HUMANE SOCIETY
INTERNATIONAL

SUBMISSION TO SENATE SELECT COMMITTEE ON CLIMATE CHANGE

EXECUTIVE SUMMARY

Land clearing in Australia is the fourth largest source of greenhouse gas emissions. Land clearing and the associated habitat loss and fragmentation is also one of the most important causes of species decline and extinction in Australia as well as the main cause of increased dryland salinity.

The use of a market based mechanism to conserve carbon such as the proposed Carbon Pollution Reduction Scheme permit system provides an enormous opportunity not only to slow land clearing but also to rehabilitate degraded landscapes. This would conserve biodiversity more effectively while making a large and immediate contribution to reducing Australia's carbon emissions and improving ongoing sequestration rates.

Additionally, maintenance and restoration of ecosystem functioning across Australia's rural landscapes, while helping Australia mitigate the impacts of climate change, also serves to allow species and ecosystems to adapt to climate change as environmental conditions change.

The Government's White Paper rejects the proposition that a domestic version of a Reduced Deforestation and Forest Degradation (REDD) mechanism (as is being considered as part of the global climate change deal to be finalized in Copenhagen at the end of this year) be included in the permit system of the CPRS. The White Paper's case for not including a domestic version of REDD is singularly unconvincing.

Perversely, the White Paper discriminates in favour of the establishment of plantation trees and against the retention of native forests with both higher carbon densities and biodiversity values, to the detriment of both the Australian environment and to national efforts to reduce emissions.

HSI proposes that landholders choosing to surrender a legal right or forego an opportunity to remove or degrade native vegetation on their land be able to voluntarily opt in to the CPRS permit system just as the Green Paper proposes that landholders choosing to plant trees can opt in.

The modalities of any such mechanism aimed at reducing emissions by ceasing to degrade natural carbon stores would obviously be different from those aimed at increasing sequestration by planting trees.

The White Paper's proposals are likely to lead to increased land clearing, increased loss of biodiversity and increased carbon emissions. Such perversities should not be contemplated.

Inclusion of a domestic REDD mechanism in the permit system of the CPRS will preferentially target protection and restoration of ecosystems with high carbon densities. Lessening of land clearing and hence further reduction of carbon emissions and lowering biodiversity loss in natural vegetation of low carbon densities will need complementary encouragement.

Alternatively, or as a supplementary measure, HSI,, proposes that a proportion of CPRS revenues be used to establish a new environmental stewardship fund dedicated to providing incentive payments to landholders choosing to protect areas of high biodiversity value native vegetation while also contributing to carbon emission reduction and provision of other ecosystem services of interest to the wider community.

The CPRS will be the first, major market based ecosystem services payment mechanism established on a national basis in Australia which could be used to establish a market value for our natural terrestrial carbon and biodiversity.

The CPRS provides an historic opportunity to dramatically reduce land clearing and forest degradation, reduce terrestrial carbon emissions, and increase the protection of biodiversity as well as to assist with securing other environmental and socio-economic benefits.

As such, a CPRS expanded to include opting in by landholders with native vegetation assets to protect could provide a win-win outcome for both the carbon and biodiversity policy objectives of government. This opportunity to maximise the use of the CPRS for the benefit of our environment should not be missed.

If in the end it is decided not to include REDD in the CPRS at this stage, then if as anticipated, international rules for REDD are agreed upon at the Copenhagen climate change talks in December, HSI believes that, consistent with its international obligations that the Australian Government must include REDD in its domestic climate response.

HSI commends the Government for taking a strong international lead on efforts to achieve agreement at the December Copenhagen climate change talks on an effective REDD regime

HSI supports the White Paper’s proposals to provide, under the CPRS, the opportunity for domestic emitters to purchase REDD credits from developing countries with appropriate mechanisms in place to contribute towards their domestic company emission reduction targets.

Such a mechanism will provide a 'win win' opportunity for Australia, for developing countries and for the planet.

The multiple benefits of this regional opportunity are so strong, given the huge carbon stores and high biodiversity values at risk in neighbouring countries, especially Indonesia and Papua New Guinea, that HSI is keen to see domestic emitters given every encouragement and support in purchasing such overseas REDD credits.

Recent United States draft Congressional cap and trade legislation provides an example to the Government of how it could increase its domestic emission reduction target by the use of overseas REDD credits.

To supplement this submission we attach the HSI Special Bulletin (Dec 2008) *Terrestrial Landscapes, Biodiversity and Climate change: Key Elements of a REDD mechanism which gives recommendations for design of an effective REDD mechanism relevant for both the domestic Australian and international contexts.*

INTRODUCTION

Humane Society International (HSI), the world's largest conservation and animal welfare organisation with over 10 million members, welcomes the opportunity to provide a submission to the Senate Select Committee on Climate Change. The Australian office of HSI was established in 1994 and, with over 40,000 supporters, concentrates on national and international biodiversity conservation issues.

