British Hydropower Association Conference

11 October 2007

Furthering the Expansion of Renewable Energy in the UK

Duarte Figueira, Director

Renewable Deployment Team, BERR

1. Issues to cover

- Challenges and Targets
- Focus on Financial, Planning and Grid issues
- Reform of the Renewables Obligation
- Planning Reform proposals
- Improving Grid Access for renewables
- Building industry confidence

2. Key long term challenges

- Tackling Climate change
- Ensuring secure, clean and affordable energy

Key Principles

- International and domestic action on climate change and energy security
- Independently regulated competitive markets – cost-effective and efficient
- Alignment of market participants' objectives and our energy policy goals

3. What we need to deliver

- Reliable energy at competitive prices
- Energy Efficiency – saving of energy
- Low Carbon Energy – cleaner energy supplies
- 10% of renewable electricity by 2010
- 20% renewable electricity aspiration for 2020

4. EU Renewables Target

- UK fully committed to Spring European Council Energy package - including 20% renewable energy target
- Very challenging for UK and EU as a whole
- Ambitious and credible approach key
- Details of implementation to be negotiated, but once MS's contributions to the target are agreed appropriate measures will be brought forward, in addition to those set out in EWP
- Consultation on proposal for Directive early 2008

5. Renewables Deployment

3 key areas of action

- Renewables Obligation
  - Banding to encourage deployment of a wider range of renewable technologies
- Planning consents
  - IPC and National Policy Statements
- Improving grid access for renewables

6. Renewables Obligation (RO)

- Introduced 2002
- Requires suppliers to provide an annually increasing and specific % of sales from eligible renewable sources
- It’s a long term mechanism – runs to 2027
- Cost borne by supply companies and passed to consumer
- Will provide support to renewables industry of £1bn/ year by 2010

7. Contribution of RO

- Since 2002 RO eligible renewable generation risen from 1.8% in 2002 to 4.4% in 2006 (4.6% for all renewable generation).
- Year on year we are seeing increasing amounts of capacity coming through.
- For reference, according to the figures published in DUKEs 2007 hydropower generated 4,605GWh which was 25.4% of renewables generation for 2006.

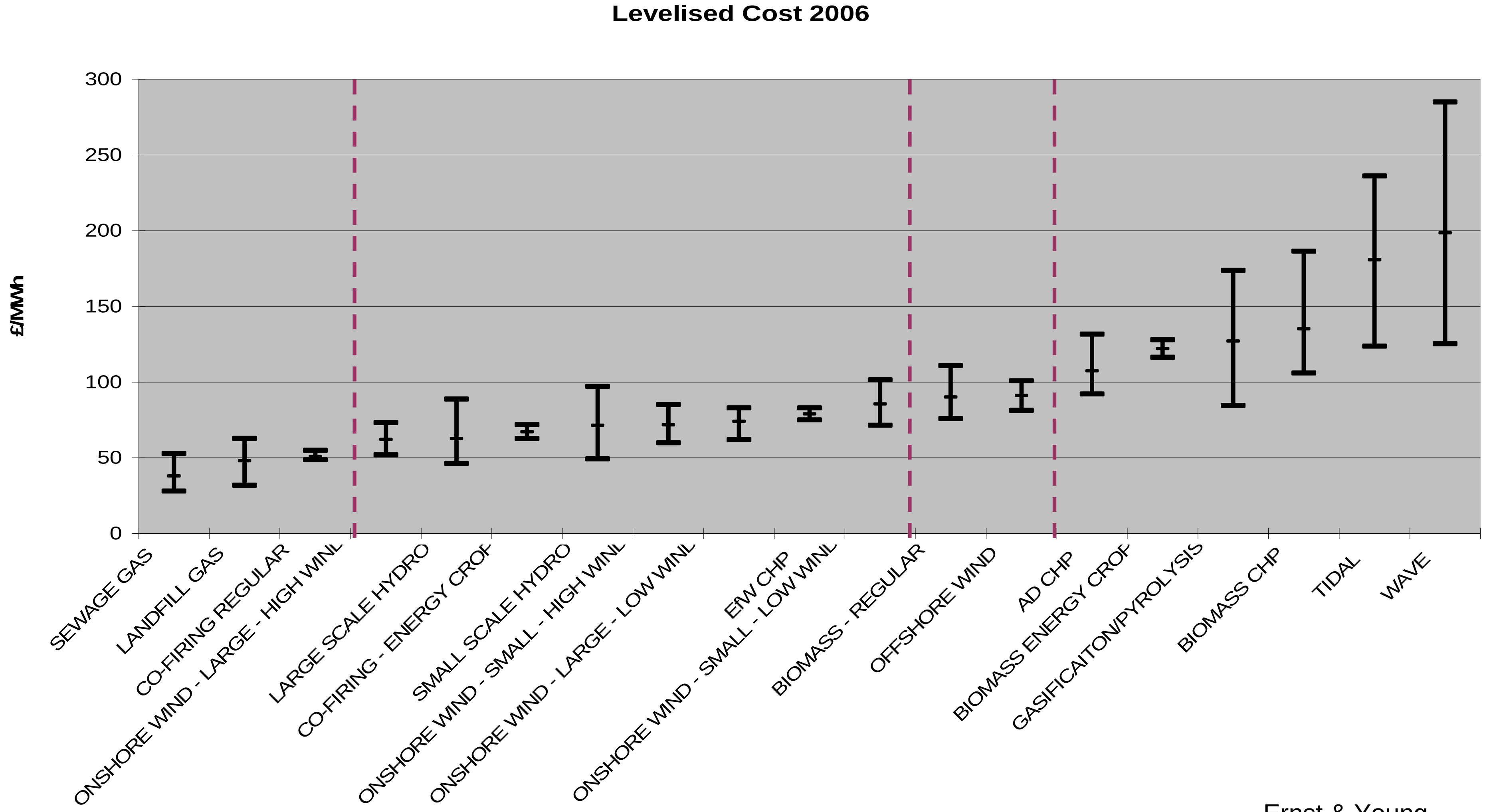
8. Overview of proposed RO changes - in Energy White Paper

