Why the lights are going out on Britain's asset-stripped nation

Electricity supply, one of the systemic flaws in the UK's failing economy, looks increasingly like it could fracture this Winter – and without accepting why that model is broken that cannot be avoided.



Paul Mobbs, The 'Meta-Blog', issue no.22, September 2022

Fracking will save us! Nuclear will save us! Tax cuts will save us!... The Conservative leadership saga has a very meagre connection to reality. We could just as easily replace their energy policy with Star Wars' Emperor Palpatine screaming, "Power! Unlimited Power!!" – the results would be just as effective.

Driven by a fanatical belief in the power of economics, where everything is a <u>quasi-religeous</u> <u>argument</u> about wealth and affluence, economic growth has become the 'Godhead' of national policy for all major political parties (yes, even the Greens).

Now, I've some really bad news for you... <u>that dream is over!</u> Successive governments have spent forty years <u>stripping the value out of state assets</u> – from council housing to universities – and that whole process has started to collapse.

After <u>'The End of Empire'</u> Britain's wealth fell off a cliff, lead by energy. As the demand for petroleum increased with greater car use and automation, energy imports increased exponentially. The long economic crisis of the 1970s was driven by the price of oil, which, at that time, was mostly imported.

The <u>development of the North Sea</u> not only saved the UK from bankruptcy; the finance generated dur-

ing the 1980s was the driving force which allowed Margaret Thatcher to overhaul the economy without regard to the immediate economic impacts. Today, with the North Sea in terminal decline, the energy trends of the 1970s crisis are resurfacing, this time driven by gas prices.

Instead of policy evolving to deal with this change, we now have a far-right Prime Minister, enacting 40-year-old fossil-fuel centric policies, who simply cannot grasp how trends have changed since the time of her idol, Margaret Thatcher.

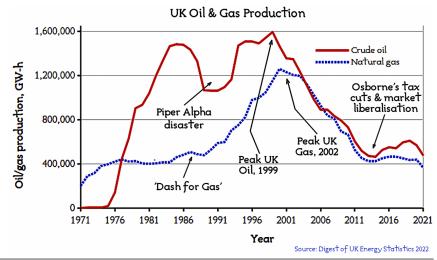
The North Sea is in terminal decline

The graph below, based on the government's *Digest of UK Energy Statistics*, shows oil and gas production in the UK. Projecting that decline, we are within the foreseeable end of the North Sea as an economically viable oil and gas production region – perhaps as early as 2030.

It may have been at that point now had <u>David</u> <u>Cameron's government</u> not slashed both corporate tax and royalties on North Sea production – effectively handing nearly all the proceeds from oil and gas extraction to the operators. Even so, the North Sea has been estimated to have the <u>second highest operating costs</u> in the world.

In the 1980s, Margaret Thatcher used the receipts from the North Sea to cut tax and pay for a large 'reserve army' of the poor — which is why the economy grew. Forty years later and we have nothing left. Instead, many people require a state-top-up to their low wages, and payment of their rent, in order to survive — but without the income from the North Sea to pay for that extra public spending.

In the meantime, the Norwegian government used its revenues to create 'The Pension Fund Global': The world's largest sovereign wealth fund,



holding US\$1.19 trillion in assets, including holdings in 1.4% of all the world's listed companies.

The Conservative government liberalised the energy industry prior to privatisation; but they were not alone. Previous Labour governments had welcomed the exploitation of the North Sea as, "the acceptable face of capitalism".

Off the back of that we saw the 'Dash for Gas': First in home heating; then in power generation. Unfortunately, gas became the dominant fuel in the UK economy just at the time the UK's oil and gas production reached its peak at the Millennium.

Britain, a leader in renewable energy in the 1970s, saw that lead hobbled by successive Tory governments; and Liz Truss has stated this as a goal of her energy policy today. Britain has a large renewable resource, but the political rejection of the technology since the 1980s means we import much the equipment to harvest it – which of course means having the cash to pay for it.

The back-and-forth about energy during the Conservative leadership debates shows just how disconnected from reality British politics has become. Just as oil dependency was the flaw in the economy of the 1960s, so dependency on natural gas is the fatal structural flaw today. And just as the cost of goods around the world spiked in the 1970s, obstructing efforts to develop alternatives to oil, the same is happening today.

Electricity is the critical flaw

People's perceptions of the 'energy problem' are largely based on domestic energy consumption – because that's the part they experience directly. What that perception fails to convey, though, is the scale of, and recent change in, energy trends.

