

Response to consultation on the Government's Renewables Energy Strategy

Executive Summary 21st January 2009

by Transition Brighton & Hove Energy Group

1. Recommendations

- a) Adopting the *precautionary principle*, the UK should plan for the contingency of cessation of foreign oil and gas, and adopt a new target of 100% electricity renewable by 2020.
- b) District heating should be retrofitted to power stations close to conurbations like Brighton & Hove, increasing energy efficiency from ~ 55% to ~ 90%.
- c) Plan for all vehicles to be electric or hybrid electric by 2020.

2. Introduction

- a) Climate change and fossil fuel depletion require renewables and an immense political and technical mobilisation of resources worldwide.
- b) EU targets on CO₂ emissions are too conservative, and to avoid more than 2°C warming, global cuts of 60% per capita by 2030 and 80% by 2050 are necessary.
- c) Peak oil availability may occur in 2010 and peak gas by 2015, so the UK cannot rely on unlimited resources and should plan for increased transport efficiency.

3. Scenarios

- a) Assess the risks of failure of carbon capture and disposal.
- b) Exported renewable energy is unlikely.

4. Regulation

- a) Schemes should meet EROEI (Energy Return On Energy Invested) criteria.
- b) Develop a cross-European strategy with a minimum 15% of total energy renewable by 2020 within the UK.
- c) Penalties for bogus carbon offset schemes should be treated as fraud and theft.
- d) The OFGEM regulator should impose a standard tariff and allow consumers to switch at any time and impose load sensitive tariffs for industry.
- e) The government should roll out energy audits – key recommendations to be acted on by March 2009.
- f) Speed up further the planning system for offshore wind farms. The planning system should prioritise the best schemes and have direct influence in integrating schemes.
- g) New build should be obliged to provide renewables. Solar thermal should be statutory.
- h) Make the process for implemented schemes transparent.
- i) For wind farms, publish standards for radar and noise.

- j) Demonstrations of microgeneration should quantify the potential for statutory targets.
- k) Development of airports should be halted.
- l) The energy market does not need protecting – the consumer and environment do.
- m) Nuclear energy is not renewable.

5. Energy Efficiency - Finance

- a) Meet the 2020 target by rewarding low consumption and aiding energy efficiency.
- b) Encourage microgeneration by buying excess electricity at the same rate the consumer pays.
- c) Introduce financial incentives for photovoltaics, and remove planning restrictions on them.

6. Energy Efficiency - RD&D

- a) Develop local energy storage (e.g. via local authority demonstration housing projects).
- b) Solar photovoltaics are developing.
- c) Variable wind energy could be stored in a Severn Barrage, by electrolysis of water (now commercial) or by air compression.
- d) The government should introduce widespread skills transfer programmes for installers.
- e) Use EROEI criteria to evaluate coal with CCS and nuclear.

7. Energy Efficiency - Transport

- a) Tax cars on CO₂ emissions, incorporating those powered through the grid.
- b) Set challenging standards for new vehicle energy efficiency in running, construction and vehicle lifetimes.
- c) Increase the capacity of public transport.
- d) Off-peak rail travel should be encouraged, and could be free.
- e) Replacing all vehicles by electric would require a 50% increase in kWh generated but little if any increase in capacity since vehicles would plug in mostly at night when the load was low.
- f) Support local employment to reduce commuting.

8. Energy Efficiency - Waste

- a) Urgently tackle waste and inefficiency.
- b) Reward people for using less.

9. Schemes

- a) Develop a build plan for the huge challenge and opportunity of the 25GW wind power needed within ten years.
- b) Adopt energy efficient traffic lights.
- c) Wind schemes have been implemented in poor wind regimes.
- d) Ensure greater use of distributed generation and cogeneration with renewables.
- e) The government should implement demonstration schemes for renewable heat.
- f) Reduce waste rather than burning it.
- g) Introduce smart electricity meter library loans.
- h) Nuclear takes 10 years to build, so will lag behind the energy gap.