



## **The Wilderness Society**

### **Submission to the House Standing Committee on Agriculture, Resources, Fisheries and Forestry**

### **Inquiry into the Australian forestry industry**

#### **Preamble**

The Wilderness Society has been engaged in the forest ‘debate’ in Australia for several decades and welcomes the opportunity to provide input into this important inquiry.

The forestry industry in Australia is, and has been for some time, in crisis. The cumulative impact that native forest logging operations has on Australia’s unique biodiversity is also pushing species closer to extinction. For many years, The Wilderness Society has been calling for a significant shift in forest policy and focus. Such a shift will see native forests protected for what they do best – protect biodiversity, store carbon, produce water and be maintained as special places for people to appreciate and enjoy for perpetuity. The new policy is needed to secure a shift in industry jobs from native forests to plantations, a move that is already happening with native forests jobs in huge decline across Australia.

We urge the Australian government to abandon its blinkered support for Regional Forest Agreements (RFAs). Where RFAs remain in place, conflict in public forests persists. Where they have been abolished, conflict has dissipated. It is clear that RFAs have failed to protect the environmental and other values of native, or industry jobs. By immediately developing a policy framework that supports a move to industry reliance on processing plantations for our commodity wood resource, the Australian Government can end the conflict in public native forests and deliver both forest protection expectations and industry jobs growth.

For further information please contact:

Penni Rockliff,  
Convenor,  
The Wilderness Society Forest Working Group  
[penni.rockliff@wilderness.org.au](mailto:penni.rockliff@wilderness.org.au)

# **Inquiry into the Australian Forest Industry 2011**

## **Discussion**

The Wilderness Society urges the Australian Government to grasp the opportunity at hand to end the decades long conflict in Australia's native forests. This can only be done if government abandons its blind belief in the mythology of what the native forest industry actually is (or is not), and understands the real proposition that Australia's wood products can be fully supplied from plantations and farm forestry with the application of smarter, more ecologically sensitive forestry management.

Most domestically produced high grade timber products are already sourced from Australia's vast plantation estate, whilst native forests continue to be controversially logged predominantly for low grade pulplog production. In April 2010, the Honorable Kim Carr, Minister for Innovation, Industry, Science and Research released the final report of the Pulp and Paper Industry Strategy Group at the Australian Pulp and Paper Industry Technical Association Conference. This report confirmed what The Wilderness Society has been saying for years – that access to native forests is predominantly required to supply resource to the paper and pulp industry<sup>1</sup>.

This is happening at a time when other values of native forests, including water, biodiversity and carbon are being better understood. The Wilderness Society believes that it is in the interests of all Australians that our native forests be protected and managed into perpetuity for these values. The woodchip market is now increasingly directed away from native forests because higher quality plantation wood is now available and consumers are demanding higher environmental standards.

For years, industry and environmentalists have been in conflict over the tension between biodiversity protection and resource extraction in native forests. In some parts of the country, including South East Queensland, parts of Western Australia, North East New South Wales and Western Victoria, this conflict has largely ended, as the industry in these locations has predominantly moved to a plantation base. At the same time, the Regional Forest Agreements in these locations have either been terminated, were never implemented or are virtually redundant.

Where Regional Forest Agreements (RFAs) remain in effect, commodity production in native forests continues to fuel community division over native forest management. RFAs have entrenched controversial logging against changing industry trends and market demand. Even in traditional timber towns, where overlogging has seen a decline in both forest values and jobs, communities are urging governments to end its "head in the sand" support for an industry whose heyday has passed. This is most prominent in Tasmania, Victoria, New South Wales and the remaining native forest logging areas in Western Australia.

It is very clear that the Regional Forest Agreements have not delivered upon their charter balancing permanent protection for forest values with jobs growth in the timber industry. Where commodity logging continues, jobs continue to be lost and pulplog production continues to drive

---

<sup>1</sup> Commonwealth of Australia, 2010. Pulp and Paper Industry Strategy Group Final Report, March 2010 , pg 95  
[www.innovation.gov.au](http://www.innovation.gov.au)

the logging. RFAs have simply accelerated a trend that was happening prior to their implementation, rather than reverse the impacts of a declining industry.

