



Drax Power Station: Burning all the things Driving extinction, inequality and climate chaos

Drax wood pellet train, Port of Liverpool. Photo by Katy Brown

Drax Power Station calls itself the “world's largest decarbonisation project”; however, in reality it is increasing carbon emissions, as well as fuelling forest destruction and environmental injustice.

Drax has long been famous as a climate criminal, for a number of reasons: it is the UK's largest power station and largest single emitter of CO₂; and its portfolio now contains three forms of dirty energy – biomass, coal and gas.

Biomass

In 2018, Drax burnt imported wood pellets made from over 14 million tonnes of trees. By comparison, the UK produces around 11.2 million tonnes of wood each year.

Even before the UK started burning millions of tonnes of wood in power stations, we were already 80% dependent on net imports for all the wood used in this country. Drax has to import nearly all the wood it burns, primarily from the US, Canada and the Baltic States, with smaller quantities coming from Portugal, Brazil, Belarus, the UK and ‘other European countries’.

Drax's biggest supplier in the US is the world's largest wood pellet company, Enviva. Enviva admits that most of its pellets are made from hardwood – which, in the southern US, means they come from the clearcutting of from highly biodiverse forest ecosystems. Drax also owns three pellet mills in the southern US, which source from monoculture pine plantations. Across the region, such plantations have been expanded at the

expense of rich forest ecosystems. They are sterile plantations with virtually no undergrowth, inhospitable to wildlife.

As well as destroying forest ecosystems and contributing to climate change, the wood pellet industry exacerbates existing environmental injustice in the southern US. The industry has a track record of siting its facilities in areas already affected by other polluting industries and inequality. Further, an investigation by the Environmental Integrity Project discovered a “shocking pattern” of air quality violations by the wood pellet industry. Residents then face the impacts of wood dust, noise and heavy traffic as well as seeing their local forests turned into pellets and shipped overseas to be burned.

In Europe, Drax buys pellets from Graanul Invest, an Estonian company with pellet mills in Latvia, Estonia and Lithuania. Graanul is Europe's largest and the world's second largest pellet producer.

Half of Estonia is classified as forest, although much of that has been cleared of all or most trees. 12% of Europe's threatened species live in Estonia – including the Eurasian Flying Squirrel (close to extinction in Estonia), brown bears and wolves – and logging is a key threat to wildlife. The Nature Conservation Commission of the Estonian Academy of Sciences has warned: “Today's forest management as a whole is unsustainable in its present trend, does not guarantee biodiversity conservation, takes little account of ecosystem services and therefore needs to change.” Yet the government wants to see annual logging rates increased further still.

Enviva's logging, Sampson County, North Carolina. Photo by Dogwood Alliance.



Coal

While Drax has reduced its coal use in recent years, it still burnt two million tonnes in 2018, sourced mainly from Russia, the USA and the UK.

In Russia, coal mining is linked to serious human rights abuses for indigenous people. A report by the Coal Action Network and Fern shows how in the Kuzbass region (where most of the coal burnt at Drax comes from) entire villages are being destroyed, people, wildlife and plants are poisoned by toxic coal dust, and mountains of

coal 'waste' dominate the landscape. The indigenous Shor have depended on wildlife for their subsistence way of life, which is being destroyed by coal.

In the USA, mountaintop removal mining is still causing the destruction of large areas in the Appalachian Mountains. In the UK, despite the Government's commitment to a coal phaseout by 2025, new opencast mines are still being approved, most recently in the Pont Valley and Field House, both in Durham.



Coal mine, Siberia. Photo by Coal Action Network



Gas

In 2018 Drax announced plans to replace its current coal-burning capacity with much larger units burning gas. If this goes ahead, Drax will become the UK's largest burner of gas. This replacement of one fossil fuel with another would lock the UK's power supply into dirty energy for decades to come and blow any chances we have of meeting our commitments under the Paris Climate Agreement to stay within 1.5 degrees of global warming.

The big new gas capacity which Drax wants to build will play into the hands of frackers by boosting the

UK's demand for fossil fuel gas for decades to come.

Following its takeover of Scottish Power assets at the start of 2019, Drax also owns four gas power stations with a combined capacity of more than 2 gigawatts (Damhead Creek, Rye House, Shoreham, Blackburn). It also holds planning consents for four new gas power plants: Hirwaun Power Station near Merthyr Tydfil, Progress Power Station in Mid Suffolk, Milbrook Power Station in Bedfordshire, and Abergelli Power Station, north of Swansea. These are smaller peaking power stations.

Subsidies

During 2018, Drax 'earned' £789.2 million in renewable electricity subsidies. That's £2.16 million every day. Renewable electricity subsidies are financed through a surcharge on electricity bills. Drax's biomass subsidies exceed its gross profits, which means the company couldn't keep operating the power station without them. Redirecting the massive subsidies which Drax receives could create a windfall for genuinely low-carbon renewable energy and make an important contribution to reducing the UK's greenhouse gas emissions. Sadly, recent Government policy has seen subsidies for onshore wind

and solar power and for energy efficiency and conservation slashed. For Biofuelwatch's campaign to redirect subsidies, see <https://www.biofuelwatch.org.uk/2018/scrap-wood-burning-subsidies-info/>



Carbon Capture?

Recently, Drax has been boasting about investing in Carbon Capture and Storage from its biomass plant – although what it is doing is in fact a tiny product testing exercise for a startup company, with no carbon whatsoever being stored anywhere. BioEnergy with Carbon Capture and Storage (BECCS) is a false solution to climate change. If this technology was to ever work, it would lead to far more trees being cut down and burned per unit of energy, devastating forests and the wildlife as well as communities that depend on them even more.