

Comments received by the CCBA during the validation audit.

CCB Standards Second Edition

Project: **Northern Ontario Pilot Project**

Comment 1

Date: 7 July 2009

Sent by: Tim Holland, Consultant

I would like to offer my comments on the Northern Ontario project design document (PDD) that has been designed by Global CO2 Reduction, Inc. I have concerns with all three of the stated project objectives (section 2.3.5), but particularly the ones on carbon and biodiversity. By using an unrealistic baseline assumption, this project would be likely to greatly overestimate the carbon credits it deserves. Additionally, by establishing a uniform-age, nearly monoculture plantation will at best have no effect on local biodiversity, and at worst will damage it.

To start with the carbon objective, the primary problem is that the project's baseline scenario assumes that the 'grassland' (i.e. abandoned agricultural fields) of the project area will remain in its current state if there is no intervention (sections 2.2 and 3.1). This is stated on several occasions in the project document, and is one of the primary assumptions upon which are based calculations of carbon sequestered. Nevertheless, there is no reason whatsoever that I can think of (and certainly no reason given in the PDD) to assume that this would be the case. There is no natural grassland that I am aware of in this area of northern Ontario, and any field left untended would likely go through the natural process of succession; generally through initial colonization by poplar or aspen species, which would eventually be taken over by species of pine and spruce. An honest baseline would assume this process of natural succession. It is not unreasonable to assume that the land in question - left untended, as the PDD claims would be the case under business-as-usual - would develop into a relatively mature forest over the 100 years of the project life-span. That is therefore the baseline against which the project should be compared for carbon accounting, rather than an economically convenient, but otherwise unlikely, everlasting grassland.

Any carbon accounting based on a grassland baseline will greatly overestimate the project's additional carbon sequestration. However, this is not to say that the project will not provide any positive effect on carbon. Taking an honest baseline based on natural succession as BAU may still very well demonstrate some carbon gains from the project intervention, especially in early stages as jack pines that are planted and brushed may add biomass faster than deciduous species left to colonize naturally. In later years of the project, however, there is more of a chance that these gains be lost as a uniform jack pine monoculture may accumulate less total biomass than a natural forest with a diverse species assemblage and more extensive undergrowth. I do not know of studies that quantify this difference, and so could be mistaken here. Nevertheless, the onus should be on the project developers to find those relevant studies and to clearly demonstrate why their plantation would sequester more carbon than the naturally-developing forest that this project would take the place of.

Regarding the biodiversity objective, it seems unlikely this project will have any positive effect, and may very likely have the opposite. In some places, the PDD discusses planting a mix of black spruce and jack pine, while in others it describes a jack pine monoculture (which will be the case is not made totally clear). A uniform-age, jack pine monoculture plantation is one of the lowest biodiversity systems that can be imagined, and adding some patches of black spruce of the same age would be only a small improvement (I have personally spent large amounts of time in both stand types in the region of the project area). There is a large body of academic literature demonstrating the poor biodiversity value of plantations (largely on oil

palm plantations, but boreal examples exist as well); the PDD needs to acknowledge this science, instead of simply referring to its plantations as "forest habitat" and assuming that is good enough. Plantations of this type have relatively little undergrowth or diversity in stand structure, and are not "forest habitat" at all akin to a mature pine forest. By interfering with natural succession in these fields - and preventing a natural mixed-stand forest from ever growing there - this project has a very real risk of actively harming biodiversity in the area.

In addressing the community objective, I have only minor points to make. It is true that this is an area which has seen a considerable degree of economic decline, and which could benefit from job creation. This project should create some employment. My only concern is that the impact of the project in this respect has likely been overstated to a certain degree by the PDD. Planting 100,000 trees in this area should take at most 100 person-days, and with fast, experienced planters may take as little as 40 or 50 person-days (the PDD estimates 120 to 300 person-days; section 2.3.1). Given that planting will be a one-time event, this is a fairly minor impact on the local economy. Add to this the fact that the majority of tree-planters working in northern Ontario are not local residents - many being university students from southern Ontario on a summer job - and the impact of the tree-planting exercise on the local economy starts to look fairly minor. What has the potential to be more relevant to the local economy is the long-term monitoring of the plantation, and its investment in community infrastructure and programs. More detail on these aspects would be useful in the PDD.

In conclusion, I have to say that in my opinion, this project is sufficiently flawed in its very nature that even with substantial changes it should not be awarded CCB certification. More honest carbon baseline calculations may still demonstrate some limited sequestration benefits; however, it is difficult to imagine how any project whose general method is to replace natural succession with monoculture planting will ever have a positive (or even a non-negative) impact on biodiversity. While the communities involved may receive some benefit from the project, this is not sufficient reason to turn a blind eye to the project's other significant shortcomings.

Thank you for considering my comments in this auditing process.