- increase total renewables growth
- increase RO efficiency - VfM for consumers
- help bring forward developing technologies

Key features

- Banding
- Raising the RO to 20%

9. Cost of Technologies

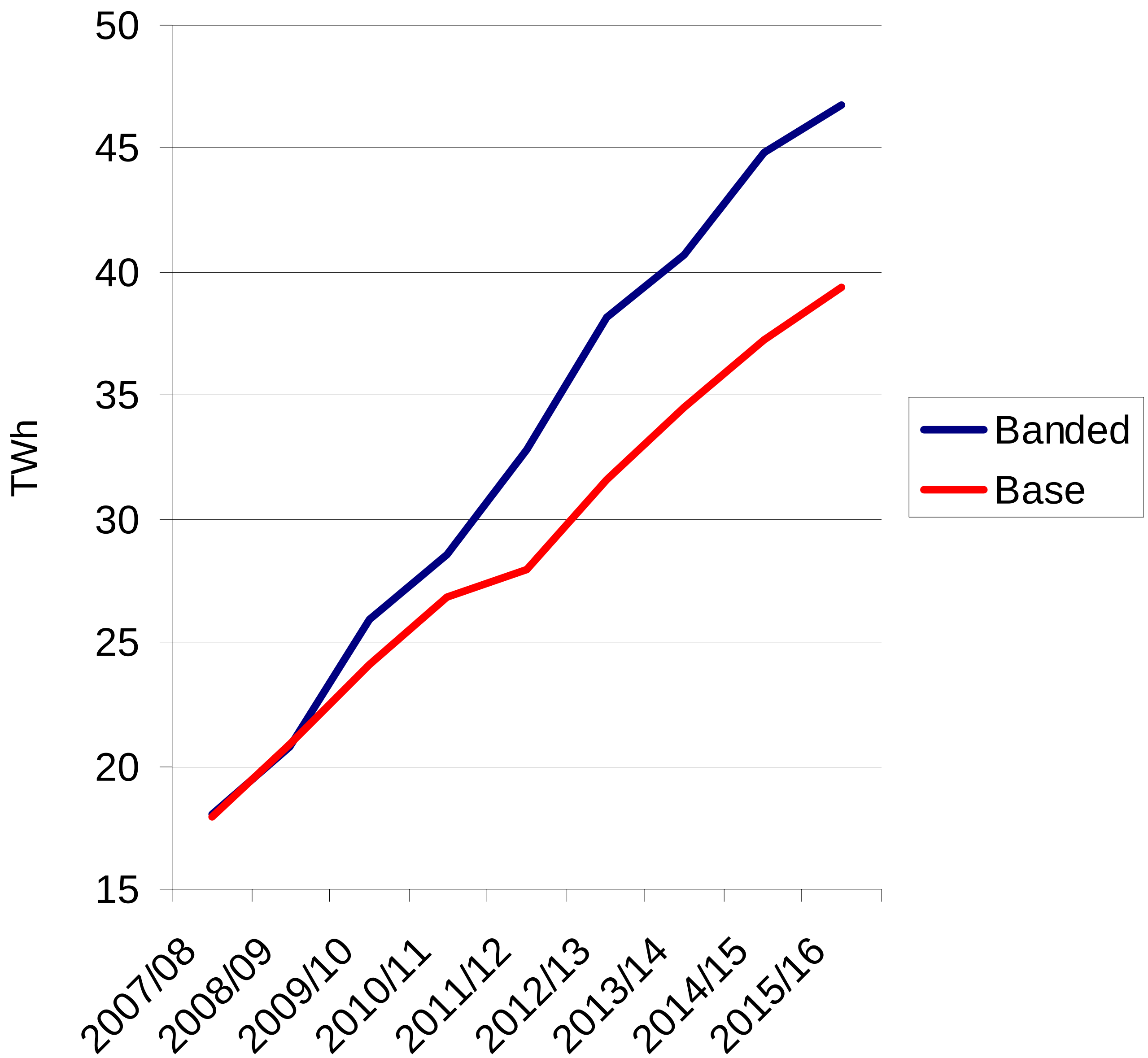


Ernst & Young

The Bands

Band	Technologies	Support Level
Established	Sewage gas; Landfill gas; Co-firing of non-energy crop (regular) biomass	0.25
Reference	Onshore wind; **<u>Hydro-electric</u>**; Co-firing of energy crops; Energy from Waste with CHP; Other not specified	1
Post-Demonstration	Offshore wind; dedicated regular biomass	1.5
Emerging Technology	Wave; tidal stream; ACTs; dedicated biomass with energy crops; dedicated biomass CHP; solar PV; geothermal	2

Impact of Banding on Deployment



12. Impact of Changes

Package of proposals will lead to

- MORE renewables deployed (base -11.4%, banded 13.5% in 2015/16)
- MORE carbon saved (base – 30MTc, banded 33MTc in 2015/16)
- GREATER diversity in technology
- DECREASED deadweight loss – cost to consumers 7% increase against 5% if no change
- FLEXIBILITY

13. Planning Reform - key aspects of the proposals

- Government consults on and publishes national policy statements – energy, transport, water, waste
- Defined standards for preparation and consultation by developers at the pre-application stage
- Independent Infrastructure Planning Commission examines and determines applications
- Rationalised consent regime

14. Planning Reform - National Policy Statements (NPSs)

- Establish the national case for infrastructure development
- Set the policy framework for Infrastructure Planning Commission decisions
  - integrate strategic economic, social and environmental policy objectives to deliver sustainable development
  - show how capacity and demand are to be taken into account
  - consider relevant issues in relation to safety or technology

15. Planning Reform – possible energy NPSs

Overarching NPS covering climate change and security of supply

Fossil fuel power stations

