Submission ID: 736

Requests to participate in the Open Floor Hearing on January 18th, 2023

Just Transition Wakefield made brief summary points in our original relevant representation, and I would like to expand on these orally, adding detailed evidence to support our case.

In summary, we would like to expand on the following points:

1. The role of Drax Power and BECCS technology in combating Climate Change.

In paragraph 4.1.1 of the Needs and Benefits document (5.3) Drax Power states

The Government considers that, without significant amounts of new large-scale energy infrastructure, the objectives of its energy and climate change policy cannot be fulfilled. EN-1 (2011) therefore states that substantial weight should be given to the consideration of need in the decision-making process (paragraph 3.2.3). It adds that the weight which is attributed to considerations of need in any given case should be proportionate to the anticipated extent of a project's actual contribution to satisfying the need for a particular type of infrastructure.

In relation to the above paragraph, we dispute that retrofitting CCS to an existing system, thereby creating an energy debt, is "new, large-scale energy infrastructure", but more importantly it cannot fulfil climate change policy objectives. Based on Sterman (John D Sterman et al 2018 Environ. Res. Lett. 13 015007) there are a number of problems with biomass and net zero, not limited to:

- wood pellets emit more CO2/kWh of electricity than coal;
- timber plantation being less carbon-dense than the biodiverse naturalised forest it replaces;
- regrowth timescales being beyond 2050 or even 2100, meaning that within the timescale of the climate emergency, burning wood pellets cannot be carbon neutral;
- the carbon accounting systems used within the biomass industry conveniently ignore processing, transport and soil emissions, counting only the carbon in the harvested wood. The atmosphere and climate do not discount these emissions.

## 2. Flood risk.

Irrespective of the historic flood patterns around Drax and the surrounding villages and farmland, the 2022 Climate Change Risk Assessment (CCRA 2022.3) advises that climate change adaptation needs to be integrated effectively into all new infrastructure, and to prepare for warming up to 4oC. Using the available open-source coastal flooding projection tools available at Climate Central.org

) it is clear

that Drax will lie within the annual flood risk zone by 2050 and under some scenarios, within the intertidal zone.

2022 has seen a series of reports about ice sheet and glacier melting, all indicating that this is happening faster than previously predicted, that sea level rises will accelerate as a result, on top of the recorded acceleration of sea level rise over recent decades. Whilst it is not the fault of Drax Power that their flood risk assessment has been overtaken by disturbing new evidence, it is within the power of the ExA to ask for new and independent analyses of flood risks over the operation and dismantling phases of the plant at Drax, using a variety of parameters to adequately assess actual risk. This is particularly important as in our view, continued operations at Drax will further accelerate global heating and therefore sea level rise.

## 3. Biodiversity

There has been increasing scrutiny of the biomass industry throughout 2022, including documentaries in both the UK and Canada about biodiversity losses from logging and wood pellet operations in British Columbia.

There is also intense scrutiny on the biomass industry in the Southern US where Drax Power sources much of its wood pellets from, and in Estonia.

The debate on this matter highlights the gap between Drax's assertion that its operations and purchases are legally compliant and licenced, and the actual impact on naturalised, biodiverse forests in Southern US states, British Columbia and Estonia. The think tank, Ember, has reported that it believes that some imported pellets from Estonia are in breach of UK sustainability criteria through:

- logging in protected areas (including those protected under Estonian law and those designated as Natura 2000 reserves);
- damage to watersheds around rivers and streams;
- damage to carbon-rich peat soils;
- logging in ways that harm biodiversity (including clearcutting and other types of harmful logging in habitat for species protected under EU and/or Estonian law due to their imperilled status); and

logging culturally significant trees.

It is clear from evidence on the ground that whether or not wood pellet production uses whole trees or waste, the timber provided to wood pellet manufacturers, including Drax itself, is derived from clear felling and from mature, biodiverse forest (not monoculture plantations). There are recorded concerns in all supplying nations about risks to specific protected species including Caribou in Canada. The South Eastern coastal forests of the US have in excess of 1500 endemic species that are under increasing pressure as natural swamp forests are cleared as being of "no commercial value", completely discounting their biodiversity value – this at a time when it is recognised that biodiversity is collapsing globally, threatening human life to at least the same extent as global heating. As awareness increases, it is highly likely that the regulatory framework for harvesting biomass from biodiverse forests will tighten incrementally over coming years, alongside international agreements on deforestation. This will threaten the global supply of "affordable" wood pellet and undermines the business case for an expanding biomass industry.