World Energy Outlook 2014

Key findings with a focus on China

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Signs of stress in the global energy system

- **Current calm in markets should not disguise difficult road ahead**
  - Turmoil in the Middle East raises doubts over future oil balance
  - Resurgent debate over the security of gas supply to Europe

- **Mixed signals in run-up to crucial climate summit in Paris in 2015**
  - Global CO₂ emissions still rising, with most emitters on an upward path
  - At $550 billion, fossil fuel subsidies over four-times those to renewables
  - Increasing emphasis on energy efficiency starting to bring results

- **Will change in global energy be led by policies, or driven by events?**
As China slows, then India, Southeast Asia, the Middle East and parts of Africa & Latin America take over as the engines of global energy demand growth.
China pushes and then plateaus

China’s energy demand in the New Policies Scenario

China leads demand growth to the mid-2020s, but energy efficiency gains, changes to economic structure & lower population growth lead to a plateau by 2040
Renewables supply half of the growth in global power demand; wind & solar PV subsidies decline from 2030 as costs fall & recent higher-cost commitments expire
Nuclear capacity grows by 60%, but no nuclear renaissance in sight

By 2040, an expanded nuclear fleet has saved almost 4 years of current CO₂ emissions & for some countries has improved energy security & balances of energy trade.
Nuclear power: public concerns must be heard and addressed

Key public concerns include plant operation, decommissioning & waste management; By 2040, almost 200 reactors are retired & the amount of spent fuel doubles
The entire global CO₂ budget to 2100 is used up by 2040 – Paris must send a strong signal for increasing low-carbon investment four times beyond current levels.
Geopolitical & market uncertainties are set to propel energy security high up the global energy agenda

China plays a key role in global energy demand growth, but policy efforts to improve energy efficiency and reduce coal use bear fruit

Without clear direction from Paris in 2015, the world is set for warming well beyond the 2 °C goal

Far-sighted government policies are essential to steer the global energy system on to a safer course