



BP Energy Outlook 2030

Washington, DC 26 April 2011

Outline



Global trends

US particulars

What can bend the trend?

Non-OECD economies drive consumption growth





Gas and renewables win as fuel shares converge







Growth of world energy consumption 2010-30 by sector and region by sector and fuel **Billion** toe **Billion** toe 3.0 3.0 Hydro 🔲 Other 2.5 2.5 Non-OECD **Nuclear** 2.0 2.0 Renew. Middle 1.5 1.5 East Electricity Gas 1.0 1.0 China & Biofuels India 0.5 0.5 Oil OECD 0.0 0.0 Coal Other Other **Fransport** Transport Industry Industry -0.5 -0.5 Final energy use Final energy use Inputs to power Inputs to power

Liquids balance – demand and supply





Policies to constrain carbon emissions gradually tighten





US consumption flat, natural gas & renewables gain share





US power generation grows while transport declines





US transport demand contracts despite biofuels growth





Unconventional gas will play a growing role









* a back-cast which illustrates what is required to stabilise greenhouse gas concentrations at 450 ppm from IEA, *World Energy Outlook 2010*

US: Impact of climate policy case





Implications for energy security







- Energy consumption driven by non-OECD; US flat
- Fuel mix diversifying
- Carbon emissions too high globally; falling in the US
- Regional and policy trends mixed; positive for US import dependence



- <u>www.bp.com/energyoutlook2030</u>
- Also:
- <u>www.bp.com/statisticalreview</u>





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