HSI considers that whatever policy is adopted to reduce Australia's carbon pollution it must include measures to protect stores of carbon in intact native forests and in other forms of natural vegetation including woodlands and wetlands. The CPRS represents an unprecedented opportunity to dovetail Australia's imperative to rapidly reduce greenhouse gas emissions with our international commitments to reduce biodiversity loss.

As will be discussed below approximately 11 per cent of Australia's emission come from clearing native vegetation[(1)]. This figure is likely to be a significant under-estimate as Australian data does not include emissions caused by degradation of natural carbon stores such as through the logging of old growth forests. Natural vegetation, unlike monoculture plantations of trees, because of their much higher levels of biodiversity, are more resilient stores of carbon.

The Government has proposed that a cap and trade scheme, in the form of the Carbon Pollution Reduction Scheme (CPRS) be the domestic response measure, therefore HSI's submission focuses on the CPRS and how Australia can use it to both reduce carbon emissions and minimise loss of Australia's unique biodiversity and other environmental values. As our reference point on the CPRS this Submission uses the Government's White Paper on the CPRS. Time and lack of resources has not enabled HSI to examine the Government's exposure draft legislation to implement the CPRS. However, our understanding is that the draft legislation does not change the Government's position on deforestation and the CPRS, as contained in the White Paper.

HSI notes that in relation to the CPRS a number of scientists have urged a more

aggressive target of 25- 40 % reduction in Australia's carbon emissions by 2020 (2). HSI strongly endorses this view. Although, we note that even a 25-40% target is insufficient if we want to see atmospheric carbon stabilised at levels that will enable the Great Barrier Reef and many Australian threatened species to survive. Australia as one of the highest per capita emitters has a moral responsibility to reduce its emissions. As a country likely to be more significantly impacted by climate change than most others Australia also has a major self -interest in a strong international agreement to achieve effective emission reductions and action on climate change. Hence Australia should take a strong international leadership role and in order to show good faith with the global community, should at least adopt a 25- 40 % target.

HSI is keen to ensure that the CPRS makes the maximum contribution to the mitigation of Australia's CO2 emissions; maximises support for Australia's international negotiating position in achieving effective international agreement at Copenhagen in 2009; is designed to make the most of the potential for Australia's natural ecosystems to help mitigate the impacts of climate change; and also to assist in efforts to protect Australia's internationally significant biodiversity from these impacts.

Climate change under a business as usual approach presents the greatest threat to global biodiversity in the entire period of humanity's time on earth. Under a Business as Usual Approach scenario, the percentage of species at risk from extinction is estimated to be 48- 100%. Even under Professor Garnaut's 'reluctant' target of 550ppm of atmospheric CO2 (3), which most scientists consider too high and which takes us above a 2 degree average increase in global temperature means, 8- 39% of species on earth are still likely to be at risk of extinction(3). Under the most stringent scenario in the IPCC 4th Assessment Report, (Scenario1) in which CO2 equivalent is limited to 445-490 ppm (below Garnaut's target), there is high confidence that a "slew of what can only be described as catastrophic impacts (30 per species loss...) will unfold."(5)

WHITE PAPER PROPOSALS AS THEY APPLY TO BIODIVERSITY AND CARBON RETENTION

Our key concern is that the White Paper (WP) (1) specifically excludes ' deforestation' from the CPRS. (For the purpose of this submission instead of the term 'deforestation' we will often use the internationally accepted term: 'reducing emissions from deforestation and forest degradation in developing countries' or REDD as if it applied to developed countries, including Australia).

The exclusion of REDD from the CPRS is a significant policy error based on incorrect assumptions and assertions with respect to methodological issues, incremental gains and failure to prioritise cost-effectiveness or seek to capture co-benefits. Including REDD in the CPRS would make both an early, cost-effective and significant contribution to carbon emissions reduction while also providing an additional income stream for landholders with relevant natural assets and opportunities as well as providing a most significant new policy measure and revenue stream for the conservation of Australia's biodiversity and for other environmental protection requirements.

Land clearing

The WP notes that emissions from deforestation in Australia have decreased from 132

Mt Co2 equivalent in 1990 down to a projected 44 MT CO2 equivalent over the 2008 – 2012 commitment period. This is, as the report states, a significant reduction brought about in part through the introduction of land-clearing restrictions.

Nevertheless, the emissions from deforestation in 2006 at 11% of Australia's total emissions, are still the 4th largest source of emissions after stationary sources, transport and agriculture(1). Additional, and very substantial emissions from degradation of forests (mainly logging) and woodlands (mainly unsustainable grazing) are not included in these estimates.

So that despite the introduction of legislation to control land clearing in most Australian jurisdictions, land clearing and land degradation with the consequent emissions and biodiversity loss is still occurring on a significant scale. This is backed up by independent research.

Thus the World Wide Fund for Nature on 6 September is quoted in newspaper reports(6) as saying that tree clearing in Queensland still accounts for 24 % of the state's greenhouse gas emissions. The WWF spokesperson is quoted as saying:

> "There have been a lot of good intentions in recent years, but the fact remains total land clearing is unchanged from the 1990s."

