

Note to Ed Miliband from Jim Adams

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This note discusses in order of significance, with long-term effects first

- Climate catastrophe.
- The world fossil fuels ‘energy plateaux’.
- The world financial crisis.
- We are now heading to a ‘climate catastrophe’ more significant than the fossil fuels ‘energy plateaux’. It will be acknowledged too late that this is the most severe test the human race has ever experienced. As a dissident on climate change projections, I think contrary to the IPCC Fourth Assessment Report, by 2100 it is very feasible that surface oceanic temperatures will have increased by 6°C – and equatorial parts of continents by 10°C. A scenario without Gulf Stream reversal is
 - World population displacements.
 - A world food crisis.
 - Over the next 150 years mankind will see very large increases in sea levels.
 - Markedly after 2080, emissions of methyl clathrates from shallow oceans, methane from permafrost areas and other feedbacks will lead to final temperature rises of ~ 35°C.

To quote a phrase from Lenin: ‘What is to be Done?’.

- 1) Absorb carbon dioxide. *Adopt, as a phased-in UK obligation, to be promoted as a UN obligation on every individual on the planet, the Chinese policy of every able-bodied citizen (or companies representing citizens) planting 32 saplings/year. Satellite pictures show this to be effective.*
 - 2) Ask the Prime Minister to have talks with James Hansen.
 - 3) Reforest tropical rainforests and forest the Sahara – actually, over human history, this means to reforest it. Introduce new varieties of trees that can grow quicker and are the most efficient at photosynthesis.
 - 4) Use ‘bio-char’ – agricultural and other biomass converted to charcoal and tilled into the soil – which keeps carbon sequestered for centuries, and absorbs nutrients which keeps them available for new crops.
 - 5) Reduce world fossil fuel consumption to as close to zero as possible.
 - 6) Introduce financial schemes to encourage the above.
- More significant than the financial crisis, and over a longer time span, are the approximately 5 – 10 year long ‘energy plateaux’, of oil, gas then coal, to be followed by fossil fuel ‘energy descents’. This is part of a more general world ‘resource depletion’ process.

As a coordinator of B&H Transition Energy Group, I was a co-author of our submission on the Government Renewable Energy consultation.

My take on this includes:

- 1) We see an 'energy gap', globally and in the UK. World peak conventional oil production happened in 2005, peak capacity may occur in 2010. Peak gas is expected five years after peak oil, i.e. around 2013. Nuclear will not fill this gap.
 - 2) Energy conservation and efficiency – we wish to see a key emphasis on EROEI (Energy Return On Energy Invested) – no matter what happens to the price of energy, for a given source, once it yields less energy per unit measure than it takes to provide it, that source will not be viable.
 - 3) Long-term UK-Norwegian gas contracts are necessary, as is UK gas storage construction, should Russia cut off EU winter supplies.
 - 4) The government must enforce Grid efficiency and construction.
 - 5) If the US develops Thorium reactors, we should collaborate on this, and with the EU on Carlo Rubbia style 'energy amplifiers'.
 - 6) Coal is a disaster (Climate Change), and terrible example to other nations. No coal without secure 100% carbon capture and disposal. The technology options (unlikely ready before 2020) should be developed with vigour.
 - 7) Coal efficient energy burn, if this is possible, needs to be retrofitted to Chinese coal fired stations. All nations need to work together on this, because the Chinese will not dismantle their coal fired stations, though it is imperative that they must.
 - 8) The wind farm electricity generation 'ramp up' must be massive, and provides opportunities for British Industry. There should be a UK 'NASA' style programme.
 - 9) Energy storage for wind generation is important – see report suggestions.
 - 10) Introduce legislation to require all citizens in an energy shortage to unplug at the wall socket all non-essential TV screens and computer monitors not in use between the hours of 11:00 pm and 6:00 am.
 - 11) Mobilise Estate Agents to deliver energy audits and management of local contractors to install energy conservation measures. Introduce home upgrade finance packages.
 - 12) Projections for world growth, particularly for China and India, are not compatible with fossil fuel availability.
- We discussed two impending world financial crises 30 months ago with the Arlington Institute in the US. The government should initiate conversations with it. The toxic assets crisis has already hit us, and has interacted with the less acknowledged other half of that crisis – peak oil price gyrations. The government needs to reinject most of the lost liquidity in the economy. The other crisis may be US Treasury bills. The UK should copy Germany and Japan in supporting indigenous industry. Look critically at the derivatives market which needs 'back stop' support – climate change will affect the insurance industry

Further significant comments and reactions to this note can be found on the website mentioned above. Look under Ed Miliband!