technical Capability

Carbon Steel **Materials** Iron Ore, Coking Coal, Manganese

> Aluminium Aluminium

> > **bhpbilliton**

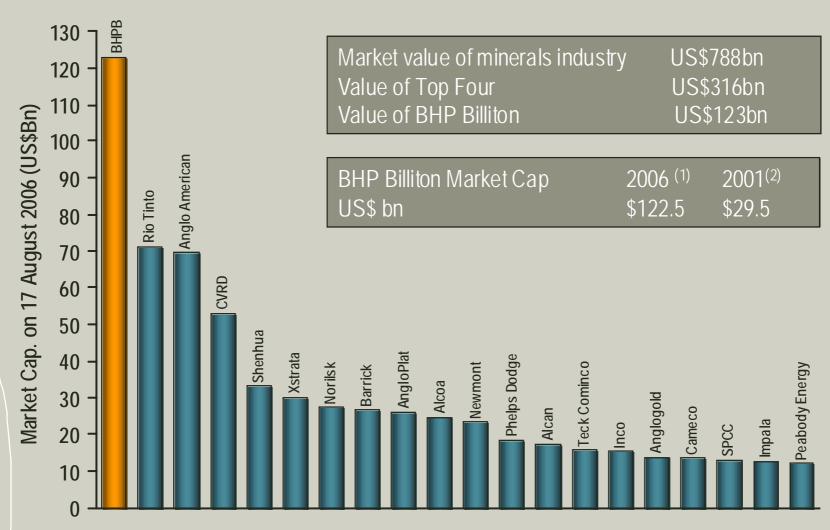
**Stainless** 

Diamonds & **Specialty Products** Diamonds, RBM





### The Largest Company in a Consolidating Sector



Source: Datastream and Bloomberg (data as at 17 August 2006)

1. Market Capitalisation on 17 August 2006 2. Market Capitalisation on 28 June 2001



### Petroleum – Current Operations

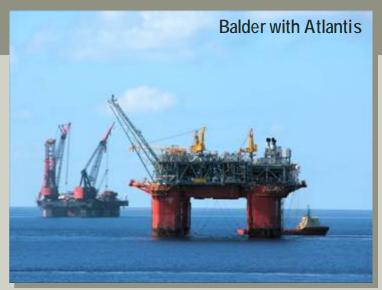


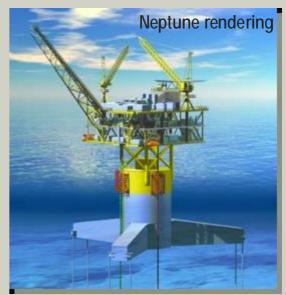
- Main Offices
- Production Operations
  - Current Production 315,000 barrels of oil equivalent per day



### Gulf of Mexico – Project Update

- Atlantis South (44% BHP Billiton)
  - Capacity: 200,000 barrels of oil/day and 180 mmscf/day of gas
  - First production 1Q quarter 2007
- Neptune (35% BHP Billiton, operated)
  - Sanction June 2005
  - Capacity: 50,000 barrels of oil/day and 50 mmscf/day of gas
  - First production 4Q 2007
- Shenzi (44% BHP Billiton, operated)
  - Sanction June 2006
  - Capacity: 100,000 barrels of oil/day and 50 mmscf/day of gas
  - First production mid-2009







### Oil & Gas: An Industry Undergoing Profound Change

### Changing Shape of Supply & Demand

### Infrastructure/ Capacity Constraints

## Energy Insecurity Driving Government Policy

## Environmental Policy Impacts Still Unclear

- Huge absolute growth
- Demand growth trending towards Asia (China)
- New price zone
- Alternatives now looking economic
- "Stranded" resources now in play

- \$16Tn investment required to 2030 (IEA), across the value chain
  - Power plant fuel & technology choices
  - Export/delivery systems
  - LNG import
  - Refining

- Energy rising up government policy agendas
- Increasing government intervention
- NOCs securing international supplies