The Wilderness Society has met and consulted with industry players who simply want common sense to prevail in the market and do not wish to see enormous government intervention and subsidy to support further mass establishment of plantations for low value products. The lessons learned from failed MIS schemes and community division over large monoculture plantations in the landscape must be taken into consideration when developing future policy. A much more integrated approach to wood production must be established. With the advancement of milling technologies, high value saw logs from plantations can be grown, managed and processed on much shorter rotations than traditionally thought to be possible. With appropriate site and species selection, and thinning and pruning regimes, high value timber production is achievable from small plot plantations. Support for such industry is essential to ensure we grow high quality, native timber species in woodlots that can provide the furniture, flooring, appearance and high end application market in Australia. This does not require revolutionary government intervention, it requires an abandonment of the lazy mythology that it cannot be done.

It is time for a new vision for the ‘timber’ industry in Australia. This inquiry sets the scene to implement this vision. This opportunity will be tragically missed if government does not set a clear agenda to move resource production out of native forests into Australia’s vast plantation estate and to develop a framework that supports farm forestry through community based partnership programs with natural resource agencies. To allow bioenergy generators to access native forests - thus entrenching broadscale logging for a fundamentally emissive activity that is also destructive of biodiversity and other ecosystem values - will only radically inflame tensions and see the Australian community move to a footing of conflict. This is not a desired outcome for governments, environmentalists and does nothing to give certainty to industry interests. Prohibiting burning of native forests for power is a key test of the challenge ahead.

For further information about The Wilderness Society’s forest and woodlands policy, please see Appendix 1.

This submission addresses the following terms of reference:

- environmental impacts of forestry
- the development of win-win outcomes in balancing environmental costs with economic opportunities
- opportunities for diversification, value adding and product innovation
- biomass
- carbon sequestration
- opportunities for farm forestry

## **Environmental impacts of forestry**

### **Carbon Emissions**

It has conventionally been acknowledged that broad scale clearing and conversion to other land uses (deforestation) of carbon dense forests and woodlands is an enormous source of greenhouse

gas emissions. What has been largely ignored in this critical debate is the enormous volume of greenhouse gases emitted from logging (degradation) of carbon dense native forests. Degradation encompasses the conversion of native forests to plantations as well as native forest logging, under current definitions.<sup>2</sup>

Global research has established that when previously unlogged forests are brought into commercial production, there is a 'permanent' loss of 40-60% of the carbon previously stored in those forests (depending on the intensity of logging)<sup>3</sup>. It is important to note that it typically takes at least 150 years to recapture 90% of all the lost carbon. Conversion of native forests to plantation entails a loss of up to 80% of the carbon previously stored.

From a climate change perspective, forest degradation needs to be defined as any land use activity that reduces the carbon stock below its natural carbon carrying capacity. The impact of commercial logging must therefore be considered a 'degrading' process and the resulting emissions be fully accounted for in national carbon accounts, in any emissions trading scheme and a national greenhouse and energy reporting system. Clearly there is a substantial opportunity cost associated with continuing to log natural forests.

The problem is further exacerbated insofar as emissive logging activities also tend to degrade the capacity of the biosphere to buffer atmospheric carbon dioxide concentrations by absorbing it (sequestration). It is important to note that the land sector (and oceans) provides the only known mechanism for drawing down and sequestering atmospheric carbon.

Australia's native forests are enormous stores of carbon. Logging of these forests replaces carbon dense forests with young re-growth forests, and carbon that has been stored out of the atmosphere for many centuries is released back into the atmosphere. Greenhouse gas emissions, through logging and subsequent manufacturing processes, come from a number of different sources:

- accelerated decay of a large proportion of the living biomass at the logged site
- accelerated oxidization of dead biomass and soil carbon
- wastage from manufacturing processes leading to final product
- consumption of fossil fuels in harvesting machines, transportation from logging site to processing plant, and industrial processes associated with production of final product

When determining net greenhouse gas emissions from logging, the longevity of the carbon lifecycle of the final product must obviously be considered. However, the single largest end use of trees logged in Australia's native forests is woodchips and pulplogs. A recent Freedom of Information request in Victoria demonstrated that more than 85% of native forests logged end up as woodchips, waste and sawdust. In Tasmania, in recent years, pulplogs for woodchip production makes up greater than 90% of native forests logged. All of these products have a carbon lifecycle of only three years<sup>4</sup>. International expert guidance on accounting for carbon emissions, emanating from the International Panel on Climate Change (IPCC), and current

---

<sup>2</sup> See decision 16/CMP.1 UNFCCC, and FAO forest definition and classifications

<sup>3</sup> Roxburgh, S, Wood S, Mackey B, Woldendorp, G, Gibbons, P, 2006, Assessing the carbon sequestration potential of managed forests: a case study from temperate Australia, *J Appl Ecology*, 43, 1149-1159.

