



Drax Independent Advisory Board
November 16th and 24th, 2021, Telcon Meeting
Timings: 14:30 – 17:30 GMT

Attendees

IAB: Sir John Beddington – IAB Chair (JB), Lord John Krebs (JK), Professor Sam Fankhauser (SF), Professor Virginia Dale (VD), Forest Research represented by Robert Matthews (RM).

Drax: Alan Knight – Group Director of Sustainability (AK), Emma Persson – Renewables Engagement Officer (EP), Richard Peberdy – Head of Sustainable Forests (RP), Kyla Cheynet – Sustainability Director Drax Biomass (KC), Michael Goldsworthy – Sustainability Manager (MG), Daphne Vlastari – Public Affairs Manager (DV), Darshana Myronidis – Head of Biomass Sustainability Compliance (DM), Kevin Tam – Senior Carbon Analyst (KT), Tanisha Beebee – Government Policy Senior Manager (TB), Richard Harris – Senior Fuels Developer Lead (RH), Matthew Rivers – Director of Alternative Fuels Origination (MR).

Day 1 – 16 November 2021

Introductory session

1. JB welcomed and introduced the session.
2. The minutes from the September meeting were agreed.
3. AK raised the question of having at least one in-person meeting next year. The IAB agreed it would be beneficial to hold an in-person meeting at one of Drax's sites in the US or Canada that includes a visit to the forests.

Update on recent media coverage

4. JB introduced the media coverage update.
5. AK mentioned media activity and the publication of recent reports by think tanks.

Update on Drax's Sustainability plan

6. AK updated the IAB on Drax's sustainability plan, which will include clear projects, outcomes and metrics. AK will update the IAB on progress at future meetings.

Update on Drax's plan to further reduce its carbon emissions

7. AK introduced an update on Drax's plan to further reduce its remaining carbon emissions.
8. JK asked if Drax owns enough land to allow for opportunities to directly offset carbon emissions, for example through enhanced weathering. AK explained that Drax's land base is not big enough for such opportunities. The only opportunity would be Direct Air Capture, but this is more expensive than BECCS.



9. KT introduced the work on Marginal Abatement Curves (MAC) and Drax's proposed target to reduce CO₂ emissions by 42% versus a 2020 base by 2030 on scopes 1, 2 and 3.
10. JB said it would be helpful to know what Drax's main objectives were on the carbon reduction plan and requested that the IAB is kept up to date on progress.

Update on biomass scrutiny work

11. RP introduced the International Union for Conservation of Nature (IUCN) guidelines and the emerging global nature positive framework, outlined by Locke et al (2021)¹. RP explained how Drax is embracing this thinking and is working on how to use this nature positive framework (which includes IUCN guidelines) in Drax's work to continuously improve biodiversity at Drax's sourcing areas and generation sites. RP said that the global discussion is no longer just focused on carbon and now also includes biodiversity. He added that Drax already works to go beyond doing no net harm.
12. On Drax's biodiversity work, JK suggested that RP outline key considerations: 1) what does Drax mean by biodiversity? 2) what are the habitat requirements? and 3) is Drax enhancing or diminishing that set of available habitats?
 - a. VD noted that it is not just habitat in general, but also life cycle considerations, and referred RP to the Esther Parish paper².
 - b. KC added that the current effort to enhance the biodiversity work to ensure that Drax's biomass is nature positive aims to understand what the current pressures are in the forests. So first, what are the issues, how/does Drax have an impact, and how can Drax get involved.
13. KC introduced the ecoregion approach by the World Wildlife Fund (WWF), which divides the world into ecoregions. She said this is key to Drax's wider biodiversity work as it helps to develop understanding of the different needs and dynamics in each of Drax's different sourcing areas.
14. RP gave an update on the Catchment Area Analysis (CAA) tool. Drax has already completed CAAs on the sourcing areas for 34 pellet mills (about 69% of Drax's supply). Methodology changes based on the IAB's previous recommendations will be made once results are in from Professor Bob Abt's work which builds on the CAAs.
15. MG introduced Professor Abt's work. Professor Abt is conducting two studies that aim to provide more evidence, beyond the CAA results, that the biomass industry has a positive impact in its sourcing regions:
 - a. Study 1: Statistical analysis of the historical impact that demand for typical biomass feedstocks has had on forest carbon stock and wood market trends in one of Drax's sourcing areas.

