



Introducing Alternative Energy

October 2007

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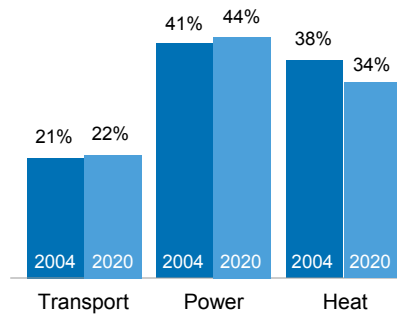
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2

The emissions challenge



- The power sector is already the largest contributor of CO₂, generating twice as much CO₂ as the transport sector.
- Growth in coal-fired generation is projected to be the single largest contributor of new greenhouse gas emissions over the next fifteen years.

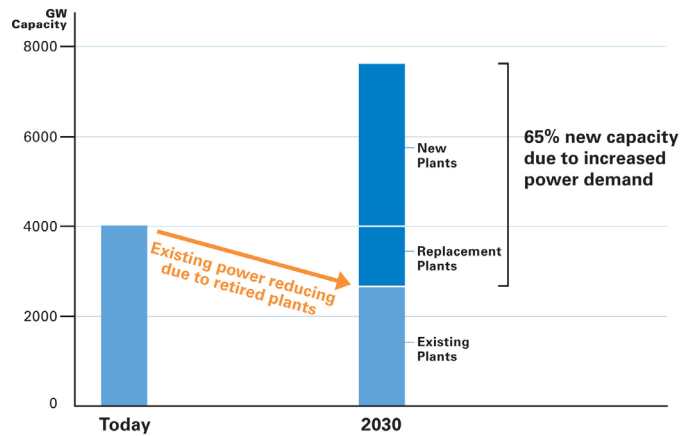


Source: IEA World Energy Outlook, 2004

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3

65% of power plants needed in 2030 are yet to be built



Source: WEO 2006

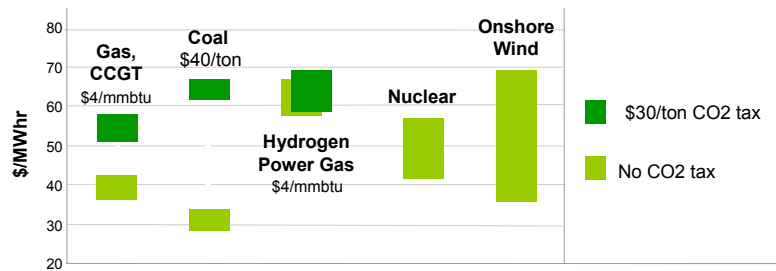
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4

Increasing suite of low carbon options are available



- Technological advances are already closing the gaps.
- As the industry demonstrates capability, carbon-constrained policies are likely to be more acceptable to policy-makers.
- As the chart shows, taxing carbon dramatically shifts the relative cost picture.



Impact of \$30 carbon tax on generation costs
Includes life-cycle costs of capex/fuel/maintenance and assumes 9% IRR

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Source : BP Analysis

5

BP Alternative Energy



- BP Alternative Energy, launched in 2005, provides low and zero-carbon electricity from solar, hydrogen, wind and natural gas-fired power generation. Our power marketing and trading business brings this electricity to market.
- We focus on power because the plants that generate electricity are the main source of the world's carbon dioxide emissions, producing twice as much as the transport sector.
- We will invest at least \$8 billion over the next ten years with \$1.8 billion due to be spent by 2008.
- We have some 2,500 employees around the globe and that number is growing all the time to meet the demand for specialists in new, clean forms of power.