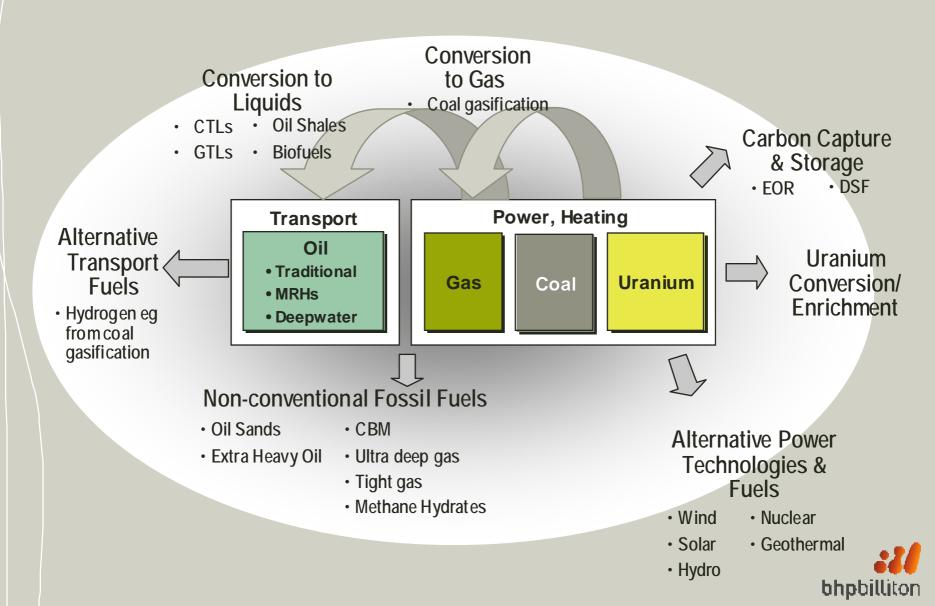
- Local issues impacting development
- Global climate growing focus on efficiency, fuel mix, renewables, nuclear, technology

- New opportunities in nontraditional areas
- More options for resource commercialisation
- Projects are larger, more remote, more expensive
- Competition increasing for resource access
- Political risk and opportunity

Has to be factored into investment decisions



### Activities/Projects Go Far Beyond Traditional Areas



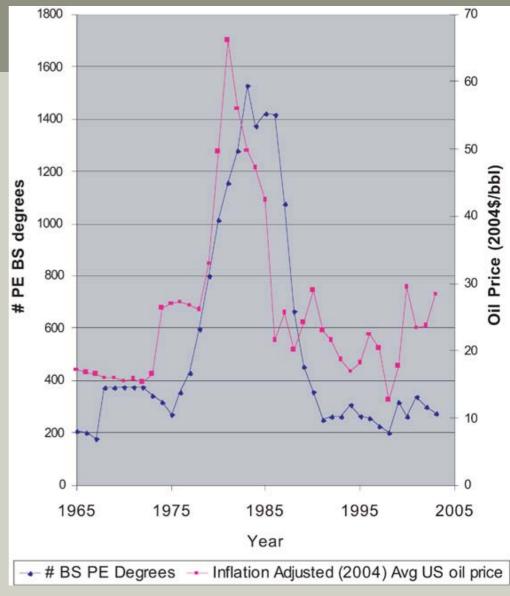
### The Short Supply of Technical Talent

- More than 50% of workers for oil companies and their contractors will retire in the next 5-10 years (Booz Allen Hamilton)
- Average age of "working members" in SPE is >50, with 70% of technical staff between the ages of 41-65
- The number of petroleum engineering diplomas awarded in 2002 was one-quarter the number awarded annually in the 1990s (Booz Allen Hamilton)
- Perception among young graduates that oil and gas is a "sunset industry". Department of Labor states that in the U.S., industry employment is expected to decline by 6 percent through 2014



#### Reasons for the Shortfall

- Current challenge of other industries
- Industry cycles cause a lack of employment confidence
- Increased company and investor focus on shortterm performance
- Lifestyle, as most activity is taking place in remote locales



Data on the number of PE degrees awarded from Mukul Sharma, U of Texas and June 2006 *Journal of Petroleum Technology*, an SPE publication

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### Reasons for Hope

- The Petroleum industry offers exciting, well paid jobs with higher starting salaries for graduates with comparable training. "This doesn't have to be desk work."
- We are dedicated to one of the most difficult and urgent problems facing humanity today.
- The industry is in a cycle that appears to be of a possible longer term.
- Industry opportunities are a bit more visible now.
- Much greater international workforce.

#### But a continued challenge.



#### In Summary

- Like you, our people are our most significant asset and number one priority – Zero Harm drives all our operations.
- We are in an industry that is undergoing rapid and radical change.
- We must find ways to attract the next generation of geoscientists and engineers.



