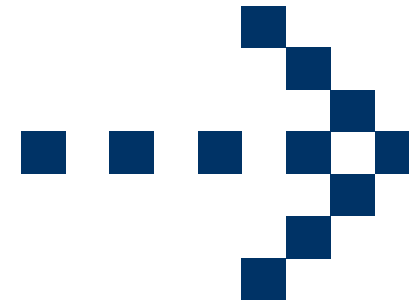


# Renewable Energy Policy Issues: Sustainability, Security and Competition

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# Overview

- Introduction
- Environmental Issues
- Security Issues
- Competition Issues
  - countries with no intervention in primary markets
  - countries where environment takes precedent
- Future of EU Renewable Energy Policy

# Renewable Energy Policy in Europe

- Drivers
  - EU Directive
  - Country Policies
  - International Commitments
- Difference in Member State Policies
  - result from attitudes to:
    - markets, competition and regulation
    - security
    - environment

## Country attitude to environment beyond climate change

- Differences to do with:
  - societal ethos
  - sustainable development
    - waste strategy
    - agricultural policies
    - transport
  - nuclear waste
- If primarily climate change based, carbon is the key issue not necessarily renewables

## Security - Black-outs

- Australia, New Zealand and California 1999-2000
- E.USA, Sweden, Denmark, UK( failures in London and Birmingham a week apart), Italy
- Generation and network failures rather than market, so far
- Potentially more powerful than competition objective

# RE Policy in Countries where Competition and Markets are Central

- UK one end of the spectrum
- White Paper on Energy Policy
  - [www.dti.gov.uk/energy/whitepaper](http://www.dti.gov.uk/energy/whitepaper)
- 60% cut in carbon emissions by 2050 from 1990 levels
  - only new substance for any policy was £60 million in 2002-2005 Spending Review for renewables

# Philosophy of how to trade-off Government objectives

- Energy policy objectives in the UK are:
  - environmental
  - competitive
  - security
  - social
- Government view is that objectives can be met together without trade-off
- No intervention in primary markets
- Renewable Obligation provides premium payment
  - no other support

## Renewable Obligation

- Obligation on suppliers to source rising % from renewable electricity to reach 10% by 2010
- 1 MWh = 1 ROC
- Supplier provides Ofgem with required ROCs, or
- Supplier buys out at 3p/kWh for any shortfall

## RO Revenue Streams

- Energy – 1.5-2p/kWh
- ROC – 2-3p/kWh
- LEC – 0.086-0.43p/kWh
- Recycled premium – 1.5-2p/kWh
- TOTAL between 5-7p/kWh depending on contract
- Supply and demand crucial for values

## RO, value and financing

- RO has price, volume and market risk if NOT an integrated electricity company
- Large companies able to take risk and gain reward
- After 2010, ROC value could fall to zero unless 10% obligation increased
  - Appears that Government understands implications for financing

## Competition takes 2nd Place to Environmental Objective in Certain Circumstances

- Majority of European Countries have support mechanisms for Renewables, but also preferential treatment in primary market:
  - for example,
    - priority access ‘must take’ contracts for renewables and CHP
    - special market rules
      - eg, priority market balancing
    - special connection rates

## Other Policies?

- If no intervention is acceptable in primary markets:
  - carbon trading can be a threat, if renewable energy sector specific support questioned
    - currently the case in the UK
  - valuation of externalities important argument for additional support but unlikely to be as effective as market intervention

## Key Question: What policy the EU will choose for next stage of RE Directive

- A few years ago, would have bet that the EU would go down competitive route similar to UK
- UK mechanism risky for many investors
- Evidence for success very different from time when RE Directive was adopted
- Policy should be open and evidence based

## Conclusion

- Renewables market here to stay and very large
- Business opportunities in Europe depends on
  - basis of country support mechanisms (ie competitive or not) and risk
  - which way the next stage of EU Directive goes