WWF has also advised that NSW's latest Vegetation Change Report shows land clearing is on the increase even where canopy cover is greater than 20 %(7). It is thus unwise to conclude that simply because vegetation clearing controls are in place in most Australian jurisdictions, that vegetation clearance and degradation rates have been reduced to levels that are negligible from a greenhouse gas (or biodiversity) perspective.

In addition, recent Australian research by Clive McAlpine and Jozef Syktus (8) has demonstrated that land clearing in Australia has brought about hotter droughts, for example of up to 2 degrees higher during the 2002-03 El Nino. The authors state that:

> "Based on this research, it would be fair to say that the current drought has been made worse by past clearing of native vegetation."
>
> "Our findings highlight that it is too simplistic to attribute climate change purely to greenhouse gases."
>
> "Protection and restoration of Australia's native vegetation needs to be a critical consideration in mitigating climate change."

Land clearing and degradation has been for many years, and continues to be, one of the greatest threats to Australia's biodiversity. As noted in the 2006 Federal Government State of the Environment Report: "Loss of native vegetation continues to be one of the greatest threats to Australia's biodiversity."

Land clearing and degradation is also the main cause of Australia's dry-land salinity problem and the National Dryland Salinity Program, in its 2004 report, suggested that, because of the magnitude of the challenge associated with re-vegetation (including cost), it is critical to at least maintain and enhance the current quality and quantity of native vegetation (9).

Loss and degradation of native vegetation is more generally a significant factor in adverse impacts on water supply and water quality as well as a factor influencing soil erosion and stability. Intact native vegetation also has a range of socio- economic values: e.g. tourism and recreation.

The reasons for continued land clearing and degradation in Australia are varied. HSI would suggest that apart from some incidental unavoidable needs such as clearing for infrastructure and urban development, land clearing and degradation persists because the market value of intact un-cleared native vegetation land is low compared with other uses of the land. This is particularly true for carbon dense natural landscapes, especially wet temperate forests and wetlands. Putting a carbon value on carbon in intact and remnant native vegetation would provide a considerable incentive for limiting land clearance and degradation. This would serve not only to improve implementation of existing land clearing control regulations but also to provide cost-effective carbon emissions reduction in the future.

So, by including REDD in the CPRS, the Federal Government could simultaneously tackle a significant source of carbon emissions, a major cause of biodiversity loss and the major cause of dry land salinity, while protecting the other values referred to above.

Furthermore, taking action to further limit land clearing and degradation though the CPRS would be in line with the Climate Change chapter of the Platform of the Australian Labor Party:

> "Labor will promote more sustainable management of Australia's vegetation cover and an end to broad-scale clearing. Labor is committed to cooperation between States, Territories and landholders to achieve net expansion of vegetation cover and reduction in emissions related to land use change."

PROBLEMS WITH THE GOVERNMENT'S APPROACH TO NOT INCLUDE REDD IN THE CPRS

The WP notes (Sect. 6.14) that "deforestation currently accounts for around 11 per cent of Australia's emissions." The WP also recognizes the "potential to reduce deforestation emissions at low cost."

It is therefore difficult to understand the Government's reasons for not including 'REDD' in the CPRS. In fact the Government itself seems to be confused on this matter. In one part of the WP (6.14) it states in relation to HSI's proposals to include REDD in the CPRS that "Keeping the above factors in mind, the Government will give this proposal further consideration." However, later in the WP (S 6.14) it is stated that the "Government does not consider it practical to include deforestation emissions in the Scheme."

The WP reasons for not including deforestation emissions in the CPRS are discussed below.

First, the WP argues that there has been a significant reduction in land clearing in recent times. HSI believes there is still significant land clearing and as well the Government

does not take into account emissions from forest degradation through logging and other types of vegetation modification.

The WP argues that, that because the areas of land cleared annually range from less than one hectare to thousands of hectares, that this could create thousands of liable entities. Hence "The need for thresholds to contain Scheme costs would mean that a significant proportion of deforestation would not be covered." However this would not necessarily be the case. As explained below HSI proposes a voluntary opt in for those landholders wishing to receive permits for avoided deforestation and avoided forest degradation in response to their having chosen to make relevant land management decisions to forego development opportunities that would have resulted in such deforestation or forest degradation.

While, HSI would like to see the eventual inclusion of the entire Agriculture Forestry and Other Land Use (AFOLU) sector in the CPRS, as is being progressively achieved in New Zealand, at this stage, we are only seeking to allow landholders prepared to reduce emissions by foregoing emissions-producing development options to voluntarily participate in an equivalent way to that proposed for landholders prepared to increase sequestration by planting trees. This would in itself lessen the number of obligations from the level envisaged in the WP.

Contrary to its areal argument concerning deforestation the WP proposes to allow a voluntary opt in to the CPRS by landholders for reforestation (planting trees) down to the level of 0.2 hectares (0.5 acres) as provided for in Kyoto forests (our emphasis). It seems to us that such an allowance for reforestation completely demolishes the WP's areal argument against including avoided deforestation and forest degradation on the grounds of small sizes and large numbers. Indeed, it is hard to escape the conclusion that the Government is systematically biased against including REDD in the CPRS. Given the substantial conservation co-benefits of REDD that plantation establishment does not have, it would seem to be perverse to favour plantation establishment over REDD.

