Submission 038
Date received: 13/04/2011

NEW SOUTH WALES SUGAR MILLING CO-OPERATIVE LIMITED

SUBMISSION

TO HOUSE STANDING COMMITTEE ON CLIMATE CHANGE, ENVIRONMENT AND THE ARTS

REGARDING THE CARBON FARMING INITIATIVE

WEDNESDAY 13 APRIL 2011

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BACKGROUND - TERMS OF REFERENCE

This submission is in response to a call by the House of Representatives Standing Committee on Climate Change, Environment and the Art for submissions on the proposed Carbon Credits (Carbon Farming Initiative) Bill 2011 We have not attached a copy of the legislation as that would be needlessly repetitive. Individual sections of the proposed legislation will be cited.

INTRODUCTION – NEW SOUTH WALES SUGAR MILLING CO-OPERATIVE

The sugar industry has been a part of life in northern New South Wales for more than one hundred years. The industry is a significant contributor to the economy of the area and provides the community with employment opportunities, growth and prosperity.

The NSW Sugar Milling Co-operative Limited was formed when cane growers purchased the three NSW sugar mills from CSR in 1978. The mills are located at Condong on the Tweed River, Broadwater on the Richmond River and Harwood on the Clarence.

The Co-operative also operates a sugar refinery which is located alongside the Harwood Mill. This is owned by a joint venture company, Manildra Harwood Sugars, in which the Co-operative is a 50% partner with Manildra.

In 2008 the NSW Sugar Milling Co-operative Ltd, in partnership with Delta Electricity, commissioned two cogeneration power plants at Broadwater and Condong Mills which generate renewable electricity by using bagasse, a material left over after sugar cane stalks are crushed, as fuel.

The NSW Sugar Milling Co-operative Ltd (NSWSMC) is also an innovator in the context of carbon projects with highly advanced and well developed international and local carbon plans for managing emissions, carrying out world best practice standard training and pioneering a world first “whole of crop” initiative which forms the subject of this submission. Added to the existing expertise in relation to the sugar industry, tremendous amounts of work have now been done to evaluate carbon credit potential both as a new revenue stream for the growers and also as a means of financing environmental protection and Kyoto compliant programmes which would otherwise simply be financially impossible for the Cooperative.

PROJECT - WHOLE OF CROP PROCESSING

The New South Wales Sugar Milling Cooperative whole of crop project (WOC) is a process where the entire crop is gathered and sent to a trash sorting plant, owned by the cooperative. The material can subsequently be used as fuel for the cogeneration plants. There are other uses which are being investigated.

The WOC processing is the first of its kind in the world. The normal process is to burn the cane before harvesting or to cut green. Green cane cutting means the harvester cuts the crop without burning and separates the tops, leaves and trash (Trash) and only puts the billeted cane into the bin for transport to the mill. In Queensland the practice of burning cane has ceased in around 75% of the cane growing regions.

In these areas the unburnt cane is cut and trash is pneumatically separated from the cane at the harvester and blown back onto the paddock. This practice of retaining the mulch layer is referred to as trash blanketing. In dryer regions trash blanketing provides benefits of moisture conservation and weed control. Under NSW conditions this trash blanketing practice suppresses cane growth due to the cooler and frequent wet periods experienced during the winter months of the harvesting season. Trash blanketing in NSW reduces soil temperatures and inhibits evaporation of moisture and causes a significant reduction in yield.

The key to reducing cane burning is an economically viable off-field use for the trash. There are significant community benefits in eliminating the burning of cane including a benefit to the local air quality and the black ash that falls locally when cane is burnt.

The WOC processes means the cane is not burnt and all material including leaves, trash and tops are sent to the mill. The WOC cannot however be processed in the existing milling process without significant sugar recovery loss. It therefore requires the construction of trash separation plants. It also introduces additional cost in the harvesting and transportation

We note the boundaries of our proposed project do not include the cogeneration renewable energy plants at Broadwater and Condong which is covered by the current Renewable Energy Certificates under the Federal Renewable Energy (Electricity) Act 2000 and one assumes any successor to this under the legislation.

The additionality test in the bill is met because without the income from CFI the subsequent cost of the trash (including the cost of the trash separation plant) for fuel purposes is far too high and is not competitive even against some of the higher cost alternative fuel sources.

ISSUE: THE EXCLUSION OF CO_2 FROM AGRICULTURAL EMISSIONS AVOIDANCE PROJECTS

The NSWSMC Carbon Farming Initiative proposal is "eligible", under the Act.

The eligibility of the project in terms of reduction of methane and N_2O gases is clear, and sugar cane burning projects are specifically named.

The bill definition of:

agricultural emissions avoidance project means a project to avoid:

(e) an emission of:

(i) methane; or

(ii) nitrous oxide;

from the burning of:

(v) sugar cane before harvest;

The definition however deliberately excludes CO_2.

