dti

Changing the Face of UK Energy: the Challenge for Securing a Genuinely Sustainable Energy Future

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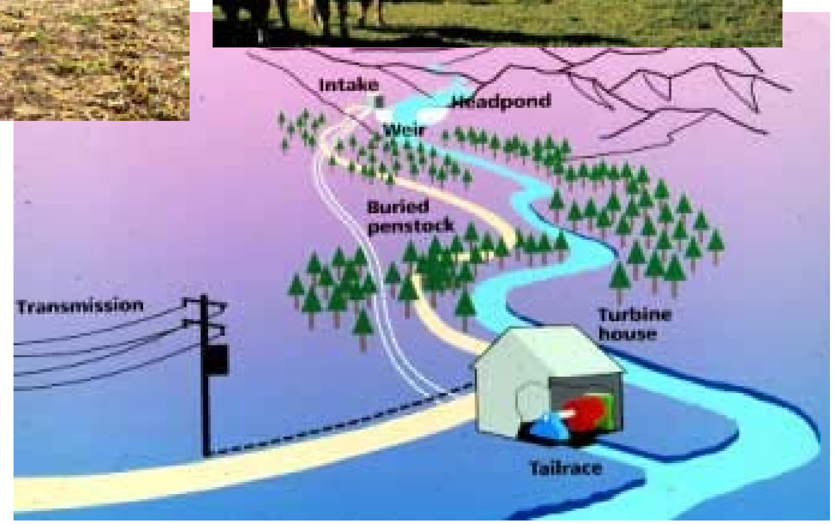
Cleaner, Smarter Energy: policies for a low carbon future