As noted above the WP then argues that if deforestation was to be included that there would be a need for areal thresholds to contain scheme overall costs. Why this situation should apply to REDD and not plantation establishment, with a threshold of 0.2 ha, is not explained. The WP asserts that, because of the need to apply a threshold for avoided deforestation, that this would mean that " a significant proportion of deforestation would not be covered." The premise, of course, is false – there is no need to apply a threshold.

The WP further states that: "Monitoring, reporting and compliance arrangements would be complicated by the periodic nature of deforestation. Unlike emissions from industrial facilities, emissions from deforestation are difficult to predict." It is not the emissions from deforestation that are hard to predict – just the landholder's decision – much in the same way as it is hard to predict the decision of an individual manufacturer to increase or decrease production.

If participation in the CPRS is limited to voluntary participation by landholders deciding either to pursue REDD or to establish plantations, such 'periodic' problems disappear – although monitoring, reporting and compliance issues remain – for all such landholders.

However, because of our suggestion for a voluntary opt in for avoided deforestation this

becomes a non-argument anyway. If the landholder, having opted in, then proceeds to deforest, this could be easily detected through standard satellite monitoring techniques and the landholder would be obliged to surrender the permits or pay the value of the permit if the permits had already been on-sold. Why wouldn't this apply to compulsory inclusion too?

The WP argues that "Announcing plans to include emissions from deforestation in the Scheme would create powerful incentives for pre-emptive land clearing if coverage was in prospect (where allowed under state and territory regulations) in order to avoid a future obligation. This could have a range of negative environmental consequences, as well as increasing emissions in the Kyoto Protocol period." This is a 'straw man' and assumes that substantial opportunities for additional land clearing remain despite previously arguing that the current regulatory environment prevents it.

While the inclusion of the entire AFOLU sector in the CPRS would create a complex web of incentives and disincentives to change land use, this is a matter for a later day. The immediate policy question relates to allowing voluntary participation in the CPRS by individual landholders choosing to change land use – either by foregoing emissions-producing development options (REDD) or planting trees. Obviously, the inclusion of REDD in such a voluntary arrangement actually creates an incentive for landholders to hold onto intact native vegetation or to rehabilitate degraded areas.

The WP, in ruling out the inclusion of deforestation, states that the Government "will continue to investigate incentive based mechanisms, including offsets, to further reduce deforestation."

Given the immediate imperative to cut back on carbon emissions as soon as possible and the urgent need to deal with loss of biodiversity through land clearing and ongoing land degradation, there needs to be commitments now for dealing with deforestation and degradation. It has been the policy of several previous governments for some years now to 'investigate options … to reduce deforestation'. Such rhetoric does not represent a commitment to actually do anything.

Based on past experience, future direct Government funding will never be sufficient to effectively stop deforestation and land degradation or adequately protect biodiversity and mitigate dryland salinity etc. For example, the Government's Caring for Our Country package, while it provides a welcome increase in funding for the National Reserve System, is a $2.25 billion program over 5 years for the full suite of Government supported natural resource management programs e.g. coastal management; Great Barrier Reef, land based pollution; Landcare; regional NRM groups. Such funding is not nearly sufficient to tackle of Australia's biodiversity and NRM problems. To make matters much worse, the growing impacts of climate change will inevitably result in growing calls for government funding to be directed towards assisting landholders and communities adapt to such impacts. Finding the political will to allocate public funds for mitigation purposes is going to get a whole lot harder.

To fail to take advantage of the opportunity to capture the co-benefits of REDD by application of private funds through inclusion in the CPRS would be to miss an historic opportunity of enormous scale and great cost-effectiveness.

HSI would, however, also support the establishment of a national fund to identify and

secure biodiversity co-benefits including through a market linked incentive program. We would consider it entirely appropriate if a proportion of any government revenue derived from the sale of CPRS permits was to be allocated to payment for ecosystem services from private landholders, especially conserving biodiversity, with priority being given to those landholders participating in the CPRS.

The WP suggests that use of offsets could be used to reduce emissions from deforestation but rather confusingly, also states that "domestic offset projects do not add to total national abatement ." This would seem to be a rather odd application of the offset concept.

If continued emissions from one source are offset by reduced emissions or sequestration somewhere else then, obviously, there is no net change in overall emissions. A rational and sensible application of the offset concept to this situation would simply involve establishment of a scheme that required emitters to purchase offsets to an extent greater than their emissions by a ratio equivalent to the CPRS' reduction target. In this way, offsets would contribute directly and sufficiently to the achievement of the objectives of the Scheme. It is important to bear in mind that the entire CPRS is an offset scheme. Offsetting, per se, is not a problem. The problem only arises through poor design of offsetting schemes.

