WDEA: CHRIS LODER PRESENTATION 30 OCTOBER 2020

RENEWABLE ENERGY

1. We need renewable energy to mitigate global warming and consequent climate crisis.

2. The climate crisis has arrived and is accelerating faster than most scientists expected.

3. Scientists have declared a climate emergency that could bring "untold suffering" unless there are significant transformations in the way humans live.

4. Historically, all 5 mass extinctions have now been linked to climate change.

5. The mortality and economic losses from climate related disasters increased per decade nearly 4.7 fold between from 1971 and 2010.

6. Identified steps to combat the worst effects of the climate crisis are:

    a. replacing fossil fuels with low-carbon renewables (continued at 7 below);
    b. reducing the emissions of pollutants such as methane;
    c. protecting the Earth's ecosystems;
    d. eating mostly plant-based foods and fewer animal products;
    e. creating a carbon-free economy
    f. stabilising the human population.

7. The Committee for Climate Change Progress report to Parliament 2018 provides an account of progress with regard to replacing fossil fuels with low-carbon renewables:

    a. UK greenhouse gas emissions fell 43% between 1990 and 2018
    b. 75% of greenhouse gas emissions reductions since 2012 have come from the power sector
    c. emissions from power generation fell by 59% between 2008 and 2017

8. However the report said that:

a. low cost, low risk options are not being supported by government,
b. chopping and changing of government policy was leading to huge missed opportunities for emissions reductions in the areas of Zero carbon homes, Carbon capture and storage, feed in tariffs and buildings energy efficiency.

9. Examples of low cost low risk options not being supported:

    a. Adverse planning environment for onshore wind, despite it being the cheapest form of renewable energy.
    b. Very difficult route to market for onshore wind and PV, which can only obtain 4ppu – 5ppu despite a retail price 3 times as high. The producer is simply not getting a fair share of the retail price.

c. Refusal of planning permission for 970 mw offshore wind farm at Navitus Bay which would have provided 85% of Dorset's electricity needs.
d. Sudden withdrawal of Feed in Tariffs. This caused a 56% reduction in renewables investment in 2016/17, largely destroying a whole employment sector at a stroke, even though the Feed in tariffs cost the taxpayer nothing, At current export prices investment in PV and wind is not viable, so alternative mechanisms have to be found (see 11 below).

10. Examples of how to make an adequate return from new investment in PV and on shore wind:

    a. a combination of selling to large customers having >85% on site consumption, and a 40% capital grant from Dorset Council. This is the basis for the DCE share offer which is currently being implemented giving a return to investors of 5.5%.
    b. a Local energy scheme to sell to the public via the local substation and a National Energy supplier. In the case of the DCE Bridport scheme this provides a price of 9.5ppu which is a saving for the consumer and doubles income for the supplier.
    c. Note that a side benefit of using Community Energy Companies as a channel for renewable energy schemes is that as capital raised is paid off year by year, increasing contributions are made to a Community Benefit Fund, which can then be used to finance locally identified opportunities to combat the effects of the climate crisis.

11. What we'd like is to see Chris address the issues raised at item <9>.

Henry Lovegrove

20.10.20