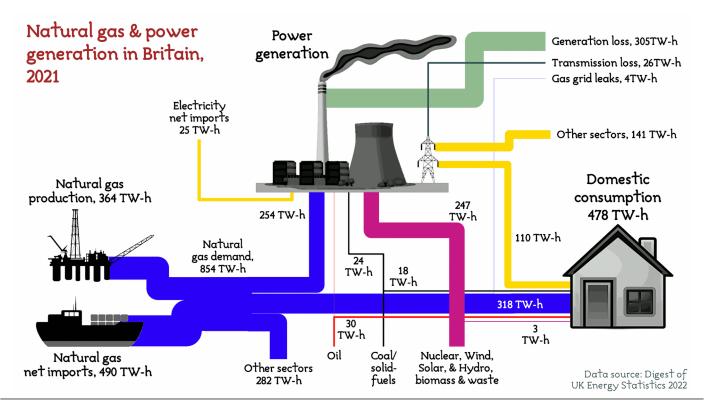
To put that in perspective let's look at how natural gas and electricity affect domestic energy supply – illustrated by the diagram below.

There are around 25 million houses in Britain, each consuming on average about 15,000 kilo-Watt-hours (kWh) of energy a year. Collectively they consume 478 tera-Watt-hours (TW-h – 1 tera-Watt-hour is equivalent to a billion kilo-Watt-hours).

In 2021, Britain consumed 854TW-h of natural gas. With the decline of the North Sea, Britain has shifted from a gas exporter to producing just over two-fifths of its gas needs; three-fifths is imported.

Only 6% of Britain's gas imports (about 3% of all gas) comes from Russia; mostly via piped gas trading with other European countries. Almost two-thirds of our imports come directly from Norway. Much of the rest arrives as liquefied gas by ship from around the world. This means we are less exposed to gas supply cuts than other European countries who import directly from Russia.

However, because the UK energy industry is a privatised entity, they can sell that gas to the European market if they can get a better price. That's



been the case over much of the Summer of 2022; and because of Europe's far higher level of gas storage, this Winter Britain may have to buy that gas back at an even higher price.

Power stations are critical, as without power nothing else in society functions: Meeting electricity demand has become the greatest challenge in the energy system today. This has arisen due to the market dogma of successive governments, obstructing progress towards creating a more efficient and resilient electricity grid.

Just over a third of the natural gas supply goes to homes, and just under a third goes to power stations – but as electricity is only a small part of overall consumption, the gas supplied to power stations represents almost half of fuel for power generation.

Coal now plays a minor part (around 4%) in the UK energy system. Most of the power stations which used coal have been demolished. The few that are left have just been thrown £420 million to keep operating because the government are so worried about power supplies this Winter.

Oil plays a minimal part in the power system, although in rural areas oil is still significant for home heating. Almost the same amount of energy as natural gas is provided by renewable and nuclear sources. We also import a small amount of electricity from Europe – which is doubtful this Winter.

All those figures for the input to power stations are what is called 'primary energy'; it's the energy contained in the raw fuel supplied from those sources. These are transformed into electrical power, and supplied to the grid as 'secondary' energy. The exception are wind and solar, which produce power directly.

Power stations are supplied with about 530TW-h of energy, of which 110TW-h (about a fifth) is supplied to homes, 141-TW-h (a quarter) goes to other uses, and 331TW-h (three-fifths) is 'lost' as heat – either directly from the power station, or from the electricity grid (4TW-h of gas also leaks from the gas supply grid).

Let's put that really clearly: For every five units of energy we put into power stations, roughly two are used as electricity, and three are thrown away into the environment as waste heat.

Let's ignore the general issue of renewable energy for now. The basic fact is that when you burn things to make electricity, the inefficiency of power generation mean that a half to two-thirds of that energy is thrown away. That's not the case with wind and solar, but many other forms of what are classed as 'renewable energy' – such as woody biomass or waste incineration – are also very inefficient at turning the energy in the fuel into usable electricity.

Overall then: Two-thirds of domestic energy is supplied as natural gas; one-fifth as electricity; and the remaining tenth as mostly coal and oil. Or to put it another way, the energy wasted from power stations is about the same as the energy in the natural gas supplied to houses.

Now ask yourself, when has a politician ever gone on TV and talked about the ecological scandal that is power generation in Britain – where we throw away most of the energy we put into power stations.