<sup>4</sup> Jaako Poyry Consulting: Technical Report no. 24. September 2000. Analysis of wood product accounting options for the National Carbon Accounting System. Report for the Australian Greenhouse Office.

international accounting rules, require forest managers to assume that 100% of the carbon in harvested wood products they sell has been emitted to the atmosphere at time of sale.

For a comprehensive understanding of an analysis of the carbon carrying capacity of natural versus industrial forests, see Mackey, *et al* 'Green Carbon: the Role of Natural Ecosystems in Carbon Storage', 2008.

To understand the role that natural forests could play in combating climate change, it is necessary to gain a more precise understanding of the carbon carrying capacity of natural forests. The results of recent research into the carbon carrying capacity of Australia's eastern forests<sup>5</sup> demonstrate that current estimates (which are based on mensuration plots in plantation and young regrowth forests) significantly underestimate the potential for these forests to sequester and store carbon out of the atmosphere.

There are substantial and as yet not fully quantified opportunities to reduce GHG emissions from broad scale clearing of native vegetation, native forest logging and degradation of native vegetation from a range of threats including inappropriate fire management and water regimes.

For these opportunities to be fully explored more accurate assessments of the carbon stored in native ecosystems need to be undertaken and the emissions from loss or degradation more accurately accounted and reported. As new data is gathered for forests, woodlands and other vegetation types it is clear that far more refinement and accuracy is possible in measurement, accounting and reporting on all ecosystems. It is also clear that current assumptions about carbon stocks in native vegetation can be significantly in error. The National Carbon Accounting System (NCAS) needs to be recalibrated in the light of the most recent research.

Linkages and synergies between biodiversity protection and restoration and climate mitigation are clear. Protection and restoration of biodiverse natural systems offers the best prospect of achieving permanence of carbon storage in vegetation and, being more resilient, will be an essential component of strategies to assist nature adapt to climate change.

The framework for assessing the contribution forests can play in mitigating climate change needs to be re-drawn to clearly distinguish between the potential role of native forests and agricultural tree crops (plantations). It should focus primarily on achieving deep early GHG emissions reductions and secondarily on medium to long term sequestration potential.

Research is continuing into the sequestration potential of these forests but preliminary, indicative results suggest it is substantial.

## **Biodiversity**

It is not the purpose of this submission to document comprehensive analysis of the threats to biodiversity from native forest logging. Decades of scientific work, documented in countless scientific papers and reports demonstrate that habitat loss, fragmentation and degradation from native forest logging has a significant impact on biodiversity. The higher the intensity and scale

---

<sup>5</sup> Mackey B, Keith H, Berry, S, 2008 (in press), The Role of Natural Ecosystems in Carbon Storage: the Green Carbon Accounting Problem: Summary of Results from a case Study of Australia's South East Eucalypt Forests and Policy Implications", *Research Report ANU Enterprise Pty Ltd*.

of logging, the greater the impact on biodiversity. Most native forest logging in Australia's public forests is clearfell logging, and remains the most critically controversial.

We take the example of logging in Victoria's native forests to demonstrate issues of biodiversity impacts.

The entire framework upon which native forest logging occurs in Victoria is under the principles of Sustainable Forest Management. As per the Department of Sustainability and Environment and the state government's policy, the *Sustainable Forests (Timber) Act 2004*, provides for the development of Victoria's sustainability charter. The charter was introduced in 2006, and in 2008, DSE reported on the charter through the *State of the Forests Report 2008*.

This report soberly holds a mirror to the face of the Victorian Government, and particularly VicForests in highlighting that VicForests' operations are far from meeting the state's own sustainability criteria.

Effective regeneration of forests is a key plank of sustainable forest management.

Regeneration reporting and regeneration failure in Victoria's native forests is an issue of paramount importance to this DTF review. Regeneration failure has been a long standing issue and conservation groups have highlighted problems with regeneration for decades. For example, on the Errinundra Plateau in East Gippsland, many coupes logged before and after the implementation of the RFA have not grown back to "*approximate the composition and spatial distribution of canopy species common to the coupe prior to harvesting*".

