Queensland Conservation Council

Committee Secretary
House of Representatives Standing Committee on Environment, Recreation and the Arts
Parliament House
CANBERRA ACT 2600

Dear Sir/Madam,

Please find below a submission by the Queensland Conservation Council to the HORSCERA inquiry into Regulatory Arrangements for the Trading in Greenhouse Gas Emissions.

Yours sincerely,

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Coordinator

Submission to the Inquiry into the Regulatory Arrangements for Trading in Greenhouse Gas Emissions

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Introduction

There may be considerable potential benefit to the Australian environment and to biodiversity conservation values, through the introduction of a carbon credit or greenhouse gas emissions trading system. Enhancement of biodiversity conservation values would be the pivotal yardstick for support of such a trading system from the environment sector. The conservation movement would vigorously oppose any scheme that further threatened Australia's biodiversity conservation values. An emission trading scheme is not viewed by the environment sector as merely the opportunity to lower greenhouse gas emissions. Rather it is also viewed as a potentially extremely important tool that could help to achieve the long term biodiversity value protection of a variety of important regional ecosystems in Australia. Numerous methods of achieving this appear possible within the development of a framework of regulatory arrangements.

More vegetation is cleared in Australia than any other developed country in the world. It is grossly anomalous that the Federal Government has a Natural Heritage Trust goal to revegetate 250,000 hectares per year, allocating hundreds of millions of dollars to the Trust, while State Governments allow nearly half a million hectares to be cleared annually. This clearing contributed over 20% of the total greenhouse gas emissions produced by Australia in 1990. Clearly the protection and maintenance of native vegetation provides a multiple benefit - in costs saved on revegetation projects, to the environment through maintenance of biodiversity values, through the reduction in greenhouse gas emissions and through the creation of carbon sinks from regrowth.

Value of stored carbon to biodiversity conservation

The carbon dioxide molecules currently being emitted into the atmosphere through anthropogenic sources are believed to have a lifetime of 50-100 years. Levels of atmospheric carbon will obviously increase over the next several decades, which will in turn, increase the average lifetime of CO2 molecules in the atmosphere. This should therefore continue to increase the value of stored carbon, particularly carbon that will be stored indefinitely, such as in forests and woodlands that are placed under long term protection agreements. The biodiversity of these areas would be maintained through the protection of ecosystems placed under emission trading agreements. Biodiversity conservation through preservation of intact ecosystems should not, however, be seen as an adjunct to carbon emissions trading but as a driving force in any decisions that are made about the future of our forests, woodlands and other native vegetation. Thus preserving intact ecosystems would not only enhance the enormous importance of conserving Australia's biodiversity but additionally retain valuable carbon stores that will become increasingly valuable over time.

Regulations should allow for a variety of trading options to offset industrial emissions and protect stored carbon. The baseline year for regulation of carbon emissions set at the Kyoto summit meeting was 1990. Land clearing in Australia was at very high levels at that time and has decreased slowly since. Restrictions on land clearing have been viewed as a relatively cost effective method of lowering total emission levels. While the environment sector strongly supports the cessation or drastic reduction of land clearing as one excellent method of lowering total emission levels, this and offset projects such as plantations should not allow industry and government to abrogate their responsibility to work towards cleaner technologies and alternative energy production systems.

Protection of native vegetation

Regulations must be developed that would prohibit clearing native vegetation to establish any type of plantation, including plantations of native species. Currently native forests and regrowth are cleared to establish plantations, particularly pine plantations. Continued clearing of native forests to establish plantations of pine should be intolerable to a federal government that is implementing the goals of the National Strategy for the Conservation of Australia's Biodiversity. Carbon stocks may be increased above the base level over the lifetime of such a proposal but plantations are generally monocultures with extremely low conservation and biodiversity values. A forest that was cleared to allow a plantation to be established would lose virtually all of its biodiversity. Any plantations established, as an offset to greenhouse gas emissions should have a regulatory requirement that they be established on land that was cleared prior to 1990, and has remained cleared since. This would maximise the sequestration potential of a project while protecting current carbon stores and natural ecosystems and their biodiversity.