Solar power

Hydrogen power

Wind power

Gas generation

Power Marketing & Trading

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6

Solar power



Currently

- BP is a leading solar manufacturing and marketing company
- Currently we have manufacturing capacity of 200 MW with facilities in Bangalore, Madrid, Frederick, Maryland and Sydney

Our commitment

- We will add another 100 MW cell capacity in 2007
- We plan to increase year-on-year sales in excess of 30% in 2007
- We aim to double current market share by 2010

Silicon activities

- Signed significant supply contract for 2007
- Extensive investigation in alternative silicon sources:
 - Provides opportunity for significant cost reduction over traditional sources
 - Scalable and in line with future growth requirements
- Continued development of our advanced Mono² and commercialization:
 - Mono² efficiencies with multi cost and processing advantages

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7

Hydrogen power



Currently

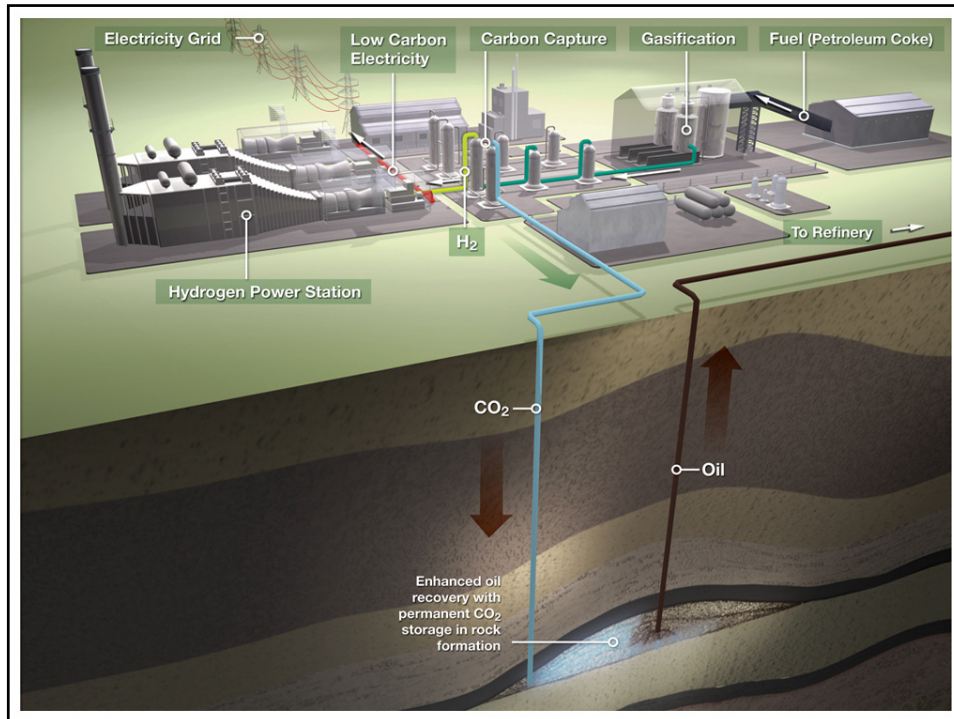
- BP is planning the world's first industrial scale hydrogen power projects with carbon capture and storage – in California and Australia
- We were recently awarded a \$90 million incentive tax credit by the US Federal Government for our Carson project.
- We have entered into a strategic technology agreement with General Electric to accelerate the development of the technology and the deployment of the concept.
- Together with Rio Tinto we have formed a jointly-owned company, Hydrogen Energy, to focus on hydrogen-fuelled power generation using fossil fuels and carbon capture and storage technology.

Our commitment

- We plan to show that this wide range of technologies will work at scale and will use a variety of fuels to produce hydrogen and diverse types of reservoirs for sequestration.

