

Will Gardiner
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August 20th, 2020

Dear Will,

Findings and Recommendations from the Meeting on May 29th, 2020, of Drax's Independent Advisory Board

The Independent Advisory Board on Sustainable Biomass (IAB) met via telephone for an interim meeting on February 24th, 2020 and again virtually for a full meeting on May 29th, 2020. This letter sets out our findings and recommendations following the full meeting of the IAB in May.

1. The meeting focused on bioenergy with carbon capture and storage (BECCS) where we considered the following two questions:
 - Can BECCS meaningfully contribute to global climate change mitigation?
 - Is the BECCS project at Drax technically, economically and environmentally feasible at scale?
2. While many climate models suggest that BECCS will be vital to achieving global climate change targets, little work has been done on just how much BECCS can be sustainably deployed at scale. As a result, legitimate concerns have been raised about the impact BECCS may have on land use, biodiversity and on the climate should it be mobilized without a robust sustainability regime in place.
3. In order for Drax to take a leadership role, we believe it must consider the biodiversity, land use and socio-economic impacts of BECCS at scale. To that end we were pleased to see that Drax has commissioned a study to assess the amount of biomass that can be sustainably mobilized for BECCS.
4. We were impressed with the rigour of the analysis produced for Drax, and the stringent sustainability constraints used to produce an estimate of the global biomass potential for BECCS.
5. The results of the study showed a lower amount of potential biomass than other literature.
6. The IAB believe this should bring some comfort to those organizations that fear sweeping land use change implications as a result of BECCS. The IAB consider this number still demonstrates that BECCS has the potential to make a material impact on climate change, but we believe that an understanding of the physical constraints of CO₂ storage is also needed.
7. It should also be noted that the results, though based on rigorous filters, do not consider future impacts of climate change on plant growth, which could be significant, in particular from a water scarcity perspective. While we understood the desire to reduce the number of assumptions and base the analysis on known data, we consider that climate projections are

now sufficiently robust to incorporate. We would suggest that this be addressed in future iterations of the analysis.

8. We also discussed the need for robust sustainability criteria to underpin BECCS sourcing choices, in particular residue removal thresholds for forestry and croplands. The IAB agreed that there is extensive academic evidence to support the thresholds chosen for this study, but that this is a topic of ongoing study that should be reviewed regularly, and taken into consideration by Drax in their sourcing decisions.
9. The IAB considers the analysis prepared for Drax a good starting point from which Drax can address many of the questions related to developing BECCS. It will be important that you build upon this work, translating this study into policy as the BECCS project moves from trial into production at scale.
10. To that end, we would urge Drax to work with organisations that have raised legitimate concerns about the sustainability of BECCS, as well as government and regulators, to pursue the policy implications of the analysis prepared for Drax. The IAB remains at your disposal to scrutinise any policy options that may emerge.
11. We were encouraged by the work at the power station to develop a commercial BECCS project. We identified several issues that will need to be considered going forward:
 - a. The socio-economic impacts of BECCS, in particular the potential impacts around the power station, need to be better understood.
 - b. When assessing potential feedstocks types, potential invasiveness and alternative uses of feedstocks must form a part of the decision-making process.
 - c. The issues of international accounting still need to be considered by Drax when moving towards BECCS.
 - d. And it is essential that you continue to use feedstocks that do not cause carbon debt, even if the carbon is being captured.
12. Again, the IAB remains at your disposal to scrutinise these vital policy choices as you make important decisions about your BECCS project.
13. At the next full meeting in November we will return to the questions we raised in our first meeting in November 2019, covering the carbon and biodiversity impacts of the biomass Drax sources. To support this, we have commissioned an independent literature review to examine the evidence of impacts on forest biodiversity from harvesting for biomass, with a focus on the US southeast. We will inform you of the findings in due course, and also plan to discuss the output at the November meeting of the IAB.
14. I look forward to hearing your views on the above and wish to thank you and your teams again for the positive and constructive meetings.

Yours sincerely,



Professor Sir John Beddington
Chair of the IAB