

Importing electricity

Some contributors asked me to say more about our growing import dependence. The UK has been a net importer of electricity since the second quarter of 2010. In the last century we had a policy of security of supply and national self sufficiency. The latest government quarterly report for the third quarter of 2021 stated that the net imports of 7.6TWh for that period was the "highest value ever". Imports reached 8.4 TWh whilst exports were 0.8 TWh. Our main exports are to Ireland which took 0.8TWh over the three months. The biggest single source of imported power is France, followed by the Netherlands. One of the reasons for the increase in imports was the poor performance of wind power.

Scotland which usually supplies substantial power into England from its large windfarms supplied 50% less in the third quarter. Scottish wind farms are given priority to supply when they are up and running, taking precedence over England based gas plants in accordance with the decarbonisation policy.

Fuel imports from the EU rose by 50% in the third quarter on a small base and imports from the rest of the world rose by 34% on a larger base. The UK also exported some fuel to the EU over that time period.

There is no evidence to support the proposition that the UK has a good business exporting wind based energy to the continent at scale when the wind blows well. The French system is usually well supplied by nuclear power, whilst continental wind farms also tend to do well when the wind is blowing across northern Europe as a whole. The danger is when there is plenty of wind market prices for surplus power are often low.

So the questions to ask are

1. Why have we allowed ourselves to become so dependent on imported electricity from Europe, when the continent is short of gas and oil, wishing to close down its coal activities and dependent on Russian gas? What are the prospects for French nuclear given the age of the fleet and the high replacement costs and delays in construction?
 2. How central is security of supply in policy formation?
 3. What is the relative cost of wind power and gas generated electricity given the need for more back up power for wind provision and adjusting for priority access to customers afforded to wind power?
 4. When could we become a serious exporter of electricity making a profit from the transaction in the way some argue we could?
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How much renewable power does the UK now produce?

The latest quarterly government figures for energy output and use relate to the third quarter of 2021. It is true this was a poor quarter for wind and solar output of electricity, but it is worthwhile looking at what happened as this was an actual outturn after huge investment in renewables. Whilst it was unfortunate that the wind did not blow much and the sun did not shine much, it was also quite a mild period meaning the system was not fully stretched by high demand which would have been met from fossil fuels.

The Business Department Report says "Output from wind, solar and hydro was low due to prevailing weather conditions" . "Unfavourable weather conditions meant that renewable generation fell to 24.3TWh, the lowest value in four years... Wind was particularly affected , down 30% on the same period last year"

The renewables figure they cite for output includes a substantial contribution from biomass or wood pellet. Wind only delivered 15.1% of our total electricity for the quarter, solar 6.2%, with hydro at just 1%. This makes a total of 22.3% from renewables for the whole three month period , under one quarter of our needs. This should put into context the claims of those who say wind is now providing the answer.

All three remaining coal power stations had to be brought into use, with a 155% increase in coal based power on a low base. Overall coal imports rose 18%.

The policy furthered the trend of making us more and more dependent on imports. In the case of coal most is now imported. 48% of the imports came from Russia. Primary oils demand rose by 14% largely met from imports. Domestic gas production was down by 11% also increasing dependence on foreign energy.

In 2021 the UK ran down its stocks of oil following a change in the stockholding protocol in January. The policy of closing gas storage is now being mirrored with the run down of oil stocks, further undermining our energy resilience as a country.

The Business Department needs to turn its attention to replacing more of these imports with UK energy. The National Security Council should be concerned about our growing reliance on the goodwill of foreigners when Europe as a whole is short of energy and when Russia intends to use its dominant positions in gas and coal as part of its diplomatic leverage.

Net zero did not even make it to Christmas

The road to net zero is meant to be a thirty year commitment. The three leaders or main players in favour of the whole speeded up plan were the EU, the USA and the UK at COP 26. The USA and the EU have already pulled back substantially from what they said and promised at the summit.