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8



Wind power



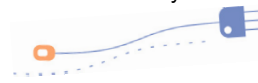
Currently

- We run 2 wind farms in the Netherlands
- We have a 300 MW project under construction in Cedar Creek, Colorado with partner Babcock & Brown
- We have a 60 MW project under construction in Texas with partner Clipper Windpower
- We have a 40 MW project under construction in Maharashtra, India with our partner Suzlon Energy
- Secured options for 4250 MW of turbines over the following 5 years
- We have an opportunity to develop almost 100 projects across 25 states with a potential generating capacity of 15,000 MW – that's enough clean electricity for some 4.5 average American homes

Our commitment

- We will have completed or be in construction some 450 MW by end 2007 and this will grow to over 1,000 MW by end 2008 including our proposed Flat Ridge project in Kansas
- Meet our launch commitment of 450 MW by end 2008 more than a full year early

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10

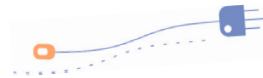
Proposed Flat Ridge Wind Farm



Kansas

- The proposed project is located 8 miles north and east of Medicine Lodge in Barber County
- It will be a 100 MW project – sufficient clean electricity for some 30,000 average American homes
- The proposed site covers some 5,000 acres
- Westar Energy has announced its intention to become a 50 MW owner generator of the project on completion of construction and to buy 50 MW via a power purchase agreement
- It is hoped that the project will start construction in 2008
- The project will utilize Clipper Windpower Liberty Turbines
- The project will be developed by BP Alternative Energy

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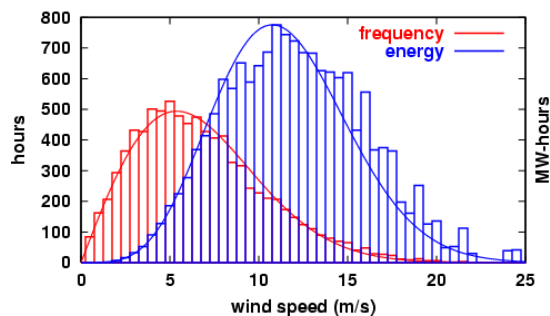


11

Lee Ranch Wind Facility - Colorado



- Distribution of wind speed (red) and energy generated (blue) for all of 2002 at the Lee Ranch facility in Colorado. The histogram shows measured data, while the curve is the Raleigh model distribution for the same average wind speed. Energy is the Betz limit through a 100 meter diameter circle facing directly into the wind. Total energy for the year through that circle was 15.4 gigawatt-hours.



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12

Gas-fired power



Currently

- We participate in 12,000 MW of gas-fired power plants (the size of a mid-sized US utility).
- We have successfully developed five new power plants in the past five years in the US, UK, Vietnam, South Korea and Spain.
- Our 1075 megawatt K Power CCGT in South Korea is the most efficient gas power plant in Korea.
- We broke ground at a 250 MW Texas City Steam Turbine project in 2006 that will take our Texas City facility to 1000 MW when complete.

Our commitment

- We will continue to look for high value opportunities to monetize our equity gas positions and build cogeneration facilities at existing BP facilities.



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13

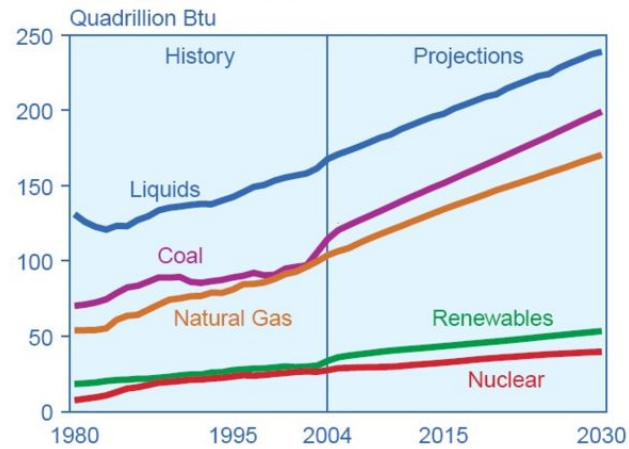
2008 Global business



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14

Figure 4. World Marketed Energy Use by Fuel Type, 1980-2030



Sources: **History:** Energy Information Administration (EIA), *International Energy Annual 2004* (May-July 2006), web site www.eia.doe.gov/iea. **Projections:** EIA, System for the Analysis of Global Energy Markets (2007).

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The Energy of the Future!