Changing the face of UK Energy

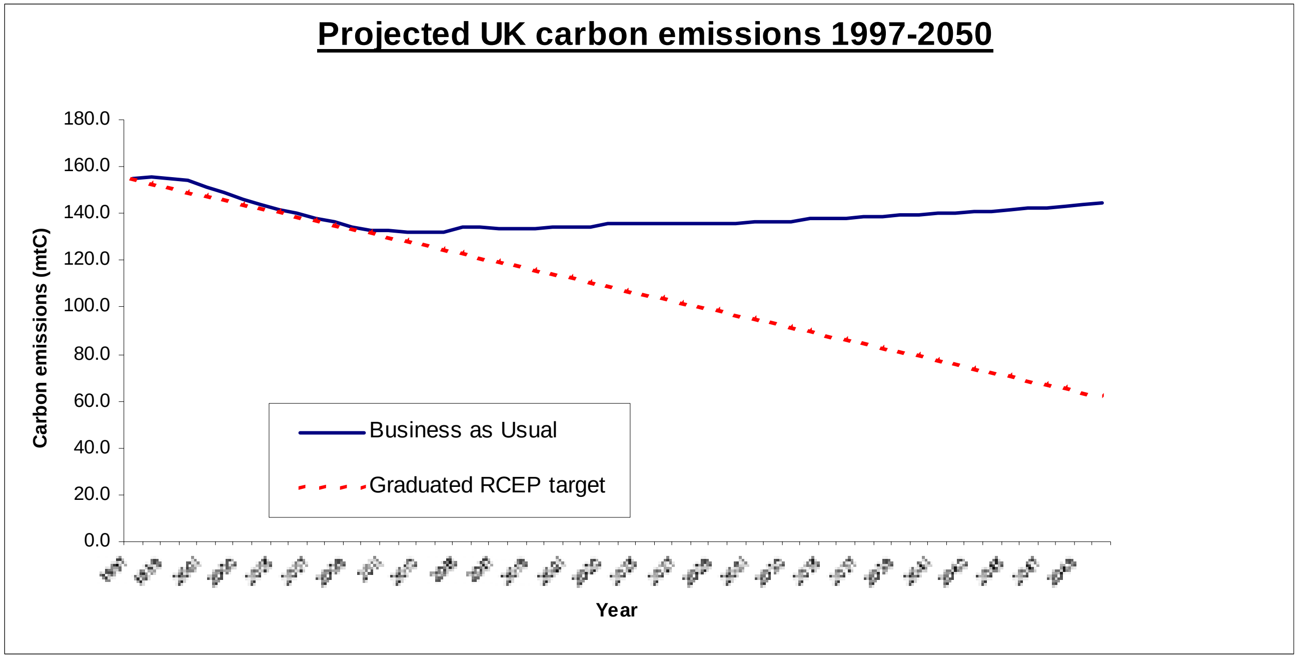






The Carbon Challenge



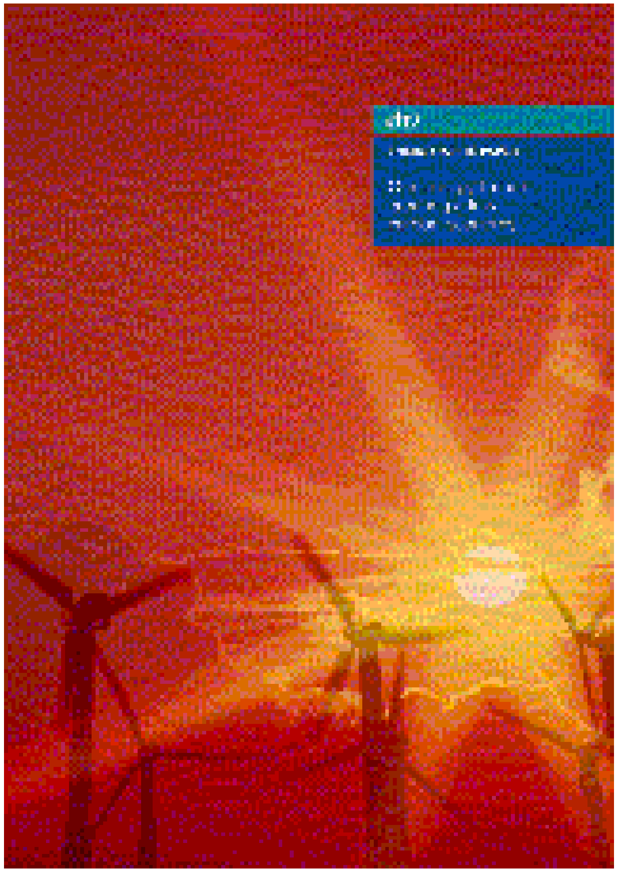
2003 **2050**

the new goals of UK energy policy

- putting ourselves on a path to 60% cuts in CO_2 by 2050
- maintaining reliability of energy supplies
- promoting competitive markets in the UK and beyond
- ensuring that every home is adequately and affordably heated

Aim to achieve these together

The Renewables Timeline



Changing the face of UK Energy

2001/06: Bio-energy capital grants and Energy Crops scheme to develop biomass generating capacity.

Energy crops Biomass may be economically viable in mid 2010's

2002 – 2012: Implementation of solar PV demonstration programme, in line with our competitors, as set out in the "Opportunities for All" white paper.

PV may be economically viable post 2020.

2002 – 2027: Operation of the Renewables Obligation

2003: Second round of allocation of offshore wind sites

2005: Installation of offshore wind farms from first round of allocation of offshore wind sites

2005 onwards: Installation of further offshore wind farms following the second and subsequent rounds of allocating offshore wind sites.

2003: OFGEM sets the incentive framework for distributed generation, for implementation in April 2005 the next price control review.

2005/06: We review the Renewables Obligation

2005: Next distribution price control implemented

2010 – 2015+ Wave and tidal technologies may become commercially viable

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Renewables supply 1.5% of UK electricity (excluding large hydro and mixed waste incineration excluded).

Onshore wind (500MW) and Landfill Gas (400MW) largest contributors.

2010 target

Renewables supply 10% of UK electricity.

Onshore and Offshore wind may be the largest contributors to the renewables generation mix in 2010

2020

Renewables supply around 20% of UK electricity

Onshore and Offshore wind and biomass may be the largest contributors to the renewables generation mix in 2020.

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Renewables Strategy

- legislation
- financial support
- technological support
- business support
- partnership

Legislation

- the Government will maintain the level of support provided by the Renewables Obligation until 2027
  - Obligation £1b per year in 2010

Renewables Obligation

- Licensed suppliers must source an ever increasing amount of their electricity supply from renewable sources
- Started in 2002 at 3%, will reach 10.4% by 2010/11
- Just announced an increase in the RO and new target will be 15.4% by 2015/16
  - Consultation will follow

Financial Support

- Capital grants
  - Offshore wind
  - Biomass
  - PV
- Research, development & deployment
- Community projects