The ink was hardly dry on the compromise conclusions before an increasingly unpopular President decided he needed to take action to cut US petrol and diesel prices which were becoming inconvenient to motorists and business alike. He pledged to sell some of the US strategic oil reserve to help get the oil price down. More importantly he had words with his allies the Saudis to get OPEC to pump some more. No thoughts here to use higher prices to force more people and businesses off fossil fuels.

Also alarmed by the huge surge in European gas prices for home heating and industrial use, he decided to keep US gas prices way below European stressed levels. He issued 3091 drilling permits for more gas, and is auctioning 80 million acres of the Gulf of Mexico for oil and gas exploration. He is now happy by implication that his predecessor Mr Trump had provided a big boost to US gas output and is dining out on that success and boosting it further with his drill baby drill policy. The Greens see this as tearing up his good intentions and promises at COP 26. It is the reason US gas prices are so much lower than Europe's.

It took the EU a bit longer after COP 26. Faced with a disastrous shortage of gas, a sometime shortage of wind power, and closures of coal and nuclear generating stations, the EU has decided to make a major pivot back to fossil fuels in the form of gas. They have now decided to buy up as much gas as they can in world markets to keep the factories turning and the lights on. They have also decided to designate gas as a green fuel which makes an important difference.

The US and EU pledges made for COP 26 did not make it unscathed to Christmas. China artfully avoided getting on the road to net zero anytime soon.

The U.K. should respond to the decision of two of the three largest generators of CO₂ in the world to change course like this. As the U.K. is still running on EU rules transposed into U.K. law this is one occasion when we should follow the EU lead and re designate gas. Unlike the EU we should not tie ourselves more to their shortage of domestic energy and gas but should use our independence to extract more of our own gas alongside imports from Norway to make our supplies of this recently greened fuel more secure. China of course, the world's largest CO₂ generator by far, was happy to see the west pledged to net zero whilst making clear China plans to increase its CO₂ output for most of the rest of this decade.

Germany is closing all its nuclear stations within a year and all its coal

stations this decade. France has several older nuclear plants temporarily closed. This will worsen the EU's energy shortage. The U.K. cannot rely on imports from the EU. We need to rely more on ourselves and have enough gas to heat our homes and to power U.K. industry.

[See my article on tax and energy price promises in the Mail on Sunday on line](#)

– <https://www.dailymail.co.uk/debate/article-10361185/Britain-energy-self-sufficient-vital-keeping-lights-on.html>

[Glengorm gas field](#)

Not many people disagree with my argument that all the time we need to burn or use gas as a feedstock it makes more sense to use gas from nearby from our own gasfields than to transport it miles across the oceans of the world in an LNG carrier or to draw on continental supplies that also depend on Russia.

I do get asked how realistic this is, given the way the North Sea is running down. It is true that recent years have not seen the same huge discoveries the drillers discovered in the earlier years of the development of this great resource. It would be wrong to say there is no new gas to find or to produce. Recent years have seen important discoveries made. The Jackdaw field is a substantial find which is ready to develop, with gas pipes running nearby and the Shearwater platform with available capacity to process the raw output.

There is a potential upgrade of Goddard in the southern North Sea, and development of Lancaster as an extension to Hurricane. There are the Glengorm and Glendronach finds west of Shetlands. In total the Oil and Gas Authority tells us over the last three years the industry found an additional 500m barrels of oil equivalent between oil, gas and gas liquids. That was with much reduced drilling.

On top of this is the more contentious issue of the Bowland shales in northern England. So little drilling has been allowed there that estimates of how much gas is available range from a very useful 2.7 trillion cm to a massive and game changing 37.6tcm.

The Conservative Manifesto promised “to introduce new measures to reduce (energy) bills”. Encouraging and permitting more exploration and development

wells in the North Sea would be a way of helping do this, which would also create plenty of new well paid UK jobs and save all those LNG carbon generating miles of travel.