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Department of Agriculture, Fisheries and Forestry

GPO Box 858, Canberra ACT 2601

To Whom it May Concern

Wollemi.io Submission - Agriculture, land and emissions Discussion Paper

About Wollemi.io

Wollemi.io (Wollemi) is a climate reporting and management platform for land and agriculture. We provide automated audit-grade GHG emissions and physical climate metrics for the financial services sector and other large companies in land-intensive sectors. For example, the Australian banking sector is highly exposed to agriculture, lending \$92bn¹ to agri-business. Wollemi aggregates a variety of agro-climate and life-cycle emissions data per agricultural production sub-sector (for example beef cattle), using both public or open source data, which is also supplemented with high resolution private data. We use expert agro-climatic data modeling techniques and machine learning to connect hundreds of data points to local/farm resolution to calculate emissions and physical climate impact. Models are fine-tuned by the addition of farm level data (where available) to ensure optimal financed and insured emissions and physical risk estimates. The Wollemi methodology has been independently validated to comply with global and national regulatory and climate financial risk disclosure frameworks such as the ISSB and APRA CPG229.

Headline response to the discussion paper

- Wollemi is highly optimistic about opportunities for **accelerated decarbonisation** in the forest, land and agriculture sector, which is a significant source of emissions, but also one of the sectors at highest risk from the impact of climate change. We note the interdependence of nature and climate and the requirement for nature-positive initiatives alongside decarbonisation efforts.
- We believe the financial services sector (banking, insurance, asset managers) and large companies in land-intensive sectors are critical to this acceleration. To this end **we support the use of science-based targets** to develop meaningful decarbonisation strategies aligned with national and global targets.
- Furthermore, we believe for forestry, land and agriculture, that **new technologies in climate reporting and management such as artificial intelligence (AI) and machine learning (ML)** are a key part of

¹ Australian Banking Association Agribusiness Report 2022



transitioning today's activities into tomorrow's goals. These technologies enable more precise and predictive climate reporting, allowing for nuanced understanding and management of environmental impacts. By harnessing AI and ML, we can effectively transition our present-day activities into achieving the ambitious climate goals of tomorrow, ensuring a more efficient, data-driven approach to our environmental efforts.

The need for higher level of ambition (response to Discussion Paper Questions 1, 2 and 7)

- As noted in the Discussion Paper, land and agriculture is a significant source of GHG emissions in Australia and globally, requiring immediate attention across the supply chain. We support science-based targets for companies in land-intensive sectors as a means of driving climate ambition; developing clear decarbonisation goals are critical to achieving meaningful outcomes.
- We draw attention to the work of the Science Based Targets Initiative (SBTi), which has published the worlds' first standard method to set science-based targets that include land-based emission reduction and removal. This requires companies in the forest, land and agriculture sector to reduce at least 72% of emissions by no later than 2050² and zero deforestation target set for no later than 2025. The latter is in line with the Accountability Framework initiative (AFi).
- The SBTi requires companies that meet either of the following two criteria to set a forest, land and agriculture (FLAG) science-based target:
 - Companies with land intensive activities in their value chain including Forest and Paper Products, Food Production (Agricultural Production and Animal Source), Food and Beverage Processing, Food and Staples Retailing
 - Companies that have FLAG related emissions that total more than 20% of overall emissions across scopes 1, 2 and 3.
- The SBTi FLAG notes the importance of the carbon rights of farmers and forest owners and outlines best practices when companies engage supply chains to reduce emissions and increase removals. These include compensation, respect for human and land rights, farmer information and access to carbon markets.
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Supporting and enabling change (response to Discussion Paper Questions 8 and 10)

- A consistent and trusted approach for assessing and reporting emissions is often raised as a barrier to reducing emissions at scale. However, disruptive new technologies, including ML, offer a new approach. As an example, Wollemi.io has developed Australian technology that uses advanced ML and AI to enable

² <https://sciencebasedtargets.org/sectors/forest-land-and-agriculture>



land-intensive organisations, including the financial services sector, to measure and manage these emissions.

- Standardised, scalable technology solutions for automated audit grade emissions reporting and management, including for land use change, can further support and facilitate the future of effective carbon and ecosystem markets as they relate to agriculture, land and forestry. The Board of the International Organisation of Securities Commissions (IOSCO), which is the leading international policy form for securities regulators (the organisation's membership regulates more than 95% of the world's securities market in 130 jurisdictions) published a Consultation Report in December 2023³ to promote the integrity and orderly functioning of the Voluntary Carbon Markets. The Report flags disclosure of use of carbon credits as fundamental to avoid greenwashing and to enhance investor's confidence in companies that use carbon credits to achieve their environmental targets.

Summary

- We encourage government support via funding and accreditation of novel technologies that offer new ways of doing with improved accuracy, simplicity and insights. This includes the use of ethical AI and ML to disrupt traditional carbon emissions calculation methodologies.
- We encourage governments to recognise science-based targets as a valuable tool within larger sectoral decarbonisation plans - the SBTi offers a common, robust, science-based understanding of how quickly a company needs to cut its land-related emissions in line with the Paris Agreement goal to limit global warming to 1.5C.

We welcome further discussion and questions about the role of climate reporting technology in sectoral decarbonisation strategies.

Regards,

Sam Sneddon

Wollemi.io CEO and Co-founder

³ /www.iosco.org/library/pubdocs/pdf/IOSCOPD749.pdf