It is obviously unfair that the Government should allow a voluntary opt in to the CPRS for landholder entities wishing to engage in plantation establishment yet prevent participation by landholders wishing to opt in by foregoing opportunity to deforest. It is also very bad policy given that, native forests customarily have much greater carbon density and resilience compared to plantations, as well as having higher biodiversity values. The Government therefore perversely discriminates against native vegetation retention.

The WP, with its discriminatory approach to deforestation (REDD) compared to reforestation (plantations), has created a significant potential problem for the environment and for the economy. ANU academics Wood and Anjani (10) show that, under the CPRS, even at a low carbon price, the value of plantations for carbon storage would exceed the value for wood production. Hence, commercial pressure for timber harvesting would move from plantations to native forests, which under the CPRS as currently proposed cannot obtain a carbon value. This would have deleterious effects on biodiversity and would perversely reverse the work of a generation in trying to shift wood production from native forests to plantations. Similarly, it would increase carbon emissions because native forests are more carbon dense than plantations with less carbon to be found in harvestable wood. For as stated by the authors, "reversing Australia's transition from native forests to plantations undermines the opportunity to halt native forest logging and allow degraded forest to regrow their carbon stocks to their natural carbon carrying capacity." The authors also note that the movement to native forest logging would have deleterious impacts on the Australian plantation industry: "plantation processing and unprocessed wood exports will contract as will associated unemployment."

Green carbon and forest degradation

Another important factor that is essentially ignored by the WP is the differential in carbon mass between native forests (green carbon) and plantation forests.

Accounting for these differences further adds to the case to include reduced emissions from deforestation and degradation (REDD) in the CPRS.

This matter is extensively covered in the work of ANU scientists Brendan Mackey *et al* (2008) [(11)]. They state that carbon stocks in forests subject to commercial logging and monoculture plantations in particular will always be significantly less on average (40 – 60 %) than natural forests on the same site. They note that the green carbon in natural forests is stored in a more reliable stock than in industrialised forests because of the greater ecological resilience of natural forests.

Their field studies have found that the carbon stocks of south eastern Australian moist Eucalypt forests are approximately four times the Intergovernmental Panel on Climate Change (IPCC) default value for temperate forests. The importance of this conclusion is that the IPCC is significantly underestimating emissions from deforestation and forest degradation, especially cool temperate forests in Australia or tropical peat forests in Indonesia – where emissions attributable to conversion to plantations are very large. Use of more realistic estimates of carbon stocks in natural ecosystems would thus identify that the contribution of land clearing and land degradation to global emissions is much greater than generally appreciated – making inclusion of REDD in the CPRS all the more important. Allowing logged forest in SE Australia to realise their full sequestration potential (halting logging and allowing logged forest to recover) is equal to a 24% reduction in the 2005 level of Australian net green house gas emissions.

One of their conclusions is that, " Reducing emissions from deforestation and forest degradation (REDD) is important in all forest biomes – boreal, tropical and temperate - and economically developed as well as developing countries." Currently Australia is promoting REDD in an international post Kyoto trading scheme. Yet, at the same time, the Government is ruling out REDD in is domestic CPRS. This is a grossly perverse anomaly. Such an improper policy setting will not only reduce the cost-effectiveness with which cuts in emissions can be made in Australia but also undermine and will not assist Australia's standing in the international negotiations over REDD – 'do as I say …' admonitions are not well received.

Overall, the Mackey et al (2008) work makes a compelling case for reducing deforestation and degradation to be included in the CPRS – immediately, by way of allowing individual landholders to voluntarily participate on equivalent terms to those proposed for landholders wishing to plant trees.

Regrowth

Limited time and resources has prevented HSI from studying the issue of regrowth .

However, it is noted that forest and woody plant regrowth is a significant vegetation type in many parts of Australia, particularly Queensland agricultural areas and forestry areas of SE and SW Australia. The carbon sequestration and biodiversity conservation potential of such regrowth can be considerable. However, under the proposed CPRS, a landholder entity who decides to allow regrowth to take place for environmental purposes cannot generate permits while a landholder who establishes a plantation for environmental purposes can obtain permits. This is an obviously perverse discrepancy that should be corrected.

AUSTRALIA'S INTERNATIONAL ACTIONS ON REDD

With its proposal not to include REDD in the CPRS the Government is being inconsistent compared to its international position on REDD. Recently in a speech in New York, Climate Change Minister Penny Wong said:

> "Of course, if developed countries like Australia want to continue their economic growth while they tackle climate change, it is not unreasonable for developing countries to want the same.
>
> To ensure emissions reductions are compatible with economic growth in many developing countries, we need ways to provide economic incentives to reduce emissions from deforestation.
>
> Instead of an economic imperative to remove forests in developing countries, we need an incentive to preserve them.
>
> Australia is working with our close neighbours, in particular Indonesia, to find a practical way to reduce emissions from deforestation and forest degradation in developing countries, better known by its acronym, REDD.
>
> A post 2012 outcome that puts us on a path to 450ppm is only achievable with comprehensive coverage of REDD.
>
> Australian modelling shows that the inclusion of forest-related activities in a future global agreement has the potential to reduce global mitigation costs by around 20-25 per cent.
>
> And the inclusion of REDD also potentially provides a significant economic and environmental opportunity for developing countries.
>
> This is why Australia is actively advocating for the inclusion of REDD in a post-2012 outcome."

