

25 April 2018

Hi

Here's a mix of good news and practical action that I hope you find interesting.

1. Great news from National Grid - **UK's consumption continues downwards**
2. **Off-grid solar in Africa is making a big difference**
3. Scotland, Portugal, Algeria - **some other big wins for renewables**
4. **Radio 4's 'The Reunion'** - fascinating look at the Kyoto protocol
5. C4's Dispatches reveals where our **biomass** comes from
6. The **Forest of Avon and Bristol Tree Strategy**
7. **Idling** - why we need to stop it...
8. OVO - **paying to use your car battery**
9. **Alternatives to soya**
10. **First horizontal fracking well completed in UK**

1. If you have been looking at [Electric Insights](#) on sunny days lately, you will have seen that, for periods, we have been producing over **23% of our electricity from solar alone. Even on a cloudy morning (like now, Weds) our solar is producing almost 13%**. Mainly because of our solar contribution, the National Grid expects [our summer electricity demand to be substantially lower](#) than last year and they expect to be 'curtailing', ie turning down, output from major power plants. **This has big implications for inflexible suppliers such as Hinkley.**

2. **Getting the Global South to leapfrog fossil fuels and go straight to renewables is absolutely essential if we are to stay below 2 degrees of warming.** At a recent talk I was approached by a woman who has been working in Africa for several decades, and she told me how off-grid solar is transforming countries such as Uganda and Rwanda. [SolarAid has been a leading mover](#) and supporting this charity is a great way to off-set carbon sins. If you want to invest, as many [mainstream companies and the World Bank](#) are now doing, [Ethex and Trine](#) offer possibilities.

3. There has been a rush of good news from different countries around the world - but let's start with Scotland! [Scotland got 68.1% of its power from renewables in 2017 and Wales is well over 40%](#), though the UK as a whole is only 30%. [Portugal got more than 100% of its power](#) from renewables in March. Interestingly, [Algeria](#) which is highly dependent on fossil fuel exports is turning partly to solar to make up for low oil and gas prices, as are other oil economies. And [China has just installed another 10 GW of solar](#) in the first quarter of 2018. At the bottom of this email is a general breakdown from IRENA, [via Clean Technica](#).

In my last email I mentioned that only 12% of the world's electricity now comes from renewables. A reader has pointed out that this statistic does not include hydro-electric power. With HEP, the figure is, in fact, 25%. Many thanks for the correction.

4. [Radio 4 recently did a 'Reunion'](#) programme, bringing together some of the key participants in the Kyoto discussions 20 years ago. There are some fascinating insights and it's an easy listen. **If you like the programme, I suggest dropping a comment to the BBC, congratulating them on doing something serious on climate change... Similarly, whenever you hear another duff / dismissive comment in an interview or discussion, make your voice heard.** Changing our media culture is essential if we are to get our government and councils to move faster.

5. Our government does have good renewable targets but they are heavily reliant on switching coal to biomass - and then just **not counting those emissions...** [Channel 4's Dispatches looked at where our biomass for the massive Drax plant](#) comes from (3 coal conversions so far, another one to go to biomass and two to gas). As ever, [our clean credentials](#) are entirely in the accounting....

6. **We need more trees** - they suck CO2 from the air as they grow, and they provide us with flood protection, biodiversity, cleaner air - and pleasure! [Bristol is just developing a Tree Strategy](#) and is looking for volunteers to help survey what we've got - no particular experience required, training provided. This connects with an [ambitious Forest of Avon project](#) that also needs support. There will be a **meeting to discuss proposals at Bristol City Hall, 4th June, 6 - 8pm. It would be wonderful if Avon could achieve something similar to the recently completed Heartwood Forest near St Albans.**

7. **Are you in the habit of tapping on windows and politely asking drivers with idling engines to switch off?** It seems more individuals and volunteer groups and councils are backing such actions - a friend of mine recently tackled an idling police car (and got a positive response!). [Research from King's College](#) suggests that action days can have a big measurable impact. **It strikes me that this is one way we can all have an effect on public culture. Even if the response is negative, the driver is likely to consider their actions in future and discuss it with their mates!**

8. Having done some trials, [OVO Energy is launching a Vehicle-to-Grid charger this summer](#), so that EV owners can earn money by allowing their battery to be used for grid balancing - another reason to take advantage of the [grants that are still available for electric cars and charging units](#). Although up-front costs for new EVs remain relatively high, the lower cost of fuel and lack of road tax means that most (depending on your driving) will pay for themselves very quickly. There is every sign that [oil prices are set to rise further](#) and, after a few years' lull, are likely to become volatile again as the market tightens and tensions in the Middle East and Venezuela fuel speculation.

Our government has said there will be a ban on petrol and diesel sales by 2040. Interestingly, the [National Grid is saying the ban should be brought forward to 2030](#) - they can cope!

9. [Most of us consume soya, whether we know it or not](#). 75% of the world's production goes to animal feed, mainly pigs and chickens, but also as a winter feed for cattle and [even for our sheep](#). The rest goes to oils, biofuels and about 6% goes directly to human consumption as tofu, soya sauce and soya milk. The problem is that the increased demand is [leading to deforestation and soil carbon loss](#) in countries like Argentina, the world's biggest producer. Reducing meat and dairy consumption is now considered one of the most worthwhile actions we can do as individuals (along with having fewer children, no flying and living car-less). If still eating meat/dairy, try and source from ['Pasture for Life' farmers](#) that guarantee 100% grass-fed animals. But also worth considering switching soya milk to [organic hemp milk](#) (produced in Devon) or similar.

10. **An update on the UK's fracking.** In early April, Cuadrilla completed the first UK horizontal well at [Preston New Road, Lancs](#), and they are working on a second nearby. The government has dramatically down-scaled its expectations of new wells by 2025. Third Energy's plans to frack near Kirby Misperton in Yorks have been put on hold as there are investigations into how solid their finances are. Local groups believe there is the [possibility of fracking applications in Somerset this year](#), and active anti-fracking groups exist in [Bristol and Somerset](#).

Although not fracking, the Guardian reports that there are serious plans to drill thousands of wells [across the South East, to extract up to a billion barrels of oil](#). A very large proportion of the land is in national park or sensitive areas such as the Weald. The method of extraction will be acidisation - pumping acid down into the oil-bearing rocks beneath the water table, and pumping the sludge back out.

The sun is now shining and a quick check of Electric Insights tell me the UK is currently being powered by 14.1% solar, 24.2% wind and 1.3% hydro. Great news. Our coal is completely off-line but gas remains 36% and nuclear is 19.8%.

As ever, if you would like to come off the mailing list, just let me know. Also, a reminder that I will be **starting the Bishopston Library series tomorrow (26th) at 7.30**, with **What is Climate Change?** Next week will be Global Energy Trends, and May 10th will be UK Energy, Emissions and Targets. Please pass on to others. All talks are free.

Many thanks.

Nikki

New solar power capacity added in 2017

Source: International Renewable Energy Agency

