

Hi

Next **Tuesday's talk at the Kensington Arms, Stanley Rd, BS6 is on 'The Way Forward'**, focusing mainly on new technology. The following week (**9th April**) will be more of a **discussion on individual and local action** – an exchange of ideas on what we can do and what we find difficult and whether local energy/sustainability groups have a role. Both begin at 7.30pm – booking links are at the bottom.

And here's some news which I hope you find interesting. For ease of reading, I am also attaching a Word copy.

1. **Cost of off-shore wind and batteries has plummeted in last few months**
2. **First UK council to become 100% renewable – uses bi-facial solar**
3. The world's biggest 'solar zone' will help combat deforestation
4. **Big Oil starts to compete with traditional electricity producers**
5. **Half our global carbon comes from resource extraction – and 80% of our biodiversity loss...**
6. Russia moves towards company emission targets...
7. A **circular economy** – companies need to know what's in their products
8. Sustainable shopping is high fashion in Sweden
9. **Car-free Oslo** – a breath of fresh air

1. Really heartening news - the economics of renewables have *seriously* improved, even since last summer. The [costs of lithium ion batteries and offshore wind have plummeted since mid-2018](#) – and **solar and on-shore wind have also dropped a remarkable 10 – 18% in just 9 months....**

This brings new innovation. We can now start to **co-locate batteries with solar and wind enabling renewables, finally, to deliver 'dispatchable' electricity** (ie companies can turn it on and off, as needed). According to Bloomberg, this **no longer requires a subsidy in**

many markets and that has profound implications for existing conventional gas, coal and nuclear. These will, on economic grounds alone, be under-cut. It seems that [74% of US coal is already at risk](#), and this is likely to reach 86% by the mid-2020s.

2. Not only are renewables getting cheaper, but there is **enormous technical innovation in the equipment itself**. Warrington in Cheshire is about to become the [UK's first 100% renewable local authority](#) by investing in two large solar and storage parks where the solar is '[bi-facial](#)' (generating from both sides of the panel, increasing production by a possible extra 20%) *and* using '[trackers](#)' so that the panels move with the sun. The sites should **save the local authority £2 million per year** and the installing company, Gridserve, also plans to **locate 24 super-fast car chargers at the solar sites**. So many win-wins! Really cheering news.

If you live in BS3 in Bristol and want to investigate solar panels, Bedminster Energy Group is organising a block purchase with discounts. Please contact me and I will put you in touch.

3. Africa is also moving ahead with solar, with the **African Development Bank pledging \$25bn by 2025 to build the world's biggest 'solar zone'**. The aim is that it will **span the Sahel region, giving rural populations an alternative to burning wood and help stop desertification**. This should support the [Great Green Wall of Africa, the continent-wide belt of trees](#) that is being planted. [First steps are being taken in Burkina Faso](#).

You can support off-grid solar in Africa by investing in [Trine](#) (not financial advice!) or donating to [Solar Aid](#). Please ask if you want more info on either.

4. It seems the UK has got a [new electricity company – Shell Energy](#). In fact, the oil and gas major bought First Utility a year ago but they have only just re-named their acquisition.

Shell claims that it has miraculously moved First Utility's 700,000 customers from a very low 3.7% renewable energy to 100% - in one go! [This article from Good Energy](#) explains how. It's the same old problem of companies **simply buying their Renewable Energy Guarantees of Origin (REGOs) on the secondary market, having no direct relationship with actual green energy suppliers.** Signing up for a green tariff with Shell is unlikely to incentivise more renewable production, which is what most of us want to achieve when we pay that little bit extra.

5. A shocking [new UN report](#) reveals that **fifty per cent of the world's carbon emissions come from resource extraction and processing. Extraction is responsible for 80% of the world's biodiversity loss....** Apparently, we are extracting resources (including biomass and food) at three times the rate of the 1970s. The figures are devastating....

Oil and gas is one major part of this so it's more than depressing to read that ExxonMobil, the biggest of them all, is planning to **increase its exploration and production budget from \$26 billion last year to \$30 billion this year and \$33 – 35bn in 2020.** Oil and gas are a long way from lying down and dying....

In this article there's a good graphic showing that of the **\$1bn spent by the oil super-majors since the Paris agreement** to undermine and oppose greenhouse gas-cutting regulation, [BP and Shell are, in fact, the worst offenders.](#) Exxon has specialised in funding (along with the [Koch brothers](#)) climate scepticism, so it is good to see the [EU parliament holding a hearing on Exxon's role](#) in getting us to the current climate crisis. They couldn't attend as they have several court cases going on at the moment...

6. One country we rarely hear of when it comes to moving away from oil and gas is Russia, the 5th biggest greenhouse gas emitter in the world. This enormous country has massive wind, solar, hydro and geothermal potential but still gets [only a few percent of its electricity from renewables.](#) More than [half the government's revenues still come from](#)

[oil, gas and petroleum products](#). But Putin is now trying to introduce a [cap and trade system for emissions and emission targets for companies](#). There are many geo-political reasons why we need him to succeed, as well as climate change – but he faces stiff opposition...

7. To reduce the resource extraction we have to get into a 'circular economy' where we re-use what we already have, and localise our production of food and goods. But it seems many manufacturers don't actually know what's in their goods because they outsource so much production. This short video is interesting – scientists at Plymouth University are [putting phones into blenders](#) in order to break them down into constituent minerals just to identify what's in them!

Once identified, we have some hope of working out how to recycle the minerals in all those gadgets we own... Here's one cheering bit of news: a factory in [Finland is now recycling 80% of battery material from electric cars](#), including the very valuable cobalt and nickel. The relatively low availability of these minerals has been casting a shadow over the long-term projections for electric vehicles, so this is good news.

8. At a more fun – but still truly inspiring – level, here's a [shopping mall in Sweden, situated next to a recycling tip](#). Sustainable shopping is high fashion there. Could this work in the UK? (I believe their government doesn't tax repair and re-use shops, to encourage them.) Apparently [community fridges](#) are taking off in the UK (a good idea for your local community?)....

9. **Oslo is another European experiment that other cities are looking to emulate.** The [Norwegian capital is now almost car free](#), and is transformed. They've done this by removing car parking, and increasing walking and bike-shares. [Buses and ferries are going electric](#). This takes real political leadership and nerve – as well as an engaged public.

Attached please find an article written by a reader who lives next door to Hinkley... Many thanks for this. I hope you find it interesting. There is a mass surrounding of Springfields, our nuclear fuel rod producer on Saturday 27th April, in Lancashire.

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

All good wishes

Nikki