

Supplementary submission to the Senate Environment and Communications Legislation Committee Inquiry into the Carbon Credits (Carbon Farming Initiative) Bill 2011 and related bills

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Further to the Committee's inquiry and deliberations, I present this supplementary submission.

1. In Section 5, *native forest* is defined as an area of land that: (a) is dominated by trees that: (i) are located within their natural range; and (ii) have attained, or have the potential to attain, a crown cover of at least 20% of the area of land; and (iii) have reached, or have the potential to reach, a height of at least 2 metres; and (b) is not a plantation.

This definition is a significant improvement on the Kyoto Protocol definition of a forest because it recognizes the difference between native forests (where regeneration is due to natural processes) and plantation forests (i.e. planted forests). This is consistent with national and international terminology and definitions¹. However, there is a type of native forest activity that may be inappropriately excluded by this definition.

In cases where severe landscape degradation has occurred, bush regeneration cannot commence through natural processes. Rather, nature needs a helping hand. For example, The Big Scrub Rainforest was Australia's largest continuous area of sub tropical rainforest covering 75,000 hectares prior to European settlement but 99% of this rainforest has now been cleared. The Big Scrub Landcare Group is dedicated to both protecting remnants and undertaking ecological restoration of this rainforest ecosystem. However, given the level of ecosystem destruction and degradation, the initial restoration phase depends upon the germination and then planting of framework pioneer canopy species². However once these framework species are established, natural processes take over the establishment and regeneration of plants and a native forest evolves in time. This '2-step' bush regeneration process (i.e. assisted 1st phase establishment of framework species followed by a 2nd phase dominated by natural regenerative processes) is used by many bush regeneration organizations.

It follows that bush regeneration activities should be recognized as a type of native forest protection project as the outcome will be a native forest and not a plantation. Therefore, to maximize co-benefits, including the conservation of biodiversity and the resilience of forest ecosystem carbon stocks to climate change³, it would be wise to modify the Bill so that bush regeneration activities are so recognized. This could be achieved by modifying the definition of native forest in Section 5 thus: "It is immaterial whether any of the trees have been established with human assistance following any of the following events: (a)...(i) or as part of a bush regeneration activity."

2. A second issue concerns non-forest native vegetation. Only three classes of native vegetation ecosystems are defined or recognized in the Bill, namely, native forests, savanna and grasslands. While these three classes cover extensive areas (e.g. forests⁴), other classes of non-forest native vegetation cover vast areas of the Australian continent; e.g. Acacia shrubland covers around 851,274 km² with 537,139 km² W.A.⁵. Non-forest native vegetation is important for the pastoral industry in the rangelands, for the conservation of biodiversity, and whilst having a low carbon density represents a significant organic carbon pool due to the large area they cover. In order to ensure this important ecological category falls within the scope of legislation, the Bill may need to be modified to recognize "non-forest native vegetation protection projects".

¹ *Global Forest Resource Assessment: Key Findings*. FAO 2010.

² Big Scrub Landcare Group; <https://www.bigscrubrainforest.org.au/about-us>

³ The relationships between the positive role of biodiversity in conferring ecosystem resilience and role of native forests in climate change mitigation are reviewed in Thompson I., Mackey B., McNulty S. and Mosseler A. (2009). *Forest Resilience, Biodiversity, and Climate Change. A synthesis of the biodiversity/resilience/stability relationship in forest ecosystems*. Secretariat of the Convention on Biological Diversity, Montreal. Technical Series no. 43, 67 pages.

⁴ *Global Forest Resources Assessment 2010: Global Data*; <http://www.fao.org/forestry/fra/fra2010/en/>

⁵ *Vegetation Profiles: fact sheets of the major vegetation groups*. MVG 16—Acacia shrublands. Australian Government; http://www.anra.gov.au/topics/vegetation/pubs/native_vegetation/vegfsheet.html