HERE COMES THE SUN!

This is going to be a blog:

- that is 100% upbeat and positive
- that only mentions the climate crisis in passing
- that is not undermined by fantasy-driven techno-fixing
- that is 100% inspired by Bill McKibben's new book 'Here Comes the Sun' (see later!).

(Quick explainer: when I refer to 'solar+' below, what I'm talking about is solar + wind + storage + efficiency + radical grid upgrades. You would all get very bored of that being repeated every time, but it is indeed the whole renewables package that we're talking about here).

And just so you understand the full extent of my ambition with this particular blog, here are the 5 questions to which I guarantee you will have an answer by the end:

1. Is solar+ the single most liberatory technology the world has ever seen, including the printing press?
2. Is solar+ the single most deadly way of killing today's fossil fuel incumbency – which is currently the single most deadly way of killing life on Earth?
3. Is solar+ of the best defence we have against authoritarian populism, let alone full-on Trumpian fascism?
4. Is solar+ making the most beneficial contribution to improved public health since antibiotics and vaccines?
5. Is solar+ one of the most effective (and cheapest) ways of reinforcing national security in a world gone mad?
6. **IS SOLAR+ THE SINGLE MOST LIBERATORY TECHNOLOGY THE WORLD HAS EVER SEEN, INCLUDING THE PRINTING PRESS?**

Once it became clear that the price of solar energy would continue to fall, year-on-year, and that its efficiency would continue to improve, year on year, it simultaneously became

clear that this would have as big an impact in the poor world as it's already having in the rich world. Weirdly, it was that arch-conservative magazine, 'The Economist', that captured this revolutionary prospect: "an energy source that gets cheaper the more you use it marks a turning point in industrial history".

Bill McKibben's go-to case study (which I now find myself slipping into any old presentation) is Pakistan. Plagued by an electricity grid defined more by outages than 'onages' and ruthlessly exploited by insanely high prices for stand-alone diesel generators (let alone for the diesel), both businesses and concerned citizens in Pakistan recently cottoned onto the fact that China is only too happy to provide preferential deals for its solar panels. With the result that the equivalent of one third of Pakistan's current grid capacity is now met by solar power – installed over the last 18 months!

(I may need to return to the solar+ vs. the printing press debate at a later date!).

2. **IS SOLAR + THE SINGLE MOST DEADLY WAY OF KILLING TODAY'S FOSSIL FUEL IMCUMBENCY – WHICH IS CURRENTLY THE SINGLE MOST DEADLY WAY OF KILLING LIFE ON EARTH?**

Solar+ is already much cheaper than fossil fuel generation (let alone nuclear!) everywhere in the world – it's only the way our current energy systems are 'fixed' (and our predominantly right-wing media) that obscures this reality. In India, for example, it now costs less to install a new solar farm than it does to buy one year's worth of coal for an equivalent coal-fired power station!

But here's the problem. Every barrel of oil, every tonne of coal, and every cubic metre of gas commands a price in the market, which drives profits, which keep the wheels of extractive capitalism spinning away. All those incoming photons from the sun come FOR FREE – and 'for free' are the

two deadliest words in the capitalist lexicon! What's more, they come for free literally everywhere in the world, rather than being concentrated in just a few places, as is the case with fossil fuels.

It is this which explains why today's fossil fuel incumbents are contesting every last inch of territory – they already know that they've lost the price battle. And why they're now doubling down on PLASTICS as their only profit-generator for the future, in full knowledge that the plastics crisis is now right up there alongside the climate crisis and the nature crisis.

3. **IS SOLAR+ THE BEST DEFENCE WE HAVE AGAINST AUTHORITARIAN PO**

PULISM, LET ALONE FULL-ON TRUMPIAN FASCISM?

Pretty much every dictator in the world today (with the exception of Kim Jong Un in North Korea and the current rulers of Afghanistan) maintain their grip on power either through their own fossil fuel resources or through corrupt payoffs from the industry. Today's much-hyped right-wing theories of the imminent collapse of democracy are the greatest exercise in global gas-lighting we've ever seen: our democracies are at risk primarily because they've been suborned, corrupted and undermined by global elites enriched over decades by revenues from the fossil fuel incumbency.

Bottom line: democracy depends on completely destroying that incumbency, once and for all, as soon as it can practicably be done. There is no available accommodation with that incumbency.