For the record, the word "regeneration" appears 76 times in the Code of Forest Practices. Successful regeneration is a key plank of Sustainable Forest Management. Regeneration failure and failure to survey and adequately report on regeneration success is extensive across the regions in which VicForests operates. As noted in DSE's *Monitoring of Annual Harvesting Performance in Victoria's State Forests 2007-08*, regeneration again is raised as a serious concern:

- 89% of coupes logged by VicForests are still outstanding and have not been handed back to DSE
- Over 7000 hectares of forests logged requires further treatment
- There are approximately 19,000 hectares overdue for stocking surveys
- Funding and resourcing is an issue to address regeneration issues

The Expert Independent Advisory Panel (EIAP), in the 2007-08 report has concluded (amongst other comments on regeneration) that:

- *there has been little progress in regards to reducing the large areas of outstanding backlog regeneration and ensuring coupes are regenerated and finalised by VicForests in a timely manner*
- *There is no current funding available to assist with completing regeneration activities associated with backlog regeneration*

- *Serious consideration and action must be taken to attempt to deal with this regeneration issue if DSE wish to ensure harvesting operations are carried out in a sustainable manner*

The EIAP has raised the regeneration issues for a number of years. This is unacceptable and further logging should be halted until there is clear evidence that Victorian public forests are growing back successfully. These are assets owned by the public, and their value for future generations is being compromised by inadequate regeneration.

Another measure of Sustainability is the Victorian Government's *Sustainability Charter*. Subjected to a process of expert review, the Victorian government has proposed 45 indicators against which sustainability is measured. In relation to state forests, indicators are measured against and reported on every 5 years in the Victorian State of the Forests Report. As recognised by the Draft Report on page 22, there are data gaps for over two thirds of the indicators for sustainable forest management.

Problems identified include:

- Ecological information is poor for the majority of forest dependent species
- No data. Forest dependent indicator species need to be identified and habitat availability assessed to be able to report on this indicator in the future
- No data. Representative forest dependent indicator species need to be identified and monitoring programs developed to be able to report on this indicator in the future
- No data. More information on the distribution of invasive species and their impacts on forest dependent native species is required to report on this indicator in the future
- No data. There is currently no comprehensive information on the number of forest dependent species at risk from isolation, nor the impact of such isolation
- Victoria's capacity to report on sustainable forest management is limited by data/information availability and an inability to report long term trends for most indicators
- Increased data/information is required for forest health and biodiversity

This demonstrates that even against the government's own Charter, management in native forests, including logging, does not meet sustainability principles. It is an appalling situation and clearly demonstrates that VicForests is not operating sustainably.

As acknowledged in the Australian Government's State of the Forests Report 2008, the Leadbeater's Possum monitoring program is "one of the most significant and longest running forest monitoring and research programs of its type in the world". The Australian National University's Professor David Lindenmayer has been spearheading this research for almost three decades. In a recent interview with The Age newspaper, Professor Lindenmayer stated that the Leadbeater's Possum is "incredibly close to extinction" and that "forestry is the key threatening process"<sup>6</sup>.

---

<sup>6</sup> The Age newspaper, October 2, 2010

Biodiversity impacts, especially with invertebrates that rely on the coarse woody debris on the forest floor, will be particularly bad as successive logging rotations reduce the natural structure of the forest and push species closer to extinction.

A 2006 Federal Court ruling found that logging in a Tasmanian forest was not able to ensure the survival of three key threatened species and would push them closer to extinction. Even Forestry Tasmania acknowledge the issue and have said that *“the issue of waste raises interesting issues, as we now understand the importance of maintaining coarse woody debris on the forest floor for future maintenance of forest biodiversity, therefore the retention of logging residues is seen as an environmental necessity”*<sup>7</sup>.

Native forest logging operations in other parts of the country have similar cumulative impacts on biodiversity. This is the key impact that fuels opposition to native forest logging around Australia.

## **The development of win-win outcomes in balancing environmental costs with economic opportunities**

Tasmania is currently in the midst of a stakeholder led process that aspires to deliver a win-win-win outcome for the environment, industry and community. The signing of a Statement of Principles<sup>8</sup> was a breakthrough after decades of conflict over native forests logging.

Amongst other things, this Statement sees traditional combatants in the logging debate sit down and reach agreement about a broad pathway forward. This includes the agreement to protect eNGO identified high conservation value forests, a transition for the industry to exit logging in the majority of other public native forests and support for building a new, plantation processing industry.

The discussions that led to the signing of the Statement of Principles were precipitated by the deepening crisis in the Tasmanian native forests logging industry. Despite the supposed security and ‘balance’ of the RFA and subsequent Tasmanian Community Forest Agreement, the public subsidisation of the industry to the tune of many hundreds of millions of dollars, and the unwavering political support for the industry and its operations, processing facilities have continued to close down, jobs continue to be lost and conflict has deepened.