The political failure of Britain's energy policy isn't simply an issue of fossil fuel versus renewable, or insulation versus energy imports. The failure of energy policy is that is cannot engage with the engineering complexity of how that system works, because that technical complexity challenges so many political assumptions.

Instead, politics has left such detailed decisions "up to the market", and for the past forty years that market has systematically asset-stripped Britain's industry: Leaving us with some of the <u>highest</u> energy prices in Europe; and with much of it <u>subject</u> to foreign ownership, meaning profits are taken offshore – in much the same way as happened to the privatised water, transport, or steel industries.

The reason this has come about is that energy, like water or telephones, is not a true 'market': It is a 'synthetic' <u>state-based market</u>, where the conditions of operation are politically set in order to meet ideological objectives; and where the companies involved make large political donations in support of those policies. Under that process technical barriers, changing global trends on energy and the environment, and most notably 'the public good', are generally ignored in order to maintain that questionable ideological construct of, 'the market'.

The collapse is 'in the post'

In the early 2000s, many researchers looking at the energy and finance system were expecting a widespread collapse – because it was founded on make-believe and supposition. That collapse duly arrived in 2007's 'Credit Crunch'. Those who predicted the crash expected wide-scale reform. Instead what happened was something no one thought possible:
Governments and central banks created hundred of billions of 'free money' and handed it to banks and finance houses – and much of it ultimately ended-up in the pockets of the world's wealthiest 1%.

Many of those same researchers are now <u>forecasting a</u> <u>crash again</u> – for a whole variety of reasons, including the <u>'bubbles'</u>

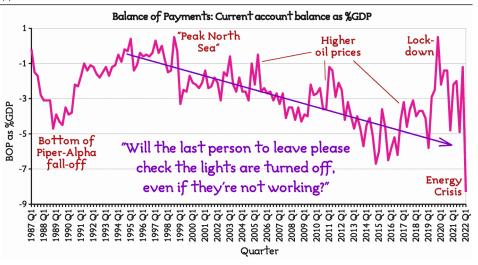
created by all that 'free money'. Many also note the correlation to the trends of the 1970s crisis.

Britain, though, is an exception: Here the crash is going to be worse; and deeper, because of the failure to evolve and invest in infrastructure for the last two or three decades.

The graph above shows Office for National Statistics data on Britain's balance of payments – the value of goods and services imported into Britain. The collapse of manufacturing industry in the 1970s & 80s meant that North Sea oil was the last major source of foreign earnings. Since 2000, with the peak of North Sea production, that figure has been falling consistently. What does this mean?

As Britain imports more, more pounds have to be sold on the international markets to buy those goods. Together with the worsening economic situation in Britain, that means the value of the pound is falling to levels not seen for decades – since the last energy crisis in the early 1980s, before North Sea production grew to meet most of our needs.

As the value of the pound falls that makes energy imports cost more; which worsens the economic situation; which causes the pound to fall more – and the only remedy for that, high interest rates, would also make the economy collapse faster too.



'Managed democracy'

The 'private equity' vultures of late stage capitalism are circling within the new Prime Minister's entourage. This is not new. Britain has been asset-stripped under successive governments:

First it was the 'classic' asset-stripping of the 1970s crash; then the North Sea; then public services, education, and the NHS; and with the country on the edge of a new crisis, new policy ideas like Freeports or Charter Cities do not make the economy 'better', they reinforce the economic policies of the last four decades at ever-more extreme levels.

If the Winter of 2022/23 is exceptionally cold then the risk of the power grid failing is far higher. As I explain in a recent video, because power is at the root of modern society, that causes everything else to collapse – accentuating the crisis.

Recently <u>Liz Truss said</u>: "...there are difficult forecasts out there, but forecasts are not destiny. And what we shouldn't be doing is talking ourselves into a recession. We should be keeping taxes low."

In reality, the 'reforms' the new government proposes do not solve these systemic problems, they accentuate them. They do not avoid the crisis, they make the crisis even more certain. What we have to ask is, to what extent this a deliberate ideology?

In conclusion, what we are talking about here is 'The Shock Doctrine' – the plan developed by neoliberal thinkers in the 1970s to utilise economic crises in order to justify the enactment of draconian economic reforms. Freed of legal restrictions from the EU, this was the ultimate aim of Brexit; and with many civil freedoms curtailed by new laws, and the government bent on a major neoliberal policy shift, the public will have little opportunity to oppose these changes. The key point, though, is that these changes do not avert the crisis. What they do is perpetuate the 'managed democracy' that has driven the ever-more extreme economic exploitation of Britain for the last forty years.