

16 03 2018

Hi

There is so much ground breaking news to pass on - good and bad. I hope you find the following interesting and useful.

1. **Clarity on our aims** - new lecture by **Kevin Anderson**
  2. Was the recent deep freeze related to Arctic warming? **Yes.**
  3. Better link to **track UK electricity demand**
  4. More bad news for fossil fuels
  5. **Seven out of eight UK fracking applications defeated this year**
  6. Drought in China, Argentina, South Africa, the US...
  7. Re-thinking our drinking. **English Wine Week coming up...**
  8. **Chemicals - easier to stop using than plastic?**
  9. National Grid plans a **supercharging network at our motorway stations**
  10. **100 cities get most of their power from renewables**
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1. It is easy to get lost in the facts and figures of our renewable and emissions targets. I recently watched a new [Kevin Anderson, climate scientist, youtube video](#) and thought his conclusions are worth repeating. The industrialised countries (**OECD**) **need to fully decarbonise - stop using fossil fuels - by 2035.** The **whole world needs zero carbon energy by 2050.** We are not on target for either. Each of us in the UK currently puts out around **15 tonnes of CO2** per year - we need to get down to **2 - 3 tonnes each.**
  2. Our Met Office has been recording **2 - 5 extreme / unusual weather events in the UK for several years** - and we've just experienced another. For a good explanation of why we had a **deep freeze while the Arctic basked** in unusual warmth, and how these are related, here is a [good Guardian article.](#)
  3. I have often recommended keeping an eye on Gridwatch to help understanding of where we get our electricity from. However, I have recently discovered [Electric Insights Drax](#) which is, I'm told, more accurate (it includes more smaller, distributed generation), it tells you the **current wholesale cost** of electricity, and the **carbon intensity of the grid.** This last point is really important. Just a few years ago we were generating electricity at more than **500g CO2e/kWh and we are aiming at 50g CO2e.** Currently we are around **320g on a winter's day.** (This figure is still misleading, however, as it **does not include losses from gas production, distribution and other 'externalised' emissions.**) Still, even with these limitations, it's useful - and generally cheering - to keep track of the changing mix of fuels in our electricity production.
  4. Carbon Tracker has just come out with [more damning findings for the fossil fuel](#) industries. We will need **\$4.8 trillion of investment to keep the world in fossil fuel energy till 2025, and that's \$1.6 trillion more than doing the same with**

**renewables**, which would achieve our aim of **staying well below 2 degrees** of warming... The point is that renewables are becoming ever cheaper. With **12 MW wind turbines** on the horizon, the cost of wind power certainly looks set to come down much further, and **solar** also continues to fall and expand.

5. **Fracking applications** have taken a series of setbacks, the latest defeats were in Derbyshire and South Yorkshire. For anyone still undecided about fracking, do watch **The Truth Behind the Dash for Gas**, and for an insight into how communities have been affected in the US, **Groundswell Rising**. For anyone worried about the UK's **dependence on Russian gas**, we imported 3 LNG (liquefied natural gas) shipments this winter, that's about **1% of our gas requirements**. Almost all of our European gas comes direct from Norway (contrary to statements made on Today programme this morning). If we don't want to import from Russia, we should be cutting our usage - **we waste a third of our heating**.
6. China is moving very fast towards renewables - but its economy faces tremendous challenges. One of the most serious - quite under-reported - is the level of **drought**. **Premier Wen Jiabao has stated that it threatens the very existence of the nation**. Eight provinces in the north have acute shortages and another are classified as 'severe'. This area contains 41% of the population, most of the electricity generation for the whole country, 38% of agriculture and 46% of industry. **It's unclear exactly what the implications for their manufacture of cheap solar panels are, and their own transition to renewables**, but they are backing away from their self-sufficiency in food goals, and their steel manufacturing.
7. Of course China is not the only country suffering **severe drought** at the moment. **Southern Africa** and **Argentina** are facing crises, while **Australia**, **California** and **Chile** are among the countries facing multi-year problems. It struck me that **these are all major wine-growing countries**. For food mile reasons, and because we effectively import their water and soil nutrients with each bottle, it is worth considering a switch to English cider, beer and wine. **English wine** now has good credentials internationally. It is **English Wine Week May 27th to June 4th**. Maybe this is a good time to gather friends and try some local produce. **Why not have an English wine tasting session for SolarAid?**
8. The world has woken up to the **problem of plastics**, but still the UK does not aim to rid itself of single use plastics for another 25 years. A **consultation on a tax** on take-away products has just been announced. Many people are making heroic efforts to cut their usage - but it really is difficult. One suggestion is to perhaps **focus also on our domestic chemical use** which is generally easier to displace (with Ecover and similar products). **Splosh is an eco-product company** that will deliver concentrated cleaning stuff for you to add water and re-use your container, so **cutting your chemical and plastic use at the same time**.

It's worth noting that a **US report in February** calculated that America's domestic use of sprays, perfumes and cleaning products **produce**

more air pollutants than their cars...

9. It now **costs the same to buy an electric car as a conventional car once you calculate in the lower cost of fuel, tax, maintenance etc.** One thing that should get the ball rolling faster is **National Grid's plans for a national network of super-chargers** at our motorway stations - up to 100 at each. With these you can charge up your car in **5 - 12 minutes**. National Grid is currently in discussion with government on this.
10. Some good-ish news. **More than 100 cities** are now getting more than half their electricity from renewables; for **42 cities that's all their power**. That's great - but not enough, and none in the UK....!

**As ever, if you would like to come off the mailing list just let me know.**

All good wishes.

Nikki