Renewable Energy

Gas Infra-structure

? Nuclear (only if nuclear need is confirmed)

Electricity Networks (cross-cutting)

16. Planning Reform – role of the IPC

- 20 - 30 commissioners appointed for expertise including planning, law, engineering, economics, community engagement, environment, local government
- Applications normally considered and decided by panel of 3-5 commissioners, with option for one commissioner and secretariat and decision by board in less complex cases
- panel would conduct the consideration of application throughout
- most evidence in writing, with discretion for panel to call oral evidence
- open floor stage where all interested parties could have their say
- statutory time limit of nine months for examination/decision

17. Improving Grid Access for Renewables

- Impressive progress.
- Investment in transmission underway – significant commitments through TIRG and TPCR.
- BUT continuing delays in delivering infrastructure (planning) and lack of flexible, bankable access products.

18. The need for change

- A possible 20-25GW connected renewable generation (much of it variable) to meet 20% aspiration means that the system will be very different.
- We have the opportunity to connect more generation for a given grid capacity.
- A key challenge is how to share capacity between different forms of generation

19. White Paper Commitments

- Work with Ofgem, National Grid and industry to deliver essential changes in the short term via existing governance framework:
  - Managing the GB queue
  - CUSC Mods
  - TASG
  - Operational review, SQSS review
- The Transmission Access Review
  - Broader review

20. Building Industry confidence

- Ministerial Commitment to proceed at pace
- Providing regulatory certainty e.g. offshore transmission regime in place by October 2008
- Providing confidence on future development of renewables e.g. proposals for future offshore rounds by Dec-2007
- Continued action re specific barriers to progress.