We would submit that it should be included.

The rest of the Act makes repeated mention of CO_2 reduction, not equivalent CO_2 but specifically CO_2. The Act must therefore envisage variations to include CO_2 reduction or sequestration within the enumerated agricultural practices.

Whilst recognising that the project is eligible under the definition, the exclusion of CO_2 makes the project unviable. We would suggest that in fact the exclusion would place a lot of projects in the same situation.

UNIQUE, NOVEL AND INNOVATIVE APPROACHES ARE NEEDED IN THE AGRICULTURE INDUSTRIES

An essential aspect to the proposed CFI is the underlying urgent need to achieve carbon reduction targets for Australia by fostering innovation and novel solutions to emissions of greenhouse gasses from existing farming practices. The WOC proposal by NSWSMC includes innovative and novel solutions to eliminate the existing practice of burning sugar cane prior to harvest. It includes research and development of modified harvesting equipment, transport and separation of the trash from the cane billets once the biomass is delivered to the mill.

The majority of the research and development is complete and implementation can occur within a short time. It simply requires the economic drivers to justify the change in farming practice. Without the inclusion of $CO_{2\ n}$ in the CFI legislation the opportunity of implementation will be lost.

THE EXCLUSION OF CO_2

The reason given, citing authority from the IPCC and UNFCCC, for excluding CO_2 emission reduction from agricultural burning is that it is a zero sum- CO_2 released is balanced out by CO_2 sequestered in the following year's growing season. This assumes biogenic production and uptake of CO_2 during the crop cycle.

The IPCC Guidelines for National Greenhouse Gas Inventories 2006 in Volume 1, Chapter 1, Clause 1.1 includes the following: -

Anthropogenic emissions and removals

Anthropogenic emissions and removals means that greenhouse gas emissions and removals included in national inventories are a result of human activities. The distinction between natural and anthropogenic emissions and removals follows straightforwardly from the data used to quantify human activity. In the Agriculture, Forestry and Other Land Use (AFOLU) Sector, emissions and removals on managed land are taken as a proxy for anthropogenic emissions and removals, and interannual variations in natural background emissions and removals, though these can be significant, are assumed to average out over time.

This reference concludes that human activity in agriculture on managed lands is anthropogenic, therefore we submit the CO_2 component should be included in the eligible emissions under the Bill.

We would also contend that the assumption is not true due to the variability of cropping area and the variability of sugar cane growth. In addition there is frequently a lag between burning and any regrowth which causes a flux in CO_2seuqestration responsible for significant emissions; cf for example http://www.stanford.edu/group/efmh/bioburn/Respburn.pdf. As that paper and other detailed direct research suggests, the figures show that regular burning and incomplete regrowth causes a net increase in atmospheric CO_2 that varies in time between a low and high value but which does indicate a net increase over time

In the case of the sugar industry, which is one of the few agricultural industries engaged in large scale burning, to exclude CO_2 elimination is to ignore the most potent effect of the in-field burning.

In the case of the unique conditions appertaining to the "whole of crop" approach, there is a 100% reduction in emission by-products and greenhouse gases from sugar cane burning, since no burning occurs. This requires an exception under the Act, and is of enormous benefit to the local community provided its commercial need for carbon crediting from its CO_2 reduction is met.

RECOMMENDATIONS

The future is not yet set, nor have any private or industry stakeholders advanced methodologies at this early stage. This means there is no discriminatory risk, or other risk of procedural unfairness.

We recommend the following:

1. The Act be modified to clearly enunciate what is currently only implicit, namely that elimination of other pollutant by-products, including CO_2, can be included where otherwise they are not counted, through the use of the power of the Minister to impose benefits through the “special conditions” and variation placita of the existing legislation.

2. The Minister and DOIC duly note that the sugar industry innovates and continues to develop radical but rigorous solutions to its emissions burden, and that this innovation will be crushed if the CO_2 component of emissions from burning sugar cane in the field is not taken into account;

3. The unique nature of the sugar industry and its burning practices should be acknowledged within the Act, and a placitum added where appropriate in the following terms:

4. “Projects seeking approval before the DOIC and relating solely to in-field burning, should, provided all other requirements for eligibility be met, be afforded an exception to the exclusion of CO_2 produced from cane burning in the paddock, provided that the project in question substantially or completely eliminates the burning practice, and that it can be established that the CO_2 eliminated is sequestered, forms part of an audited renewable energy project that offsets CO_2 from burning fossil fuel or is otherwise permanently retired.”

We thank the Honourable Members of the Committee for their time and patience and look forward to a successful conclusion to the consultation process. We are eager to be partners in the carbon pricing and environmental solutions sectors as part of our ongoing stewardship of our part of Australian-owned agriculture.