

Drax AI Growth Zone Briefing

July 2025



Key Points

- **Drax is the UK's largest carbon emitter**, releasing 13 million tonnes of CO₂ in 2024—**3.5% of the UK total**—by burning 7.3 million tonnes of wood.
- A **Drax-powered data centre** would lock in **high emissions for decades**, not deliver low-carbon energy.
- **No proven technology exists** to capture CO₂ from burning wood at scale, and the UK lacks the infrastructure to store it.
- Even if BECCS (Bioenergy with Carbon Capture and Storage) worked, it would **not deliver carbon-negative energy** or help meet **2050 Net Zero targets**.

The Data Centre Proposal

In February the Government announced new subsidies for Drax from 2027-2031. The Heads of Terms announced allow the plant to operate at a maximum 27% load factor. If Drax is included in an AI Growth Zone, this would override the Energy Minister's assurances to Parliament, and result in far more wood being burnt than intended by DESNZ.

AI Growth Zone criteria favour sites near low-carbon energy infrastructure - but Drax is **not** low-carbon. It is the UK's largest carbon emitter and the world's biggest wood-burning power station. In 2024, it burned 7.3 million tonnes of wood - much of it from clear-cut, biodiverse forests in the U.S., Canada, and Europe - causing serious harm to ecosystems, communities, and the climate. The CO₂ released isn't reabsorbed for decades, if at all.

Climate and Forest Impacts

Burning wood at power stations like Drax releases large amounts of CO₂ that isn't offset for decades - if at all. The Climate Change Committee (CCC) warns that continued large-scale unabated biomass use is **incompatible with Net Zero** and should end once subsidies expire in 2027.

Counting biomass as zero carbon is misleading. Drax is the UK's **largest carbon emitter**, releasing 13 million tonnes of CO₂ in 2024. Scientists warn that burning wood - even instead of coal or gas - **increases warming for decades to centuries**. The European Academies Scientific Advisory Council also confirms biomass burning causes long-term climate harm.

Drax's wood is mainly sourced from forests in the southeastern U.S. and Canada, including **biodiverse and old-growth areas**. This degrades habitats for threatened species like the caribou, black bears, flying squirrels and numerous bird species, causing serious harm to nature and wildlife as shown by multiple NGO and BBC investigations.

Issues with BECCS

Proponents of BECCS argue that biomass can replace fossil fuels as a carbon-neutral energy source. However, BECCS is only carbon-negative if the bioenergy itself is low-carbon; this proposition is based on the net transfer of CO₂ from the atmosphere into the growing biomass that takes place during photosynthesis.

This balance breaks down when biomass is burned rapidly and at scale, making it a net CO₂ emitter comparable to fossil fuels. There are currently no scalable, nor functioning BECCS projects using woody biomass.

Research shows that biomass from forestry residues cannot meet the urgent emission reduction timelines required by the Paris Agreement, as it can take 44–104 years to reabsorb the released carbon. Even if BECCS were viable, it would not enable the UK to reach net zero by 2050.

Community Impacts

In the U.S. Southeast, where most of Drax's wood pellets are sourced, communities suffer from air pollution caused by pellet mills, which emit harmful PM2.5, nitrogen oxides, and volatile organic compounds linked to cancer, respiratory and pulmonary health issues. These mills are 50% more likely to be located in low-income, non-white "environmental justice" areas. Drax has faced multiple fines and, in 2022, was accused of environmental racism after settling air pollution violations in Louisiana.

Burning wood at UK power stations like Drax also releases PM2.5, which scientists say has **no safe level** for human health - putting nearby communities in Yorkshire at serious risk.

Including Drax in the AI Growth Zone would exacerbate the already extremely harmful impacts upon communities abroad.

Real Green Jobs

Most biomass energy in Europe comes from burning wood, often sourced by cutting down trees. Since new trees take decades to absorb the same carbon, this worsens the climate crisis at a time when we urgently need to remove CO₂ from the atmosphere. Protecting forests and restoring ecosystems like peatlands is far more effective at long-term carbon sequestration.

Drax claims BECCS will create 10,000 jobs, but this figure only applies to peak construction. Once operational, it would require just 375 staff while costing the public £43.3bn. AI data centres are typically highly automated, requiring relatively few long-term staff (primarily in IT, facilities, and security).

Yorkshire deserves real green jobs. Research shows that there are over 73,000 direct green jobs needed to decarbonise Yorkshire over the next 10 years. Communities don't need to remain tied to polluting industries - future employment lies in renewables, grid upgrades, energy storage, retrofitting, regenerative farming, and recycling. These sectors offer lasting, well-paid work and benefit the local economy.

We urge you to withdraw support from the joint bid to develop an AI data centre in partnership with Drax Power Station. Proceeding with this project would directly contribute to increased forest degradation, ongoing pollution in impacted communities, and a long-term rise in carbon emissions—potentially lasting decades to centuries.

For more information please contact stopburningtreescoalition@gmail.com.