

Lynemouth Power Station in Northumberland is the UK's second biggest power station after Drax. Lynemouth, like Drax Power Station, burns wood pellets imported from the southeastern USA, many of them made from clearcuts of highly biodiverse and carbon-rich forests.

A brief history of Lynemouth Power Station

Lynemouth Power Station used to be a coal power plant that supplied electricity to the Alcan aluminium smelter in the nearby village of Ashington. Alcan, a subsidiary of Rio Tinto, closed the smelter in 2012 and sold the power station to the German energy company RWE the following year. In 2015, RWE succeeded in winning subsidies guarantee (Contract for Difference) for converting the plant to biomass, but it decided not to go ahead for financial reasons. Nonetheless, the then owners had to stop burning coal at the end of that year, because the power plant was too polluting to comply with new EU emissions standards. This means that *the subsequent conversion to biomass did not replace coal burning, but simply allowed a mothballed power plant to start operating several years later*.

A few months after shutting down the plant, RWE sold it to the Czech energy company EPH (Energetický a Průmyslový Holding). EPH, via its fully owned subsidiary Lynemouth Power, proceeded with the biomass conversion and started burning wood pellets in the summer of 2018.



How many wood pellets are burned at Lynemouth and where do they come from?



Train delivering wood pellets to Lynemouth Power Station, photo: Biofuelwatch

Lynemouth Power Station has the capacity to burn 1.5 million tonnes of wood pellets a year. In 2020/21, the most recent year for which Biofuelwatch has got such information,³ the plant burned 1.26 million tonnes of wood pellets, of which almost 800,000 tonnes came from pellet mills by Enviva⁴ in the South-eastern USA, and around 340,000 tonnes from Canada, almost certainly from Drax's pellet plants.⁵ The remainder was sourced in Europe, mostly from the Baltic States. Enviva has a long-term supply contract for the Lynemouth Power Station until 2027, when the government's support for the plant is scheduled to end. That support takes the form of a Contract for Difference, which is a guaranteed market price which, except during the record high electricity price in 2022,

has represented a lucrative subsidy, paid via everybody's electricity bills.

What are the impacts of Lynemouth Power's pellets sourced from Enviva

Enviva is the world's largest pellet producer, with nine pellet plants in operation and a tenth under construction, all of them in the southeastern USA. Enviva routinely sources wood from the clearcutting of coastal hardwood forests, many of them wetland forests called 'bottomland hardwoods' in that region. Those forests lie at the heart of a global biodiversity hotspot, home to a high number of animal and plant species found nowhere else in the world.⁶ Just 20% of the vast hardwood wetland forests once found in the region remain, and only 10% are protected.⁷

In December 2022, the environmental magazine *Mongabay* published evidence from a former

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Clearcut of forest near Enviva's Sampson County pellet plant in North Carolina, photo: Dogwood Alliance

Enviva employee turned whistle blower, who stated: "We take giant, whole trees. We don't care



where they come from. The notion of sustainably managed forests is nonsense. We can't get wood into the mills fast enough".8 In the same month, investors raised a securities class action lawsuit against Enviva, alleging amongst other things that: "Enviva had misrepresented the environmental sustainability of its wood pellet production and procurement".9

In 2018, a report by the Environmental Integrity Project found that the majority of pellet plants in the region at the time had either failed to keep emissions below legal limits or had failed to install pollution



Enviva's Ahoskie Pellet Plant, North Carolina, photo: Dogwood Alliance

control required under the Clean Air Act.¹⁰ More breaches of legal limits for air pollutants have been recorded since then, including at Enviva's Simpson County pellet plant.¹¹

Across the South-eastern USA, wood pellet plants are 50% more likely to be sited in environmental justice communities, i.e. communities with an above-average level of deprivation and where at least 25% of the population are Black. Katherine Egland, Co-founder of the Economics, Environment, Climate, and Health Organization (EEECHO) in Mississippi, has compared the UK's wood pellet imports from the region to the history of the cotton trade: "If you look at the map of the wood pellet trade states and the former cotton trade states, they are the same. The UK ignored the human rights abuses of the cotton trade, with slavery, now they are imperilling the descendants of that same population with the wood pellets. [The US South] also happens to be the most climate vulnerable region in the nation."¹³

What are the impacts of Canadian wood pellets burned in Lynemouth Power Station?