The Minister in her speech also advocated a market based approach for 'international REDD':

> "Australia's proposal is a market based approach that puts an economic value on activities that reduce emissions from the forest sector in developing countries. National governments would be issued with forest carbon credits for emissions reductions below an internationally agreed national forest emissions level, which takes existing emissions reduction activities into account."

HSI strongly supports the international leadership position on REDD being taken by the Minister but considers that Australia should equally also apply this position domestically in the CPRS. For as Mackey et al states:

> "While international attention is now focused on REDD in developing countries, the laws of nature that account for the global carbon cycle operate irrespective of political boundaries. Therefore, a unit of carbon emitted due to deforestation and forest degradation in Australia, the United States, Canada or Russia has exactly the same impact on atmospheric greenhouse gas levels as a unit of carbon emitted from deforestation and degradation of forests in Indonesia, Papua New Guinea, the Congo Basin or Brazil. From a scientific perspective, solving the climate change problem requires, among others things, that REDD be accounted for in all forest biomes, irrespective of the host nation's economic status".

Australia's international position on REDD would suggest that, for the sake of consistency and credibility, that REDD is included in the CPRS.

THE CASE FOR INCLUDING REDD IN THE CPRS

Drawing on the above section there are a number of reasons why REDD should be included in the CPRS:

- deforestation will continue to be the 4th largest source of carbon emissions in Australia;
- forest degradation is also is a significant contributor to greenhouse gases, however as with deforestation, avoided degradation is not proposed to be included in the CPRS, indeed the term is not even mentioned in the WP ;
- natural forests hold 40 – 60 per cent more carbon compared to plantations and the carbon stock in natural forest is more resilient, compared to plantations;
- land clearing and degradation is one of the main threats to biodiversity and climate change will increasingly become a driving force in species extinction;
- land clearing and degradation is the main contributor to dryland salinity in Australia;
- including REDD in the CPRS will provide a carbon value for forest bio-mass that will lead to reduction of carbon emissions; biodiversity protection; dryland salinity mitigation and other environmental and socio- economic benefits - a win-win result for both individual landholders and for Australia as a whole;
- reasons advanced in the WP for not including REDD in the CPRS are unsound and not convincing - and it seems that the WP is perversely discriminating against REDD in favour of the establishment of plantations;
- it is inconsistent to propose that REDD be included as a market based

mechanism in a future international climate change agreement, but not be included in our domestic arrangements i.e. included in the CPRS

If in the end it is decided not to include REDD in the CPRS at this stage, then if as anticipated, international rules for REDD are agreed upon at the Copenhagen climate change talks in December, HSI believes that, consistent with its international obligations that the Australian Government must include REDD in its domestic climate response.

A PROPOSAL TO INCLUDE REDD IN THE CPRS

HSI proposes that actions to reduce emissions from avoided deforestation and forest degradation (REDD) be able receive permits under the CPRS in a manner equivalent to that proposed in the WP for plantation establishment. As is currently envisaged by the CPRS for plantation establishment, REDD actions would be included as a voluntary opt in.

Permits would be allocated in regard to avoided carbon emissions by foregoing destructive development opportunities that would contribute towards meeting Australia's international commitments.

Such REDD activities under the CPRS would only be eligible if the landholder entity had the legal right and opportunity to deforest or degrade a forested area or to allow a degraded area to recover.

While our proposals are primarily aimed at native forest vegetation, the proposals could also apply to other forms of native vegetation e.g. wetlands at risk of draining if the methodologies are available to measure relevant changes in the carbon stock.

The incentive for landholders is that the permits would be tradable, but would have to surrendered (or a payment of equivalent value if the permits had already been traded) if the area of vegetation was subsequently deforested or degraded.

As with the WP proposals for reforestation, the Kyoto definition of forest would apply to area i.e. area of vegetation down to a threshold of 0.2ha would be eligible.

Methodologies for measuring and reporting carbon fluxes associated with creation, destruction, degradation or removal of above- ground woody native vegetation are time-proven and very simple (well supplemented by auditing methodologies based on modern remote sensing technologies). In essence, it is safe to immediately include in the CPRS the creation, destruction or removal of readily and directly measurable volumes of wood (which have precise and predictable carbon equivalence conversion ratios) that can be reliably and remotely audited).