¹ <https://www.wbcsd.org/download/file/11960#:~:text=Nature-positive%20and%20the%20Global%20Goal%20for%20Nature%20,on%20Biological%20Diversity%20%5BCBD%5D%2C%20the%20United%20Nations%20Framework>

² <https://wires.onlinelibrary.wiley.com/doi/full/10.1002/wene.385>



- b. Study 2: Modelling the net climate impact of an increase in biomass demand sourced from the US South using the Subregional Timber Supply Model.
16. VD highlighted that the statisticians at Forest Inventory and Analysis (FIA) are extremely useful and could benefit this work.
17. RM said he had previously circulated two reports produced for BEIS on lifecycle analysis (LCA) studies for bioenergy production and recommended MG look at these studies. RM also added that it is important to pick out key scenarios rather than one large one to get clearer results and that consensus building with stakeholders in a community is crucial.
18. SF said he liked the Monte Carlo analysis (a specific sensitivity analysis to establish a range of outputs for each modelled scenario) used by Professor Abt but urged MG to also isolate two areas of uncertainties: 1) parameters where the range of uncertainty is particularly wide, and 2) for a given range of uncertainty, what the model is most sensitive to.
19. JB mentioned the plan and agenda for the meeting next week and closed the session.

Day 2 – 24 November 2021

Introductory session

1. JB welcomed and introduced the session.

IAB impact on Drax and future topics

2. AK introduced the summary of discussion on the IAB's impact on Drax and asked the group for input.
3. JK said that outcomes should be identified where possible as the summary of discussion is developed.
4. RM said that PBL Netherlands Environmental Assessment Agency (PBL³) is producing a paper on "the science of bioenergy and minimising carbon debt", which tries to address some of the myths about bioenergy. RM will circulate the paper to the IAB once finalised.

Drax's approach on biomass standards versus the sector

5. AK introduced the topic of biomass standards and how Drax is now positioned as a global company.

³ <https://www.pbl.nl/en/>



6. RP introduced pellet demand and explained which countries produced biomass and the different levels of sustainability. Sources used in the presentation were Hawkins Wright (2021)⁴ and SBP 2020⁵ data. RP included data on imports to the UK.
7. AK added that key considerations will include how the quality of the data can be improved, and what Drax's role is in bringing the rest of the industry with them.
8. The IAB said that increased industry demand for sustainable biomass could be an important stimulus for change.
 - a. AK said that a plan is being drafted on how to continuously improve standards within the biomass sector so only sustainable biomass is used.

Update on UK energy crop sourcing

9. TB and RH gave an update on the energy crops work since the last IAB meeting in September.
10. VD added references in the chat regarding surveying landowners: Hodges et al. (2019)⁶, Hodges et al. (2019)⁷, and Dale et al. (2019)⁸ pages 42-47.
11. TB presented the energy crops 2022 engagement timeline.

Drax stakeholder Roundtables Policy Paper

12. DV introduced the policy paper which is an output from the roundtables Drax hosted this year with participants from NGOs and industry. DV explained the context behind the policy paper and the recently published Glasgow Declaration.
13. The policy paper aims to outline Drax views on the multiple roles of forests and what this means in the context of the climate and nature crisis.
14. The IAB suggested refining some of the language used in the paper and recommended considering how specific metrics can be incorporated.
15. JB asked what the next step is for the policy paper. DV said the Drax team has already held three roundtables and is currently refining this paper. The paper will be circulated internally and among the participants from the roundtables for review.
16. JB thanked and closed the session.

⁴ <https://www.hawkinswright.com/report-library/report-page/bio-energy/outlook-for-wood-pellets/outlook-for-wood-pellets-q1-2021>

⁵ https://sbp-cert.org/wp-content/uploads/2021/03/SBP_AnnualReview_2020_FINAL.pdf

⁶ <https://doi.org/10.1016/j.rser.2019.06.012>

⁷ <https://doi.org/10.1016/j.dib.2019.104674>

⁸ <http://dcm-productions.co.uk/world-biomass-2019-2020/>