



# ***INFORSE-Europe Sustainable Energy NGO Seminar***

**6<sup>th</sup> to 8<sup>th</sup> October 2010**



## ***Feed-in Tariffs and the Renewable Heat Incentive***

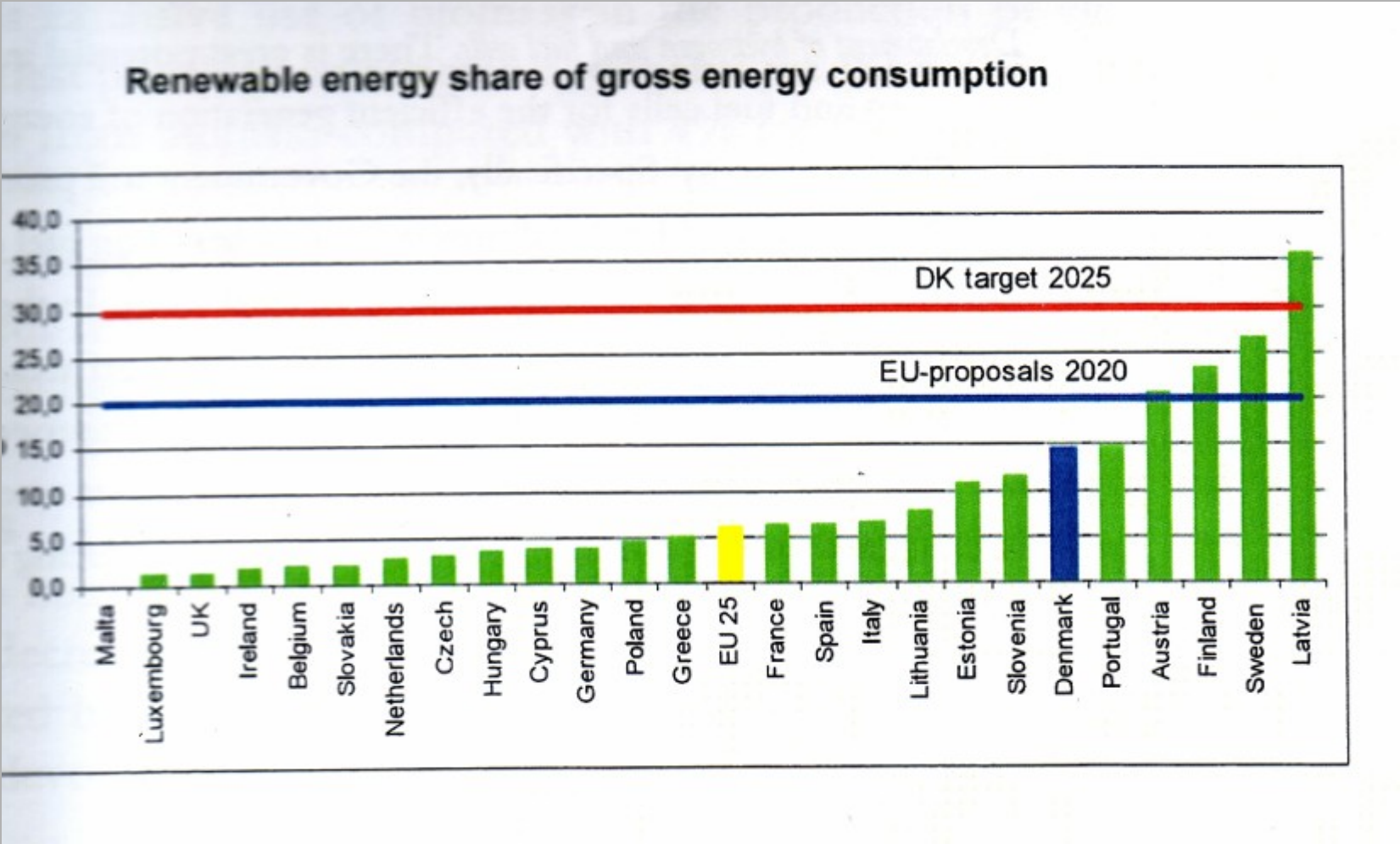
*by*  
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# A challenge -20% of Europe's energy from renewables by 2020