The policy environment for the CPRS needs to include a number of critical elements:

a) a general commitment to recognise and reward landholders choosing to contribute to emissions reduction by foregoing the right and opportunity to:

i) log old growth forest and woodland (allowing high carbon density native vegetation at or near natural carbon carrying capacity (CCC) with, axiomatically,

negligible ongoing sequestration of carbon in above-ground biomass to be maintained indefinitely (for at least 100 years);

ii) log regrowth forest (allowing rapidly growing forest to sequester additional carbon for many years until CCC is eventually reached, asymptotically); and

iii) graze woodlands unsustainably (allowing chronically degrading open forests and woodlands to stabilize and recover by reducing grazing pressure sufficient to allow natural regeneration).

b) a specific formula and institutional arrangement for converting emissions foregone by a one-off decision to reserve old growth from wood production zones into eligibility for an annual allocation of emissions permits. Our preference is that the formula be a discount ratio based on prevailing rates of clearing and logging for that forest type in that region/district such that incentives are created for minimising deforestation and forest degradation where such rates are currently highest (some states already have the capacity to monitoring and reporting such changes).

In a later section of this paper we suggest other formulae for converting emissions foregone into permit allocation eligibility.

USE OF A PROPORTION OF CPRS REVENUES TO OBTAIN ADDITIONAL CARBON AND BIODIVERSITY AND OTHER CO-BENEFITS

Including REDD within the permit system of the CPRS while providing significant carbon retention benefits and biodiversity and other co-benefits is unlikely to be sufficient.

Internationally, various types of 'market linked' approaches are being considered for REDD. As explained by the Union of Concerned Scientists: (13)

> "Market-linked approaches generate funding by using auction revenues or allocated allowances for REDD from cap-and-trade systems, or by establishing dual market systems in which REDD credits are not fungible with industrial country allowances. In these systems, funding increases as cap-and-trade markets grow but the REDD credits are not offsets. Examples of market- linked financing proposals include Germany's pro- posed use of auction revenues, the U.S. Lieberman- Warner Climate Security Act's proposed use of allowance allocations, the Center for Clean Air Policy's "Dual Market" proposal for a separate REDD market, or required purchases of REDD- Specific units as in Greenpeace's TDERM."

In the Australian context, use of CPRS revenues for REDD type activities is an example of a market linked approach to REDD.

Even with REDD included in the permit system of CPRS, not all biodiversity and other co-benefits such as reduction in dryland salinity are likely to be achieved. The CPRS permit system as it applies to REDD will focus on high carbon content vegetation formations.

Important areas of high biodiversity, but lower carbon content include for example

woodlands, grasslands and shrublands. Areas of lower carbon content in dryer parts of Australia may also be important in maintaining saline water tables at acceptable levels. However because these areas are of a lower carbon content than say, moist eucalypt forests, these vegetation types are unlikely to be traded in the CPRS permit system.

Woodlands, grasslands and shrub lands are often the most threatened ecosystem types in Australia and the least protected in national parks and reserves. Also they are they are the types of ecosystems most threatened by climate change.

HSI proposes that a proportion of the revenues generated by the CPRS be allocated to a new national environment/biodiversity fund for the protection of Australia's unique environment for the benefit of future generations. Such a fund could also attract other government funding contributions as well as private sector support.

Money from the fund could be made available across Australia to those landholders with the legal right to remove or degrade vegetation on their land, but who choose not to do so. Payments would be of a 'stewardship' nature similar to the existing national environmental stewardship program. Landholders joining the program would be obliged to enter into certain obligations to maintain and manage the vegetation on their land in exchange for Fund payments.

In effect the Fund would provide for those entities choosing to protect the natural vegetation on their land but for which the carbon content would not attract CPRS trade interest. While these types of vegetation holdings would be of a lower carbon content, there were would still be some level of carbon emission abatement content, that would contribute to Australia's overall emission profile.

USE OF CPRS REVENUE FOR REDD PURPOSES GENERALLY

If it was decided by the Government to not include REDD as part of the CPRS permit system, HSI would propose that a proportion of CPRS permit revenues be used for native vegetation retention purposes, both for vegetation of high natural carbon carrying capacity and for other vegetation type systems of lower carbon content, but high biodiversity value.

Such a proposal would be similar to that made by the Australian Conservation Foundation to allocate 5% of CPRS permit auction revenues to stewardship payments [(14)].

There is strong justification for such an approach because of the carbon storage benefits. In addition Australia's biodiversity will be significantly adversely impacted by climate change and current Government budget measures to conserve biodiversity are manifestly inadequate- additional streams of funding to assist our biodiversity to survive are urgently needed.

ABILITY UNDER THE CPRS TO PURCHASE REDD CREDITS FROM DEVELOPING COUNTRIES

HSI strongly supports the WP proposals to make provision for the opportunity to

purchase REDD credits from developing countries which can be applied towards Australia's emission reduction targets under the CPRS. This policy is in fact the core of international REDD policy being pursued by Australia and other countries.

It is understood from the WP that such a policy would not apply until international REDD rules are agreed.

Some concerns have been expressed that such an approach could amount to 'REDD imperialism' in the context of developed countries taking ownership of carbon credits that developing countries themselves might wish to use once developing countries join an international carbon emission target regime. The ultimate logic of this argument is that developed counties should do nothing to assist developing countries with finance to protect primary forest – as any form of REDD, either market based or non- market amounts to forest development rights being transferred from developing to developed countries. As well, an international REDD market is in one sense just like any other market, developing country entities can chose whether or not to participate. It could be argued that, in fact, an international REDD market is of higher value than other forms of commodity markets in that it is directed at protecting the planet's life support systems, as well as providing income to developing countries.

