

17. 05.2018

Here are some bits of news that you may find interesting.

1. **Which countries are meeting their Paris commitments?** - Carbon Tracker says almost none
2. **Good news - Europe's biggest insurer backs away from coal**
3. Heating in the UK - **grants available for heat pumps, replacement boilers and new night storage**
4. Hunterston - another of our nuclear plants in trouble
5. **Geo-engineering** - a good World Service broadcast
6. Ramez Naam youtube - **good round up on latest solar and wind prices**
7. Centrica trials block-chain microgrids in Cornwall
8. **Eating seasonal and local - it matters**
9. **Gleaning - a good day out and cuts food waste**
10. Buying land in Ecuador

1. On the World Service news (but not in most mainstream UK media) it's reported that there is **growing frustration with the slow progress and foot-dragging of the Global North with regard to our Paris climate change pledges**. The [Carbon Tracker has just come out with a report](#) that puts only Morocco and The Gambia in the 1.5 degree compliant list... **The EU's actions are considered 'Insufficient' and leading us towards a three degree world**, while the US, Russia and Saudi Arabia are among the 'Critically Insufficient', taking us to **four degrees plus**. See bottom of email for graphic.

2. In the global war on coal, there was some good news earlier this month. Europe's biggest insurer, [Allianz, has said it will stop insuring single coal plants and mines](#) immediately and withdraw all policies by 2040. The company will also stop investing in coal (it has around E664 billion under management...). **Both actions will have a powerful effect on the coal industry.**

Over recent years, **Allianz has been criticised for supporting coal production in Poland in particular**. The Polish government's priority has been energy independence from Russia and it has robustly defended its coal industry against the European Union. However, as everywhere, the **economics of renewables are changing everything** and even [Poland's seemingly intransigent government is now embracing wind power](#), no doubt helped by Allianz's decision and others.

3. England, Scotland and Wales recently went a [record 76 hours without the use of coal](#) in our electricity production, and our government has pledged to get coal completely off-line by 2025. Replacing it with biomass, gas and nuclear creates more /other problems, but an added issue is that the risk of *not* achieving our 2025 goal remains. **During the recent extremely cold periods, we diverted much of our gas towards our heating, meaning that we were forced to use more coal in our electricity generation. So decarbonising our heating is also a priority.** Now is the time to think about insulation before next winter. The government is aiming for 12% of our heating from renewable sources by 2020 and grants are available for [air and ground source heat pumps, changing old boilers and storage heat systems.](#)

**Another option for cutting our gas use is to use hydrogen (up to 20%) in our gas grid and displace methane.** The [Institute of Mechanical Engineers has come out with a report](#) calling on the government to take a serious lead on 'Power to Gas', using excess electricity to split water (H<sub>2</sub>O) and produce hydrogen, with oxygen the only unwanted by-product. That 'excess' electricity is from our current summer and night time production when demand is low.

4. Again not headline news but one of our nuclear reactors, [Hunterston B, has recently closed down because of cracking in the graphite blocks.](#) Graphite is an essential part of controlling reactions and keeping reactors safe. [Similar problems have been found at several of our ageing nuclear](#) fleet, and it's a reminder that **four of our reactors must stop operating by 2023, and another four by 2024**, at the latest. (They've already had 10 year life extensions.) **This gap in our generation must be filled with renewables and efficiencies but it's not clear what's in the pipeline.** With the drop in government support, it seems that [small entrepreneurs are backing away from renewables.](#)

5. **Geo-engineering, techno-fixes to suck carbon dioxide from the air**, are increasingly being discussed as part of the solution. Here's an interesting [World Service discussion](#) covering the main options. However, it's interesting to note that the full carbon analysis of the equipment and operations involved in Direct Air Capture (DAC) is not given and that carbon capture and storage (CCS) still only makes commercial sense where the carbon is used as artificial lift for oil and gas. **I think the last point made in the discussion is really valid: these technologies could prove to be a costly distraction, and cutting our emissions remains the absolute priority.**

Worth noting, however, that we have just had [our first full month of 410 parts of CO<sub>2</sub> per million.](#) We are **now adding 2 - 3 ppm per year.** Pre-industrial revolution, we were at **280.** **450 is considered commensurate with 2 degrees of warming.**

6. This article gives a link to an [excellent talk by American Ramex Naam.](#) It's a really good, positive round up of where we are now, and the prospects for solar, wind and batteries. **Across the world - the US, India, Chile, Mexico, Dubai - solar is now significantly cheaper**

than coal, nuclear or gas, and is likely to not only stop new thermal plants being built, but undercut many that are in operation.

7. The need for **more flexible electricity demand is an essential part of managing our grid** as we move further away from the old model of large power plants designed to meet maximum demand. In low demand period, these have either been under-used, or more often (catastrophically) they have simply vented their excess heat.

Centrica is one company that has built a '[virtual marketplace](#)', incentivising battery storage and more flexible demand as a cheaper option to upgrading the grid. The trial is in Cornwall where there is good renewable generation, to the point that the grid can't always handle it all. Centrica has recently announced that it will be adding a [peer-to-peer trading platform, using blockchain](#). In Europe, where the Sonnen Community is well established, they are [running similar trials](#). It's an interesting sign of the brave new world we are entering where we are likely to buy our electricity in very different ways.

8. **Eating seasonal, local and organic food is something we can all do to cut our carbon footprints.** But most of us are out of touch with what is actually in season.... [Here's a helpful guide](#).

9. Cutting food waste is something else we can all do. It's amazing what can be made into soup..... However, **much of the food waste is higher up the production chain** - incentivised and then not used by supermarkets. There is now a [gleaning network](#) in the South West, hoovering up (with permission) unwanted but perfectly good food and delivering it to charities. If you're interested in getting involved in some good fun, productive activity, [here's a link to their volunteer form](#).

10. I have mentioned in 'Land Use' talks Ecuador's appeal to the world for a low level of financing to compensate the country for not allowing oil drilling in its most sensitive national parks. That appeal failed, but the [World Land Trust is 80% towards its target of raising £167,000 to buy 400 acres](#) to prevent road building that would divide two existing precious reserves. If you have carbon sins to offset, or can just help, please follow the link. David Attenborough is a patron of this charity.

As ever, if you would like to come off the mailing list just let me know. See below for the graphic from the [Carbon Tracker report](#).

All good wishes.

Nikki

CRITICALLY INSUFFICIENT	HIGHLY INSUFFICIENT	INSUFFICIENT	2°C COMPATIBLE	1.5°C PARIS AGREEMENT COMPATIBLE	ROLE MODEL
4°C+ WORLD	< 4°C WORLD	< 3°C WORLD	< 2°C WORLD	< 1.5°C WORLD	<< 1.5°C WORLD
RUSSIAN FEDERATION	ARGENTINA	AUSTRALIA	BHUTAN	MOROCCO	
SAUDI ARABIA	CANADA	BRAZIL	COSTA RICA	THE GAMBIA	
TURKEY	CHILE	EU	ETHIOPIA		
USA	CHINA	KAZAKHSTAN	INDIA		
UKRAINE	INDONESIA	MEXICO	PHILIPPINES		
	JAPAN	NEW ZEALAND			
	SINGAPORE	NORWAY			
	SOUTH AFRICA	PERU			
	SOUTH KOREA	SWITZERLAND			
		UAE			