



Drax Independent Advisory Board
Tuesday, February 9th 2021 Teams / Telcon

Invited Attendees

IAB: Sir John Beddington, Lord John Krebs, Professor Sam Fankhauser, Professor Virginia Dale, Robert Matthews, Elena Schmidt.

Drax: Laura O'Brien, Rebecca Heaton, Selina Williams, Emma Persson, Matthew Rivers, Richard Peberdy, Ross McKenzie, Tanisha Beebee, Will Gardiner

Other: Björn Roberts (Earthworm)

Agenda:

- 1. 13:30–14:00: Introductory session**
 - 1.1. Welcome (led by John Beddington)
 - 1.2. Minutes and actions arising from November and December (2020) meetings
 - 1.3. Brief introduction to today's meeting and attendees (Rebecca Heaton)

- 2. 14:00–14:30: Opening remarks by Will Gardiner, Drax CEO**

- 3. 14:30–15:00: Drax Healthy Forest Landscapes Project (HFL) (Matthew Rivers, Drax)**
 - 3.1. Introduction to the project
 - 3.2. How HFL fits with other Drax work

- 4. 15:00–15:45: Overview of Healthy Forest Landscapes (Richard Peberdy, Drax)**
 - 4.1. Our approach
 - 4.2. The four elements we are trying to measure
 - 4.3. Overview and learnings (Amite pilot)
 - 4.4. Overview of phase 2 pilots

- 5. 15:45–16:00: Introduction to Earthworm partnership with HFL (Björn Roberts, Earthworm)**
 - 5.1. Earthworm introduction
 - 5.2. The partnership with Drax
 - 5.3. Wider use of the HFL concept

- 6. 16:00–16:15: External Activities update**
 - 6.1. Chatham House roundtable (Ross McKenzie, Drax)
 - 6.2. IAB Newsletter (Emma Persson, Drax)

- 7. 16:15–16:30: Conclusions and wrap up**



Drax Independent Advisory Board
February 9th, 2021, Interim Telcon

Attendees

IAB: Sir John Beddington (JB), Lord John Krebs (JK), Professor Sam Fankhauser (SF), Professor Virginia Dale (VD), Forest Research, represented by Robert Matthews (RM). Apologies were received from Elena Schmidt.

Drax: Rebecca Heaton (RH), Laura O'Brien (LOB), Ross McKenzie (RMck), Richard Peberdy (RP), Mathew Rivers (MR), Selina Williams (SW), Emma Persson (EP), Tanisha Beebee (TB), Will Gardiner (WG)

1. JB opened the meeting. The IAB agreed the minutes from the November and December meetings.

Opening remarks by Will Gardiner, Drax CEO

2. WG joined the session to explain Drax's proposed acquisition of Canadian pellet production company Pinnacle Renewable Energy and how it advances Drax's strategy to increase biomass self-supply, reduce costs and create a long-term future for biomass. The acquisition of Pinnacle gives Drax access to supply in three major North American wood baskets - British Columbia, Alberta, and the US South. Pinnacle's long-term third-party supply contracts gives Drax new business opportunities outside the UK.
3. WG said that Drax is committed to ensuring best practice in health and safety, operational efficiency and sustainability across the enlarged group and intends to invest accordingly to deliver this outcome.
4. Historically, the pellet industry has had a positive impact in British Columbia, because of its use of sawmill residues from logs infested with pine beetle. These residues were being burned prior to the establishment of the pellet industry. Drax is looking closely at how forest sourcing will evolve.
5. The IAB discussed the issues and areas of discussion going forward.
6. The IAB agreed to commission some studies, for example - around biodiversity and sustainability for the BC catchment area - and noted the need for local input.

Presentation on Drax Healthy Forest Landscape project

7. MR introduced the HFL tool to the IAB, explaining that it complements other evidence captured by Drax to demonstrate sustainability, such as certification and the catchment area analysis. WG had set the challenge of creating a tool to demonstrate in a simple, compelling way the evidence of the impacts of our sourcing on forests. Drax has partnered with non-profit organisation Earthworm Foundation (EF) to work on this project. Through this collaboration, four metrics were chosen: forest cover, forest carbon, biodiversity and community wellbeing.