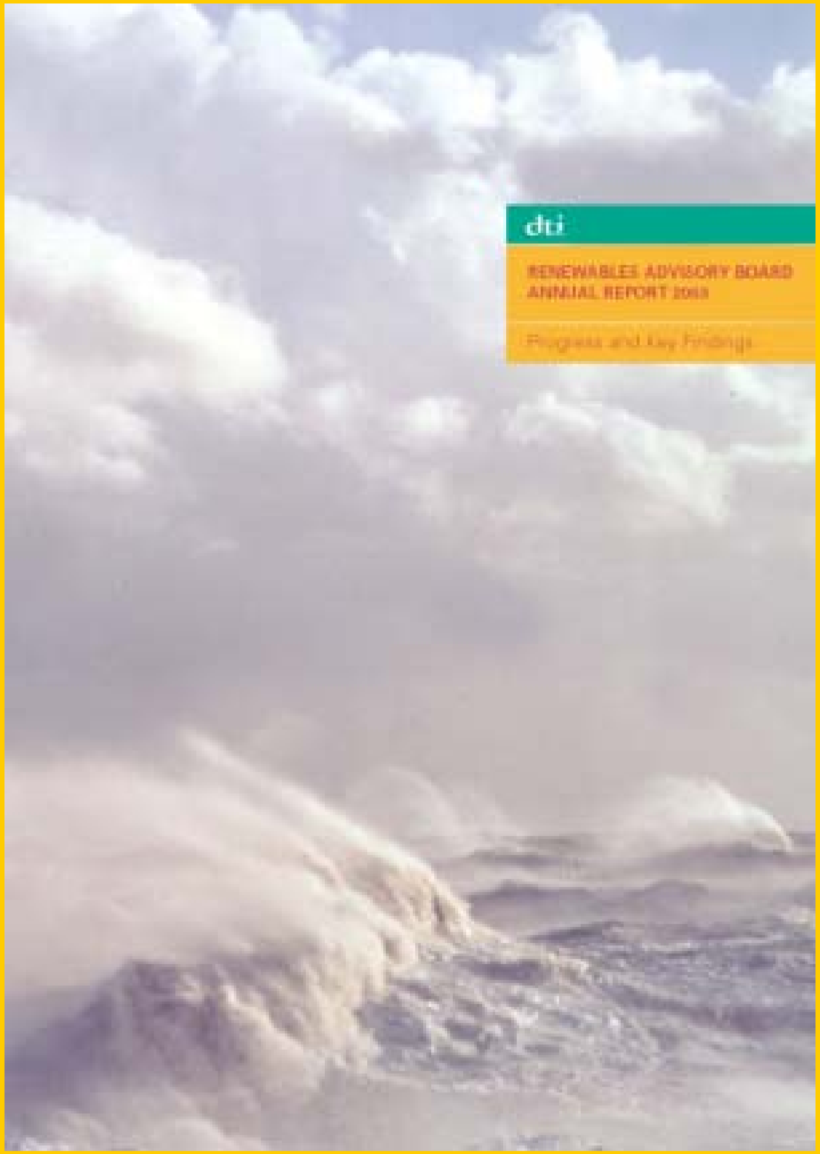
Technological support

- Programme of Research, Development & Deployment
  - advanced biomass
  - wave / tidal
    - Marine Test Centre Orkney (open this year)
    - Ocean Power Delivery
  - hydrogen / fuel cells

Business support

- Renewables UK
  - UK content of major contracts
  - gap analysis
  - jobs – baseline established
  - major investors (Invest UK)

Partnership



Renewables Advisory Board

- The Renewables Advisory Board is an independent non-departmental public body sponsored by DTI, which provides advice to Government on a wide range of renewable energy issues on request and may also offer other such advice to the Government, as it considers appropriate.
- The Board comprises twenty six members and is chaired by the Minister for Energy at the DTI.
- Working groups established
- RAB reported in December, 2003

RAB Work Groups

Network infrastructure

Planning

Communications

Jobs

Finance

Innovation

Next steps

- announcement of awards of second round of offshore licences – December 2003
- consultation response on technical amendments to Obligation
- consultation on new planning guidance
- continued policy development on link between grid and renewables
- conference for financial sector
- publish supply chain gap analysis

Issues

- Connecting renewables
  - distributed generation
  - transmission
- Planning
  - PPS 22
  - MoD – guidance / advice / research
- Public attitudes

Scenarios and Wind

- Expect wind to play a major part
  - Maybe 80% of 2010 target
    - 8GW – onshore and offshore
  - Possibly 70% of the 2020 aspiration
- Can it be done?
- The wind market sector worldwide has grown on average by at least 30% year on year

Consequences for the UK Wind Market

- New market conditions has accelerated development
- Current interest in the UK is as follows
  - Onshore 10 GW
  - Offshore
    - Round 1 1 GW
    - Round 2 6 GW

Opportunities

- The support measures announced support another 12 GW of renewable projects to compete to generate ROCs
- Investment opportunities
  - Manufacturing
  - Owner

Future

- An energy mix
- Renewables an important part of the solution
- Energy efficiency important as well
- Issues to be accommodated
- Government committed to the future


it's only natural

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