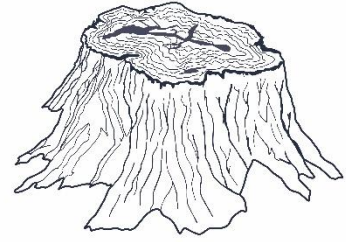


CUT CARBON NOT FORESTS



Drax Myth-Busting

1. What Drax claims

Moving from coal to biomass reduces emissions and is a 'zero-carbon' or low-carbon source of energy.

The facts:

- Drax is the UK's largest emitter of CO₂.
- Drax's claims that it is reducing carbon emissions through switching to biomass are misleading.
- Logging wood for biomass has been linked to the degradation of forest carbon sinks.
- Burning wood for fuel emits more CO₂ than coal at the smokestack, but combustion emissions from biomass electricity are allowed to be counted as 'zero' under EU and UK law, on the basis that trees will eventually grow back in the landscapes where they are sourced.
- Since Drax burns wood pellets from forests across the globe, it is not required to count the emissions from this process in its annual reporting. These emissions are ignored due to loopholes in biomass accounting rules, but if they were counted the UK would be even further off course for meeting its carbon budgets than it already is.
- In fact, GHG emissions attributable to Drax increased from 15.1 million tonnes of CO₂ equivalent in 2019 to 19.4 million tonnes of CO₂ equivalent in 2020, of which 13.2 million tonnes was from burning so-called "sustainable" biomass.
- Beginning in 2019, CO₂ emissions from burning biomass in the UK electricity sector exceeded those from coal and were second only to emissions from burning fossil gas.
- Almost all of these emissions are not included in the UK's national GHG inventory, according to leading think tanks. If they were, this would have added between 22 and 27% to the emissions from total UK electricity generation, or up to 3.6% of total UK GHG emissions in 2019 – equivalent to the annual emissions of 6-7 million passenger vehicles missing from the UK's balance sheet.
- Cutting and burning biodiverse forests is the last thing you want to do in a climate and biodiversity crisis. Far from being "green," biomass electricity is a dirty and destructive energy source.

2. What Drax claims

Drax is working to ensure the UK's energy system is delivered at a lower cost.

The facts:

- The UK Government pays subsidies for biomass electricity of over £1 billion per year – equal to £3 million per day (this figure is for all large biomass burning power stations).
- Of that, Drax receives subsidies of between £800-900 million per year or over £2 million per day.

- Wind and solar power is readily available at a fraction of the cost of electricity produced at Drax from burning biomass, and guarantees real CO₂ emissions reductions. In fact, wind and solar are so cheap that they're now bringing down UK energy bills.

3. What Drax claims:

The reason that Drax is no longer a member of the S&P Global Clean Energy Index is because of their gas and coal generation.

The facts:

- S&P's decision came shortly after a decision by financial services firm Jeffries to inform its clients that bioenergy is "unlikely to make a positive contribution" to tackling climate change.
- Drax does in fact continue to burn fossil fuels! Further, just like burning coal and gas, burning forest biomass emits large amounts of CO₂ and is not a climate solution.
- Evidence suggests Drax was removed from the Index due to what [the Guardian described as](#) "doubts over the sustainability of the company's wood-burning power."
- Citi also downgraded Drax's stock to 'neutral' from 'buy,' [noting](#), "we do not fundamentally see biomass as a sustainable source of energy."
- ShareAction [calls](#) biomass "a risky bet for investors," pointing to the scientific consensus that burning biomass instead of coal accelerates climate change.

4. What Drax claims:

Drax is committed to sourcing sustainable biomass that contributes to the long-term maintenance of growing carbon stock and productivity.

The facts:

- [Scientists are clear](#) that whole trees are the most carbon-intensive type of biomass and that burning this biomass for electricity makes climate change worse for many decades or more. Drax routinely burns wood pellets made from whole trees; whole trees made up over half of all the pellets the company burned in 2020.
- Investigations have uncovered that wood entering Drax's supply chain is often sourced from clearcuts of mature natural forests in the southeastern U.S., primary forests in British Columbia, and Natura2000 protected areas in Estonia.
- Harvesting forest biomass to produce pellets harms forest carbon sinks despite experts agreeing we need to do the opposite to address the climate crisis.
- Recent research shows that cutting and burning forests in the U.S. Southeast – the leading global region supplying wood pellets burned by Drax – leads to a net shift of carbon from the land to the air that lasts for decades.
- Biomass energy is a double whammy to our planet: endangering wildlife by cutting down trees in ecologically diverse forests to convert into pellets, then further endangering these ecosystems by burning those pellets in power plants which release dangerous emissions.

5. What Drax claims:

There has been an increase in growing stock of timber in all catchment areas in the U.S. South, where Drax sources biomass from, over the last two decades.

The facts:

- The state of the forests in the U.S. South, where Drax obtains most of its feedstock—is not nearly as positive as Drax portrays. [Natural forests are declining](#) in both acreage and [forest health](#), with serious negative impacts for nature and the climate.
- Forest acreage has grown less than 2% in the last 64 years, and acres of “forest” in the region are increasingly likely to be pine plantations, not natural forests.
- The wood pellet/biomass industry often attempts to mask its impact on forests by focusing on national or regional trends in forest growth – but photographic evidence shows the localized impacts of the forests actually being sourced for wood pellet mills.
- Additionally, as reported by Channel 4 News, CNN, and others, clearcuts of mature hardwood forests in the region routinely enter Drax’s supply chain.
- On the landscape, replacing older trees with saplings after harvest [reduces the amount of carbon](#) stored in the re-growing forest, even under the best-case scenario in which trees are replanted and regrow immediately; the latter represents a separate and significant source of emissions, known as “foregone sequestration,” which UK rules do not account for.

6. What Drax claims:

We stand ready to invest over £2 billion of private finance in the Drax Power Station BECCS project (Bioenergy with carbon capture and storage). Without BECCS at the Drax Power Station, the cost of reaching net zero by 2050 will be £26 billion more expensive.

The facts:

- [Analysis by Ember](#) finds that a BECCS unit at Drax could require £31 billion in subsidy over a 25-year lifetime. Analysis provided for the Government alongside its Net Zero Strategy finds that the first BECCS plants could need a price of £179/MWh guaranteed by public subsidy. This corroborates Ember’s figures and is more than triple the price guaranteed to offshore wind.
- This is due to several factors, including the cost of wood pellets. The Climate Change Committee has warned that the price of pellets could increase by up to 500% by 2050. Unlike other renewable technologies, which continue to become cheaper, this means the cost of bioenergy cannot keep falling over time. Government analysis shows that the cost of wood pellets will be the single biggest factor affecting the ongoing operating costs of BECCS power plants.
- BECCS is promoted as a technology that can help meet energy demand and deliver so-called “negative emissions.” However, because bioenergy from forest wood is not inherently carbon neutral, BECCS is not inherently carbon negative. [Recent research](#) indicates that Drax’s approach to BECCS will actually make climate change worse.
- Ultimately, BECCS would represent very poor value for money since it will not deliver the promised negative emissions and will cause significant harm to nature.
- Any programme to subsidise BECCS at Drax Power Station will be ineffective in drawing down emissions and will divert public resources better invested elsewhere. Instead, public money should be spent on protecting and restoring biodiverse ecosystems and carbon sinks; energy saving measures, such as retrofitting homes; and genuinely clean and renewable energy like wind and solar.