Vast areas of vegetation in Queensland remain under the threat of clearing despite the introduction of regional tree clearing guidelines in late 1997. Under these guidelines, which currently only apply to leasehold land, many ecosystems may be cleared down to 20% of their original extent. There are, as yet, no general controls over clearing on freehold title in Queensland and it proceeds at an alarming rate. Uniform national vegetation protection laws over both freehold and leasehold title need to be implemented urgently and should form part of the framework for any emission trading system that is developed.

Regrowth as a carbon sink

Recognition as a carbon sink of regrowth on land cleared prior to 1990 holds important potential for conservation gains. The vast brigalow belt of Queensland, covering over 350,000 sq km contains only minor remnants of intact brigalow based ecosystems. However brigalow resprouts following clearing and many areas are routinely cleared every 8-10 years. Brigalow Belt ecosystem

expert Robert Johnston published a paper recently elucidating the long-term biodiversity conservation potential of brigalow regrowth. The floristic composition of brigalow regrowth closely mimics the original vegetation prior to clearing. Brigalow cleared prior to 1990, when clearing levels were extremely high, could provide important carbon sink projects. Some of these areas could eventually be protected in the long term as both Government controlled Parks and also as "off Park" reserves. Integration of an incentive program into the emission trading system could ensure the permanent protection of the biodiversity values of such projects by allowing landholders to develop "off Park" Reserves without suffering financial loss.

Extant vegetation as a carbon sink

It is necessary to recognise within a regulatory framework the carbon sequestration value of land that was intended for clearing but was not cleared because of the initiation of a carbon trading agreement. A sequestration project that was based on this premise could have the stored carbon biomass measured at the beginning of the project and the emission credit for the project averaged out over the duration of the agreement. Re-measurement of carbon stocks every 5 years could verify any decrease or increase. Such agreements should only be allowed to operate on land where the ecosystems retain their biodiversity conservation values. Ecosystems that have been badly degraded through poor management should not be allowed to form an alternative source of income for poor land managers. The biodiversity values of land intended for such agreements could be verified by the appropriate departmental officers in each State and Territory, such as through the Department of Environment in Queensland. The time periods for such sequestration agreements could be for up to 100 years with a right of resale for the party involved in purchasing the agreement.

Rights to trees on leasehold

Legislation addressing rights on leasehold land is required. The enjoyment of royalties on trees growing on leasehold land is an important consideration. These rights presently reside with governments. In order to facilitate the involvement of landholders in projects that could protect the biodiversity values of vast areas of native vegetation, governments should be willing to legislate to confer tree ownership rights to the landholder during the time of an agreement between a landholder and a purchaser of a carbon emission credit. Under such an agreement there would be no rights to use the trees in any other fashion and these rights to the landholder would cease at the termination of the emission trading agreement. These rights could only be conferred where a native title determination had been made and should in no way diminish the potential rights of native title claimants. Further discussion over native title with indigenous groups may influence the QCC position on this issue.

Verification methodology

There is an obvious need to regulate for a standard verification system. The best verification method would be the use of a standard remote sensing methodology in conjunction with on ground verification of projects by a third party mutually agreed between the Commonwealth and the project. There also needs to be regulations that establish and control accredited bodies to monitor the sequestration of carbon in emission trading projects. Projects should be monitored every five years utilising representative sampling methods. However, considerable work is needed to allow accurate measurement of stored carbon in extant stands of vegetation. All currently used methods including forestry default value tables, allometric equations and remote sensing techniques need to be refined to confidence level of at least 95%.

Many projects may be established more economically using default value tables that provide stored carbon levels and carbon sequestration values for certain ecosystem or tree types. The use of

default value tables negates the need for costly project-specific measurements. A 95% confidence level would need to apply to tables where they are used to establish the contract These tables would also need to be conservative in their values and any dispute over the sequestration levels, where a project attempted to claim a higher carbon stock, would require independent, accredited verification measurement of such a claim at the expense of the claimant

Current timber use practises

There is an urgent need to legislate to change the way timbers harvested from forestry operations are currently utilised. The bulk of harvests are processed into short-term decay products, as woodchips exported to produce paper. The agreed default value life span for paper products is only one year, obviating the need for Australia to use harvested timber in long-term carbon storage processes such as for construction and in furniture production applications. The current recognised carbon storage life for these products is 50 –100 years. Much work is required to construct accurate default values for carbon stored as long term products such as for housing and furniture. Utilisation of our native hardwood forests to produce woodchips for paper within a framework of carbon emissions limitations is ludicrous. The destruction of the biodiversity of these forests greatly compounds the disaster.