So, we should just stop equivocating! If you think our prospects for a better world in the future depend on reinforcing and indeed 'rebirthing' – democracy, then you're going to have to get binary: it's only the new dawn of solar+ that keeps democracy alive; dragging out our dependence on

fossil fuels (at the behest of the 1% of the 1% who give not a single shit about the remaining 99.9% of us) obliterates any last hope you might have of avoiding our descent into authoritarianism and fascism.

4. **IS SOLAR+ MAKING THE MOST BENEFICIAL CONTRIBUTION TO PUBLIC HEALTH SINCE ANTIBIOTICS AND VACCINES?**

OK, this is a bit of a stretch! Indeed, the answer is clearly 'no'. But before moving on too quickly, bear in mind that the chronic air pollution caused by the burning of fossil fuels is responsible for at least 7 million deaths a year.

As of September 2025, according to Our World in Data, Covid-19 has killed a total of 7,100,783 people. So that's the equivalent of all the deaths from a full-on pandemic killed every year by fossil fuels.

5. **IS SOLAR+ ONE OF THE MOST EFFECTIVE (AND CHEAPEST) WAYS OF REINFORCING NATIONAL SECURITY IN A WORLD GONE MAD?**

Are you all keeping up with the lessons being learned in the war between Russia and Ukraine? Fun fact: Ukraine's increasingly sophisticated drone warfare capability has done as much to undermine Russia's revenues from exports of oil and gas than all the EU's often performative posturing about sanctions and reduced dependency on Russian imports.

Right now, even as you read this, the Orsknefteorgsintez refinery in Orsk (1,400 kilometres from the border with Ukraine) is still smouldering away after a massive blaze caused by Ukrainian drones. This is one of only two refineries capable of producing the jet fuel used by Russia's strategic bombers. Elsewhere, 16 of Russia's 38 refineries have been hit since earlier in the year, some of them multiple times, including one of Russia's largest fuel-processing facilities at Ryaz near Moscow.

Russia's own citizens are beginning to feel the effects of all

this. The price of petrol and diesel has soared; supplies in Crimea ran out completely in September; Russian tanks are bogged down as much by limited fuel as by Ukrainian drones.

Let’s just hope our strategists in the Ministry of Defence have woken up to the implications of this. Every single complex, large-scale fossil fuel and nuclear energy facility (power stations, refineries, storage depots, reactors, waste facilities, transport hubs, pipelines etc etc) is now ‘at risk’ in terms of future warfare scenarios.

Which explains why Ukraine is now investing hell for leather in distributed solar+ facilities for schools, hospitals, factories and homes, the length and breadth of the country. After all, the damage done to a solar farm even by the deadliest Iskander missile from Russia can be sorted in just a few weeks.

(Thanks, Bill, for these fascinating updates!).

What an astonishing picture all of the above provides in terms of the solar+ revolution! And perhaps now is the time to mention that solar+ is ALSO by far the most cost-effective, readily available, constantly improving combination of technologies to help drive down emissions of greenhouse gases. And, in the process, to give us at least some vague prospect of staying below a 2°C average temperature increase before 2050.

And it’s all happening right now. As The Economist keeps reminding its rather startled readers, it took a whole year to install a Gigawatt of solar power in 2004; by 2016, it took just one week; by 2023, a Gigawatt of solar was being installed every 24 hours, and by the end of this year, it will be down to every 18 hours. (A Gigawatt is the equivalent of one big gas-fired power station).

All of this and a whole lot more is covered in Bill McKibben’s

brilliant new book *'Here Comes The Sun'*, (with its modest subtitle *'A Last Chance For The Climate And A Fresh Chance for Civilisation'*!). This not only eloquently summarises the case for solar+ (as comprehensively laid out in Mark Jacobson's *'No Miracles Needed'*) and urges us properly to understand the 'suddenness' of this solar moment (as does Jamie Arbib in 'Stellar'), but it then invites us personally to get stuck in so much more purposefully to this 'unifying mission for a divided world'.

I defy you not to be uplifted by such applied hopefulness – from the man who published '*The End Of Nature*' back in the 1980s (as gloomy a book as its title indicates!), but who now, *right now*, "really for the first time, can see a path forward. A path lit by the sun".

By Jonathon Porritt

(Bill McKibben's *'Here Comes The Sun'* is published by W.W.Norton)