Remains of a clearcut oldgrowth forest from which wood was supplied to a Pinnacle Pellets mill, now owned by Drax, photo: Michelle Connolly

As referenced above, those pellets are almost certain to come from pellet plants operated by Drax. Drax operates eight pellet mills in British Columbia and two in Alberta. In October 2022, a BBC Panorama programme showed how Drax, having obtained a logging concession, had clearcut old growth forest near one of its pellet plants, 14 This was followed by a documentary by the Canadian Broadcasting Corporation, CBC, also revealing Drax's involvement in clearcutting such forests in the province. 15 In early 2024, new investigations by BBC Panorama and by Biofuelwatch, Conservation North and Bulkley Valley Stewardship Council showed that, in 2023, Drax continued to



source whole trees from clearcutting of primary and oldgrowth forests, including some of the rarest oldgrowth forest ecosystems.¹⁶

Across British Columbia, old growth and primary forests are being clearcut at an alarming rate, with the consent of the provincial government. Although the government had promised a 'paradigm shift' to conserve remaining ancient forests, this has not materialised. According to Michelle Connolly from the British Columbian organisation Conservation North: "The wood pellet industry in B.C. is set to expand in a big way. And the only way they can do it is if the B.C. government continues to allow the logging of primary forests for this purpose. And this has to stop." 18



Old growth forest threatened by logging, including for wood pellets in British Columbia, photo: Michelle Connolly



¹ facebook.com/LynemouthPower/?locale=en GB, entry 22 December 2015

² modernpowersystems.com/features/featurelynemouth-fid-imminent-4990484/

³ drive.google.com/drive/u/0/folders/1w0XxXcKO90cTRBjV7WFPJm9qnrrMMfx4

⁴ envivabiomass.com/enviva-partners-lp-signs-long-term-off-take-contract/

⁵ The information available in the link on footnote 4 shows that Canadian pellets came mostly from British Columbia, but also from Alberta. Drax is the only company that produces pellets for export in both provinces.

⁶ cepf.net/our-work/biodiversity-hotspots/north-american-coastal-plain

⁷ dogwoodalliance.org/2015/10/crosspost-bioenergy-in-europe-threatens-north-american-wetland-forests/

⁸ news.mongabay.com/2022/12/envivas-biomass-lies-whistleblower-account/

⁹<u>bloomberg.com/press-releases/2022-12-27/enviva-securities-fraud-class-action-lawsuit-pending-contact-levi-korsinsky-before-january-3-2023-to-discuss-your-rights</u>

¹⁰ environmentalintegrity.org/wp-content/uploads/2017/02/Biomass-Report.pdf

¹¹ media.dogwoodalliance.org/wp-content/uploads/2017/08/Air-Quality-Fact-Sheet.pdf

¹² liebertpub.com/doi/full/10.1089/env.2017.0025

¹³ scalawagmagazine.org/2020/10/wood-pellet-environmental-racism-part-two/

bbc.co.uk/news/av/science-environment-63123774

¹⁵ cbc.ca/news/canada/wood-pellets-bc-forests-green-energy-1.6606921

¹⁶ https://www.biofuelwatch.org.uk/2024/drax-bc-pellets-investigation/

¹⁷ news.mongabay.com/2022/09/british-columbia-delays-promised-protections-as-old-growth-keeps-falling/

¹⁸ https://www.cbc.ca/news/canada/wood-pellets-bc-forests-green-energy-1.6606921