Baselines

Carbon sequestration projects need to establish a baseline that sets the emission or sequestration levels of the area before a project begins on that area. Any baseline that is established at the initiation of a project should be married to the project for its entirety. The Kyoto agreement has established 1990 levels of emissions as the baseline and the technology and sequestration levels that exist at the start of a project should remain as the baseline input throughout the project. This should also apply to the land use history of an area where the baseline for a project should reflect the land use history of the area.

Indirect, secondary and displaced emissions

Any indirect or secondary emissions should count in the overall emission equation of the project, as should all displaced emissions. The draft Greenhouse Challenge Sinks Workbook suggests that emissions created through the employment of contractors to plant, tend and harvest plantations should not be counted into the project's emission inventory. This is clearly an unsatisfactory designation. Such emissions are obviously created through the conduct of the project and must count as part of that project's total emissions. A displaced emission would be one where cleared land was turned over to a forestry project but the landholder then cleared more land to replace the original area that had been used to establish the emission trading agreement. The potential for any such emissions to occur needs to be well established at the initiation of the project and this should be a basic regulatory requirement. Any project should be required to display that displaced emissions do not occur and regulation of the verification of this is necessary. If this did not occur then many projects could be established on cleared farmland. The landholder could then attempt to clear more land to replace the cleared land that has been given over to a sequestration project. This scenario further strengthens the case for national vegetation protection laws over both freehold and leasehold land.

Soil carbon

If an increase in soil carbon is claimed during the life of a project there must be a regulatory requirement for this to be demonstrated through both initial and follow up measurements during the project period. It would be the responsibility of the claimant to prove such an increase had occurred.

Commercial viability
Commercial viability should not be a consideration as to whether a project should count as a carbon credit generating project. There is no method to establish whether a project would have occurred without the emission system operating and the potential commercial viability of a project should not be used to disbar a project proposal from inclusion into the system.

Vegetation thickening
Vegetation thickening is a cyclic phenomenon that is currently occurring in many ecosystems of Australia. This thickening often occurs through a combination of poor land management techniques such as overgrazing and through the insufficient application of historical fire regimes. Thickening is therefore an unreliable circumstance for the generation of emission trading credits over the long term. It may however, in some circumstances, be able to be used as a method to generate emission credits during a shorter period. Time periods for such projects could be in the order of 20 to 30 years. This should only be allowed to be employed if the biodiversity values of a proposed area are assessed and found to be relatively sound. This may only occur in areas that have not been overgrazed, but lack a regular fire regime. Periodic burning in such areas could be allowed for in the overall model which, while increasing the biodiversity values of the ecosystem, would not have a great impact on the carbon sequestration levels over the life of the project. Fire should be developed as a tool for improvement and maintenance of ecosystem integrity. This could be achieved without compromising the emission trading values of woodland and forest systems. Current NGGI methodology indicates no long term deleterious effect on carbon sequestration levels through anthropogenic fires and provides a default net value of emissions as zero.

Rehabilitation of degraded land as a carbon sink
The rehabilitation of badly degraded land that has been degraded over an extended period should be allowed to be counted as an emission credit-generating proposal. The land would need to be destocked and revegetated. In cases of restricted regional ecosystems a combination of an emission trading agreement and a range of incentives to permanently protect the ecosystem would greatly benefit biodiversity conservation. The linking of incentives to a variety of projects within an emission trading system is seen as vital for the most effective and efficient protection of important habitat types.

Other considerations
A great variety of contingencies need to be accounted for within the development of an emissions trading system. Episodic events that destroy a project such as wildfire or flood, the inclusion of covenants within an agreement, the potential for resale of an agreement to a second or third party and the potential for an international market to develop are examples.

Addressing the needs of all stakeholders
There is a pressing need for extensive discussion, extension, liaison and development of the issues involved in the development of a methodology for greenhouse gas emissions trading with all stakeholders including rural landholders in Australia. Many of the projects that are developed within the emission trading system will be located on leasehold or privately owned land in rural areas. Emission credit trading that produces a range of sustainable land management and resource management techniques that leads to biodiversity protection is obviously highly desirable. Such agreements would fulfil the goal of the National Strategy for the Conservation of Australia's Biological Diversity. The issues are many and complex and landholders will need to play a pivotal role in any system that is developed.