

Just Transition Wakefield. Final submission, Deadline 10, 17/07/2023.

Interested Party Number: 20032286

Drax Bioenergy with Carbon Capture and Storage, PINS Reference: EN01012

Summary of submission in excess of 1500 words

1.0 Throughout the 6 months of this planning enquiry we have read and heard nothing to change our minds that this application for the development consent order is not justified. In fact, throughout this period, the evidence of worsening climate breakdown is building inexorably, with records tumbling – ocean temperatures, surface temperatures across all continents, accelerating polar ice loss, rising methane levels and of course the highest carbon dioxide concentrations for millennia.

1.1 This is the background against which the Examining Authority's recommendation to the Secretary of State must be made.

2.0 Climate change

2.1 We acknowledge and welcome Drax's recognition that biomass burning is NOT zero carbon, but **zero rated** within carbon accounting rules.

2.2 We summarise and restate our evidence from EASAC and Sterman et al that biomass burning cannot be zero carbon, and cannot even be low carbon within the time frame of the climate emergency and the UK's legally binding climate targets. We also highlight the project's vulnerability to legal challenge should the Secretary of State consent the application.

2.3 We demonstrate our view that because of the issues with the carbon emissions accounting system, and the long carbon payback period, that the claims from the applicant that BECCS is a negative emissions technology, within the period to 2050, do not stand up to scrutiny.

2.4 We question the role, post 2027, of the remaining unabated biomass units.

2.5 We highlight the climate implications of losing significant forest based carbon sinks, not just to Drax, but to the entire global biomass industry. We highlight that carbon sinks are also biodiversity reserves.

3.0 Carbon Capture and Storage

3.1 We highlight the continuing questions over the claimed 95% capture rate, and the fact that this DCO is not just related to, but entirely dependent on, the consent for development of both the Humber Low Carbon Pipeline AND the Northern Endurance Partnership undersea storage facility. We continue to highlight that it makes no

sense to consent this (or any other CCS facility) unless and until these two primary infrastructure projects are fully consented.

3.2 Amine and other emissions. We continue to question the human and ecological impacts of airborne amines and their degradation products, particularly nitrosamines. We also restate our concern that the consenting system does not make any allowance for the cumulative impacts of multiple amine-emitting CCS installations in the region.

4.0 Sustainability

4.1 We highlight the difference in ecology and biodiversity between a mature, multi-species natural or naturalised forest and a mono-culture timber plantation. We therefore stress that replacing mature, biodiverse forest with mono-culture plantation is incompatible with UK and global agreements to both protect and enhance biodiversity.

5.0 Policy Frameworks

5.1 Biomass Strategy. The expected publication of the UK Government's new Biomass Strategy is now July 20th, after the closing of this enquiry. We believe this to be at best unhelpful and at worst, deliberately undermining this enquiry, and we restate our request that Interested Parties be allowed to submit comments on the Biomass Strategy once it has been published.

5.2 Climate Change Strategy. Following judicial review, the UK government has revised its Climate Change Strategy. However, Friends of the Earth and others are considering further legal challenge because they believe it to still be incompatible with the Climate Change Act.

5.3 Humber Low Carbon Cluster. Recent news that the role of hydrogen in the economy is being downplayed may well have material effect on this Development Consent Order.

5.4 Financial. We highlight the continuing questions in both parliament and the media about the subsidies paid for biomass, and the fact that the applicant intends that the biomass industry is a growth industry, despite limited and non-renewable forest resources, which further threaten the economic viability of the industry long term.

5.5 Energy Policy. We highlight our original comments that this DCO is incompatible with policy EN-1, because the dispatched power is lower than at present for two reasons. Firstly because of the energy debt associated with CCS systems, raised in our early submissions. Secondly because it seems likely that the unabated biomass units are likely to be used intermittently to cover peak load times rather than baseload.

5.6 Powering Up Britain. We highlight in particular that the DCO does not contribute to energy security, as it can only operate on imported biomass. The UK does not have the capacity to produce the tonnage of wood pellets required by Drax, and the technology at Drax is not suitable for non-woody biomass such as crop wastes.

6.0 Delay.

6.1 We summarise and highlight our recent submission that there are significant issues associated with the applicant's proposed delay. These include changing policy context with a potential new government, changing subsidy regimes that may affect this DCO and that the Humber Low Carbon Pipeline and Northern Endurance Partnership undersea storage are not yet consented.

7.0 Future Climate Impacts on the operation of the power station.

7.1 Sea Level Rise. We highlight the risk to the site of the area potentially falling within tidal range by 2050, even in a moderate risk scenario of 3.2°C by 2100 as well as being within the 10 year flood risk zone even at 1.5°C of warming.

7.2 Flood and Drought. We highlight our concerns, possibly shared with the applicant, that the operation of the CCS plant is vulnerable to both drought and flood. Drought because of the shortage of cooling water, flood because the silt levels of the flood water could overwhelm the filtration system.

7.3 We express concern that the issues discussed however briefly in section 7 fall between the NSIP and Environment Agency permitting processes, that they are consequently at risk of oversight, yet may prove a significant risk to the project. We should not wait for hindsight.

8.0 Health and Safety.

8.1 We highlight the Health and Safety issues associated with wood dust that still blight both the workforce and communities in Southern US states that host pellet manufacturing facilities.

9.0 Conclusions

9.1 The application for the Development Consent Order to retrofit Carbon Capture and Storage to (up to) two out of four units at Drax Power Station should not be recommended for permission.

9.2 We are clear that the biomass industry is not compatible with the UK's legally binding climate targets nor its biodiversity commitments. Biomass burning cannot be carbon neutral, never mind a negative emissions technology, **within the timeframe of the climate emergency and legally binding targets.**

9.3 We are clear that the application to retrofit CCS to Drax Power Station is not only linked, but reliant on the successful construction and operation of both the Humber Low Carbon Pipeline AND the Northern Endurance Partnership undersea storage facility, and therefore should not be consented unless and until both of these projects

are consented and approved by the regulatory bodies as well as the Secretary of State.

9.4 We are clear that there are serious questions over the financial viability of both unabated biomass and BECCS between now and 2050.

9.5 We are clear that the application of BECCS and the use of the unabated units for peak load operations will both reduce the power supply to the electricity grid, which itself is incompatible with government policy.

9.6 We are clear that there will be measurable health impacts on UK communities, including the workforce, from a combination of wood dust and amine/nitrosamine pollution.

9.6 We are clear that the application of CCS to such an old power station is poor value for money, even if it met all other sustainability criteria.