

## **Summary of full submission (deadline 2) by Leeds Trades Union Council**

Our submission develops our concerns that that not only are the accuracy of the jobs projections in Drax's application questionable but also the technological scenarios on which they are predicated, which must therefore also be scrutinised in this examination.

Our Submission is structured as follows:

### **A) Predictions of jobs numbers**

- 1) Rationale for scrutinising both jobs claims at local and regional levels, and the wider technological scenario.
- 2) We argue that the jobs prospects are far poorer than implied in the application, result in a boom and bust pattern locally and regionally, and are based on highly uncertain future scenarios.
- 3) The Needs and Benefits Statement and Heads of Terms for S106 offer no grounds for confidence in extensive local employment or training benefits.
- 4) We discuss the slippage between terms like [jobs]“created”, “supported” and “generated”, and failure to provide any comparison scenario against which to evaluate jobs claims
- 5) The alternative, vital jobs, potentially foregone by the present scenario, in work yielding both greater emissions reductions and higher numbers of secure local jobs.

### **B) Dependency of jobs numbers on viability of BECCS as a negative emissions technology: relevance of challenges to carbon neutrality assumptions.**

We present detailed arguments for the importance of scrutinising claims for the carbon neutrality of woody biomass burning, and for disputing the Applicant's argument that this lies outside the scope of the examination, being a matter of government policy and the subject of an already-consented and operational project.

We argue that

- The project has the potential to be unlawful, eg in terms of the overarching Climate Change Act 2008 (2050 Target Amendment Order 2019).
- The Planning Act 2008 (104.7) requires this to be taken into consideration notwithstanding NPSs
- National policy cannot currently give sufficient guidance for the ExA to meet overarching legal and planning policy requirements
- The burners will be near the end of their life before the end of the decade, so the Application is in effect for an entire BECCS unit, not merely a CC retrofit.

- Insufficient account is taken of wider impacts of the energy penalty, eg higher use of fossil fuels contrary to EN-1 and draft EN-1
- Government consultations on BECCS business models gives grounds for treating BECCS as a as a technology in its own right, so that full lifecycle emissions must be assessed notwithstanding previous consents for biomass.

### **C) Emissions from industrial scale biomass (wood chip burning)**

Here we review the reasons why large scale woody biomass burning cannot be treated as carbon neutral over any timescale relevant to preventing catastrophic global heating. The carbon emitted, including overall loss of forest carbon sequestration capacity, will not be recaptured for many decades and the carbon debt will be compounded as long as harvesting on this scale continues.

We cite results from two scientific publications (Sterman et al, 2018 and the Spatial Informatics Group, 2019) presenting complex modelling of the loss of carbon sequestration and increase in atmospheric CO<sub>2</sub> from the use of woody biomass. The latter paper examines the impacts of Drax's own operations at three US pellet mills.

We also summarise two reports on Canada's logging industry, demonstrating unsustainable clearcutting of mature trees including for pellet mills supplying Drax , and the huge carbon emissions resulting from clearcutting of mature forest.

### **D) Efficiency of carbon capture**

The claim that carbon capture is a tried and tested technology is misleading. According to a comprehensive survey by the Institute for Energy Economics and Financial Analysis, no power CCS facility has ever achieved anywhere near its nameplate capture rate.

The facility cited by the Applicant (Petra Nova) captured 17% less than a low target of 33% of CO<sub>2</sub> emissions, whilst the only existing power CCS plant (Boundary Dam) has had an average capture rate of only 50% (up to 2021), and its most recent annual figures show a reduction in CO<sub>2</sub> emissions intensity of only 65% (relative to unabated coal).

We cite the Tyndall Centre's (2022) report concluding that CCS should be reserved for marginal applications in industry, but not for power.

**In section D 5)** we examine the problems with "blue" hydrogen (ie from gas with carbon capture), citing research evidence that this can produce higher CO<sub>2</sub> equivalent emissions than unabated gas. We consider this relevant to the Application due to the importance the Applicant places on the wider Humber cluster of which this is the key element.

**Finally, in Section D 6),** we discuss potential problems with the pipeline, and argue that, in addition to technical and safety issues, the reliance of the pipeline on a consistent supply of CO<sub>2</sub> from Drax has implications for how BECCS is operated, such that it cannot make sense to adjudicate BECCS without considering the pipeline at the same time.