8. The IAB asked why these four metrics were chosen. MR explained that Drax had tried to include aspects which can answer most of the questions that Drax receives about biomass sourcing.
9. RP described the differences and complementary nature of the Drax Catchment Area Analysis and HFL. HFL is focused on local stakeholders, while the CAA is market focused - teasing out the effect of biomass demand in each catchment area.
10. RP explained the four metrics for the HFL tool:
 - a. *Above ground forest carbon*: Carbon sequestration and storage is a key climate function of forests. Maintaining or increasing the growing stock or forest inventory and the rate of sequestration in the long-term can be an indicator of healthy and sustainable forests.
 - b. *Forest cover*: Change in forest cover and character (species mix, forest type etc.) is the basis for all other metrics and creates an impact across the entire forest landscape. Issues include deforestation, degradation, conversion and loss of habitat.
 - c. *Landscape level biodiversity*: Biodiversity is a critical indicator of a healthy forest ecosystem. It is of clear concern to a wide range of stakeholders. Monitoring changes in biodiversity across the forest landscape is an essential part of the HFL process.
 - d. *Community wellbeing*: The social aspects of the forest landscape are clearly important and include the rights of Indigenous Peoples, workers' rights, and general well-being. The interaction of the community with the forest is an important metric to monitor.
11. Throughout the project there has been ongoing consultation with a wide range of stakeholders and experts such as EF, Indufor, Hatfield Consultants, Oxford University, and the UK Space Catapult. These experts were consulted on:
 - a. Identifying the most appropriate metrics that can provide an indication of sustainability trends in biomass supply chains.
 - b. Identifying the best available technology and methodology to monitor and measure each metric.
 - c. Defining the extent of the 'forest landscape' around each mill or cluster of mills - essentially the fibre supply catchment area.
 - d. Identifying the most suitable service providers or partners for each metric in each forest landscape.
 - e. Undertaking a pilot study to test the process and methodology and refining the process and extend to other forest landscapes.
12. MR explained that different approaches were explored. There were lots of dimensions to explore in these first stage pilots.
13. RP introduced the first pilot, Amite BioEnergy in Mississippi – a catchment area of 660,000 hectares. Drax partnered with Hatfield to use satellite data to look at changes in forest cover.
14. Forest cover over the 2016-2020 period was found to be stable to slightly increased.



15. It was concluded that remote sensing could be useful in areas with poor forest inventory data. However, in the US South, the USDA FIA data is robust and remains the best source for above ground forest carbon data. Drax are continuing the trials.
16. On the biodiversity metric, Drax partnered with Oxford University, using the Oxford University LEFT project which has an established methodology of data analysis to measure biodiversity. The LEFT methodology presented the most robust way of replicating the same tool in all geographical areas. It collects information on species of interest in a particular catchment, maps 'red list' species, and also looks at the type of area (elevation, soil type etc.).
17. The biodiversity metric showed stable results in the Amite pilot. The plan is to continue with LEFT as a 'first pass' and where negative indicators arise to implement more focussed work.
18. The IAB said the methodology and results would need to be simplified to make it easier for stakeholders who do not work in forestry or biodiversity to understand.
19. RP explained the community wellbeing metric. This metric uses qualitative and quantitative data. Employment, income, poverty, education and health status were researched. EF worked with Drax to create a collective score based on the quantitative data. Qualitative data was collected through interviews. The qualitative findings showed that people were worried about prospects for young people, education system, forest health, and that the forest industry is important to locals.
20. RP concluded by asking the IAB to consider how the context, trust of information, these metrics and their results can be summarised for effective communication. The IAB said that this tool, the robustness of its metrics and what it can communicate should be discussed more at a subsequent meeting. Drax and EF agreed to consider ways to improve the data and analysis, and to discuss this with the IAB at a future meeting, along with how the results will be communicated.

Presentation from Björn Roberts (Earthworm Foundation).

21. BR introduced EF. He explained how EF's roots were in timber products in the tropics, but it is now working with a whole range of forest risk commodities also in boreal and temperate latitudes.
22. BR said he was confident that Drax are focused on building a low-carbon business for the future. EF partnered with Drax to help EF members understand what is happening in the areas where Drax sources its fibre. The HFL methodology helps inform discussions with stakeholders.

JK summarised the recommendations of the meeting:

23. IAB recommended improving the communication of the results from each HFL metric, especially biodiversity.



24. IAB suggested analysing the forestry landscape and landscape specific issues in British Columbia, (because of the Pinnacle acquisition), to enable assessment of Drax's operations and impact on that landscape.

25. The IAB concluded that the HFL tool and what it can communicate should be further discussed. The idea of how to move forward on looking at each metric in a future IAB meeting will be discussed.