

Biofuelwatch's comments on 'Powering up Britain' published on 30 March 2023

Key mission does not support woody biomass burning

Under 'details' a summary of the suite of documents it says "*The new department's mission is to replace our energy with cheaper, cleaner, domestic sources.*"

Clearly from the outset Drax's current reliance on imported biomass is not 'on mission'

Again on page 5 of the Powering Up Britain documents, it says *After decades of reliance on imported fossil fuels, the new department's mission is to replace them with cheaper, cleaner, **domestic** sources of energy"*

There is also an emphasis on Energy security: setting the UK on a path to greater energy independence.

Biomass at Drax is currently heavily reliant on imports and reliant on the countries the UK imports from remaining allies which is likely, but also on their land use/carbon accounting forestry/forests policies remaining as they are which is not guaranteed

Also Consumer security: bringing bills down, and keeping them affordable, and making wholesale electricity prices among the cheapest in Europe

Drax uses consumers' money in a way that is not cost effective in comparison to say wind generation which can bring costs down over time

3. Climate security: supporting industry to move away from expensive and dirty fossil fuels.

We submit that biomass burning is equally polluting and that biomass burning - whether or not BECCS is applied - and that our analyses indicate that BECCS should not be relied on for climate security.

4. Economic security: playing our part in reducing inflation and boosting growth, delivering high skilled jobs for the future

Drax and BECCS make a low impact in this area compared to other industries, as submitted by other organisations in other representations

Biomass burning is not compatible with any of the above and therefore unsurprisingly, in comparison with other genuine renewable energy sources there is no mention of imported woody biomass, which Drax relies up, as a renewable to be accelerated

Focus on domestic short rotation forestry and perennial crops for bioenergy

There is a clear focus on domestic biomass production with an emphasis on domestic short rotation forestry and perennial crops. The *Carbon Budget Delivery Plan* makes several mentions of this:

P101 Agriculture and LULUCF Domestic planting of Perennial Energy crops (PECs) and Short Rotations Forestry. Increase planting of PECs (miscanthus and Short Rotation Coppice) and Short Rotation Forestry (SRF). Increase land planted with perennial energy crops and short rotation forestry, ensuring above- and below-ground carbon sequestered by fastgrowing species through the Biomass Strategy. We will also be further exploring how this will be driven by market demand, what the appropriate sustainable business models might be and whether other support might be needed from government to enable this planting.

P 139 Agriculture and LULUCF Increase ambition for planting perennial energy crops and short rotation forestry. This may be achieved either through: increasing land planted, or relaxing expected standards about stocking density or use of exotic species. Subject to the results of further policy development, this proposal could produce carbon savings in Carbon Budget 6. Increasing land planted with perennial energy crops and short rotation forestry, would ensure above- and belowground carbon sequestered by fast-growing species.

P 170 Yearly additional area of perennial energy crop and short rotation forestry planted
Ha 0 0 9,600**** 15,000****

And also makes reference to fixing carbon using algae and seaweed

P 142 Explore the potential to cultivate macroalgae (such as seaweed or kelp) to fix carbon dioxide into biomass.

There is no mention of imported woody biomass.

Responding to the Climate Change Committee's (CCC) Annual Progress Report 2022 Recommendations

In response to 64 “The Biomass Strategy needs to set out a best use hierarchy for biomass and address the sustainability of the biomass supply required to support the rapid and sustainable deployment of BECCS (for power and biofuels). The Strategy should consider reducing reliance on imports by increasing domestic biomass supply as part of wider land-use changes (including diet change).”

The government says “The Biomass Policy Statement set out key principles for biomass use across the economy focussing on how biomass can support the delivery of our net zero and wider environmental targets. We are developing a priority use framework for the Biomass Strategy which will assess the decarbonisation potential of biomass uses across sectors. The framework will also consider other factors, such as costs, environmental impacts and availability of sustainable biomass from domestic and international sources. Building on this framework and sustainable feedstock availability, we intend to outline the role of BECCS, potential routes for BECCS deployment, and the policy frameworks needed to enable BECCS projects to deploy at scale, which will apply the updated sustainability criteria recommendations. Domestic biomass production will be delivered as part of a strategical approach to land use, which considers the full range of Government land-use priorities. The Government has committed to publishing a Land Use Framework for England in 2023, which will set out land-use change principles to balance climate, food, and environment outcomes.

Drax should demonstrate how it will be able to comply with this criteria going forward. In Oral evidence to the Environmental Audit Committee (Environmental Audit Committee Oral evidence: Technological innovations and climate change: negative emissions technologies, HC 738 Thursday 25 November 2021) Dr Daniel Quiggin, Senior Research Fellow, Environment and Society Programme, Chatham House commented that “about 3% of Drax’s feedstocks come from agricultural waste rather than woody biomass residues, which comprise about 97%. A key question to ask Drax is what their upper limit is on the amount of energy crops that can go into their turbines. There are some technical constraints around that, and the NFU should be aware of what those limitations are.”

Jason Shipstone, Chief Innovation Officer, Drax Group responded:

We used to have a UK energy crop scheme, which Drax used to participate in fully, not that long ago. There are sources of bioenergy other than wood. I have a team working for me that are actively exploring these and have done for many years now. Over the last two years, we have increased the amount of this material that we can use from the 3% to 5% numbers that Dr Quiggin quoted, up to between 10% and 30% with some of these. These could become active sources of alternative fuels for us in the future, and

we are progressing some of those now. Q90 Mr Goodwill: Are those things produced in the UK, like miscanthus or willow? Jason Shipstone: Some of it is in the UK and some of it is international. **There are different types from different areas, but all of it is being considered as potential fuel use. We have had several active trials over the last year to understand what those limits are for blending with wood.**

We would invite the ExA to ask the applicant *in light of the updated government policy as indicated by the Powering Up documents* to share the results of those trials and indicate how and whether it will be able to comply with sourcing domestic and perennial biomass going forward, given that there are limitations on how much woody biomass can be sourced domestically.