A transformation in the UK's energy supply is required in the next decade





# The transformation of the UK energy supply has already started



## Unlocking investment to deliver Britain's low carbon future

*Report by the Green Investment  
Bank Commission*

The Green Investment Bank will be established in the next few months:

“The scale of the investment required to meet UK climate change and renewable energy targets is unprecedented, with estimates of investment required reaching £550 billion between now and 2020. In contrast, only £11 billion was invested in Britain's “dash for gas” during the 1990s, which was considered transformational at the time”



# Hypothetical example of potential FIT income for a small 2kW solar photovoltaic (PV) installation



Assuming 2kWp solar PV installation costing £10,000 and 50% of the electricity generated is used on site and 50% exported to the grid.

Total financial benefit = £850 p.a. index linked to RPI for 25 years

Simple return 8.5% pa tax free and index linked

Guaranteed electrical output = 25 years





# Hypothetical example – a village scale wind turbine

500kW community owned wind turbine

Assuming 25% capacity factor

$$\begin{aligned}\text{Output} &= 500\text{kW} \times 8760 \text{ hrs per year} \times 0.25 \\ &= 1,095,000 \text{ kWh}\end{aligned}$$

This is the annual electricity demand of 250 households

Income from FIT = £230,000 pa guaranteed for 20 years

Capital cost approx £900,000 (or £3600 per household if no bank borrowing)

Simple payback on capital investment = 4 years





# The Renewable Heat Incentive (April 2011?)



- Solar water heating, biomass (woodfuel) boilers, biodiesel for domestic oil boilers and heat pumps may be eligible for payments for renewable heat as from April 2011.

- Opportunities for farmers to grow oil seed crops? Market for 1 million domestic oil boilers to run on biodiesel with a RHI subsidy of 50p/ litre
- Opportunity for woodfuel supply and sustainable woodland management
- RHI prices and conditions still out for public consultation





# Renewable energy planning issues within AONB's

Domestic solar PV and solar thermal panels are permitted development within AONB's and National Parks except on listed buildings and in conservation areas.

Land Use Consultants report to DECC Jan 2010:

Identify the type and level of renewable energy infrastructure that could be accommodated in designated landscape areas without compromising the purposes/ integrity of the designations



Solar farms?



Biogas (Anaerobic digestion) ?



No biomass in Shropshire!



Chris Huhne, Energy and Climate Secretary, introduced legislation in August 2010 to give local authorities powers to sell renewable electricity and benefit from feed-in tariffs.

He suggested that FITs could generate £100m per year income for UK local authorities, to be used for public benefit.



Solar PV at Underhill School, Portland



# Renewable energy - Dorset CC initiatives

Solar PV on the roofs of schools and public buildings – self funded + “PV for Free” offers



St Mary's School, Dorchester



Researching commercially viable renewable energy opportunities on County Council owned farms - solar PV on farm buildings and medium scale wind turbines. Investigating options for joint local authority investment / community share issue



# Renewable energy - Dorset CC initiatives



Dorset CC has purchased 160 acres of woodland for sustainable woodland management and self-supply of woodchip from thinnings for heating schools and public buildings

The County Council plans to carry out a biomass district heating feasibility study in Dorchester to link County Hall, Dorchester Prison and the County Hospital with a heat network supplied from a single woodchip boiler





# Distances from the shore





# Key facts on zone 7 – West of Isle of Wight



- The nearest point from the shore is approximately 8 miles, the point furthest away from the shore is 19.8 miles
- Target Capacity: Eneco currently believes that around 30 per cent of the zone could be developed, providing approximately 900 MW of capacity
- Annual output equivalent to the electricity demand of approximately 587,000 homes (based on 900 MW installed)
- There are approx 342,000 homes on Bournemouth Poole and Dorset
- Portland Port may be suitable for construction and assembly facilities



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Thank you for your attention

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