Another argument against applying developing country REDD credits to Australia's CPRS is that it will let Australian polluters 'off the hook' by allowing them to use these credits against their caps rather than reducing their own carbon emissions. HSI strongly is of the view that Australian carbon emitters have to significantly reduce their emissions. At the same time, any actions that Australian entities can take using REDD credits to reduce deforestation and forest degradation in developing countries is of significant benefit not only to developing counties but to the planet. In fact there is evidence that if the world is to have any chance of remaining below an average global temperature increase of 2 deg C that all remaining old growth forest must be saved.

One way of ensuring that the Australian polluting entities importing REDD credits also make a domestic contribution to reducing emissions is to establish an arrangement that requires domestic emitters to purchase offsets to an extent greater than their emissions by a ratio equivalent to the CPRS' reduction target.

Another common argument against the importation of overseas REDD credits into the CPRS is that 'cheap forest credits would flood the market' i.e. domestic carbon polluters would purchase 'cheap' REDD credits instead of taking action to reduce their own emissions. First there is no reason why there should be a flood of REDD credits. It will take some time to establish REDD projects in developing counties that fulfill international REDD rules e.g. those relating to permanence and leakage. Different developing counties will have different capacities for developing REDD projects. Second in an efficient operating international REDD market the price of a tonne of carbon should be approximately the same whether in Australia or Indonesia. Finally, an arrangement mentioned above could be used whereby domestic emitters are required to purchase offsets to an extent greater than their emissions by a ratio equivalent to the CPRS reduction target.

USE OF OVERSEAS REDD CREDITS TO INCREASE AUSTRALIA'S EMISSION REDUCTION TARGETS

As stated above, HSI is strongly of the view that the Government's 5 % CPRS target is a grossly inadequate response to the pressing climate change problems facing Australia and hence a reduction target of at least 25-40% by 2020 is required.

One way of increasing the target to a more realistic level would be to follow the model to the draft cap and trade draft legislation recently released by the US House of Representatives Energy and Commerce Committee. The draft legislation proposes a target of a 20 % cut below 2005 emissions by 2020 . On top of this the bill proposes a separate 10 % cut on 2005 levels obtained by purchasing REDD credits from developing countries (15). Under the US bill revenue for purchasing these credits would be obtained from the auctioning of carbon permits to US domestic emitters.

CONCLUSION

For a win win outcome on carbon retention and biodiversity conservation HSI urges the Australian Government to:

- Incorporate reduced emissions from deforestation and forest degradation (REDD) into its Carbon Pollution Reduction Scheme, either directly as a permit attracting activity, or through use of a proportion of revenues obtained from auctioning of permits.
- Continue its strong support for the development of an international REDD regime.
- Provide, as part of the CPRS, provision to import overseas REDD credits, to be applied towards achieving the CPRS emission reduction targets.
- Substantially increase Australia's emission reduction target so that Australia can be part of an international commitment which would see developed countries reducing their emissions by at least 25-40% by 2020.

REFERENCES

1. Carbon Pollution Reduction Scheme: Australia's Low Pollution Future. White Paper. Department of Climate Change. 15 December 2008.
2. Morton, Adam. Garnaut is wrong say scientists. (September 2008. www.smh.com.au
3. Garnaut, Ross. Supplementary Report. Targets and trajectories. 5 September 2008

4. Wilkinson, Marian. With smoke in our eyes we can't see the fog. Sydney Morning herald. 6 September 2008.
5. Brook , Barry. Scenarios on a 2- to 6 degrees Celsius warmer earth. Imagining the Real: Life on a greenhouse Earth. Program and abstracts. Canberra. June 2008.
6. 'Qld tree-clearing is out of control'. Canberra Times. 6 September 2008.
7. WWF private correspondence August 2008.
8. Land clearing triggers hotter droughts. University of Queensland website . UQNews Online. 2 September 2007. (http://www.uq.edu.au/news/index.html?article=13308)
9. National Dryland Salinity Program. Breaking Ground. Findings from 10 Years of Australia's National Dryland Salinity Program. 2004
10. Wood, Peter and Anjani, Judith. Submission to the Commonwealth Government on the Carbon Pollution Reduction Scheme Green paper. August 2008.
11. Mackey et al Green Carbon: the role of natural forests in carbon storage
12. Building confidence toward an effective global climate change agreement - an Australian perspective: Speech to the Pease Institute, New York 27 March 2009. Senator Penny Wong, Minister for Climate Change
13. Union of Concerned Scientists. Filling the REDD Basket: Complementary Financing Approaches. (http://www.ucsusa.org/assets/documents/global_warming/TFCI_REDD-Basket.pdf)
14. Delivering on the promise of stewardship. www.acfonline.gov.au
15. Adam Morton and Anne Davies. US goes further than Rudd over emissions. The Age. 2 April 2009.