Public policy aiming to balance environmental costs with economic opportunities has failed demonstrably.

As the signatories to the Statement of Principles have reached broad agreement on a pathway forward, they now look to government to rapidly implement the agreement and deliver the outcomes in a practical, policy and legislative. Investing in the opportunity to resolve the long-running conflict over logging in Tasmania is now the responsibility of government. Should this opportunity fail to be realised, Tasmanians may face years more conflict and subsidisation as

---

<sup>7</sup> Hans Drielsma, Executive General Manager. Forestry Tasmania, 22 December 2005.

[http://www.forestrytas.com.au/forestrytas/media\\_releases/two\\_visions\\_for\\_tasmania.html](http://www.forestrytas.com.au/forestrytas/media_releases/two_visions_for_tasmania.html)

<sup>8</sup> <http://www.wilderness.org.au/regions/tasmania/tasmanian-forests-statement-of-principles>



environmental crises deepen, social division deepens and the economic viability of logging these forests continues to become more marginal.

Constructive dialogue has proven a powerful tool in the current situation in Tasmania. Stakeholder-led discussions, free from politicization have delivered a peace plan for government to implement. This model should serve as a positive example those striving to resolve high-conflict situations in other parts of Australia and around the world.

While recognising that all situations are unique, given the environmental, social and economic similarities between Tasmania and other native forest logging jurisdictions around Australia, the Statement of Principles and the process that led to its development could present a useful model for conflict resolution in other areas.

## **Opportunities for diversification, value adding and product innovation**

The Forest Stewardship Council and its certification schemes currently offer the only space in which a productive discourse between environment, social and economic stakeholders involved in the broad forest debate is occurring. FSC certification is a required market entry for an increasingly large segment of the downstream processing sector. The failure of Australian Paper to be in a position to supply book printing paper for the Harry Potter series in Australia was significant in the demise of the company in Tasmania. The author required that the book be printed on FSC stock. The market for tissue papers and retail hardware is following a similar path.

For Australian companies to be able to sell into the most profitable markets FSC certification is a requirement. Companies that cannot or choose not to take this pathway are at significant risk. The Australian Government has supported an alternative certification scheme, The Australian Forestry Standard with large amounts of financial support both directly for the development of the standard and indirectly by providing funding to support the promotion of the scheme. No Australian ENGO's (including The Wilderness Society) support this scheme because of the way the standard setting process was conducted<sup>9</sup>. This scheme is still associated with highly controversial native forest logging practices.

FSC certification is leading to genuine measurable improvements in plantation management outcomes. The only native forest logging likely to be supported by the Wilderness Society is small scale eco-forestry that is FSC certified. The Wilderness Society supported the recent successful FSC certification of the Lagoon of Islands property in the Central Highlands of Tasmania.

---

<sup>9</sup>[http://www.wilderness.org.au/pdf/Certifying\\_the\\_IncredibleFULLv3.pdf](http://www.wilderness.org.au/pdf/Certifying_the_IncredibleFULLv3.pdf)  
<http://www.wilderness.org.au/campaigns/forests/pdf/TWS.%20Certifying%20the%20Incredible-responseto%20AFSLtdV1.%20Feb%202006.pdf>

In order for the industry in Australia to maximise its opportunities the Australian Government should provide funding to support the development of an FSC standard as part of the National Initiative of FSC Australia.

## Biomass

Bioenergy fueled by wood taken from native vegetation (especially forests) is unsustainable and should be categorically ruled out across Australia. There are a number of reasons for this:

- Logging in native forest ecosystems in Australia is associated with a high emissions profile and restrains the capacity of the landscape to sequester carbon<sup>10</sup>
- The impact of maintaining commodity logging cycles in native forest is an overall reduction in the carbon carrying capacity of between 40% and 60%
- Scientific evidence demonstrates that native forests are carbon sinks that continue to sequester carbon for up to 800 years. Research published in *Nature*<sup>11</sup> “found that old-growth forests accumulate carbon for centuries and contain large quantities of it. We expect, however, that much of this carbon, even soil carbon, will move back to the atmosphere if these forests are disturbed.” Native forests should not be disturbed by logging due to the huge amount of carbon they store and the ongoing role they play in sequestering carbon. The Renewable Energy (Electricity) Act must be updated to reflect the latest science.
- Burning native ‘wood waste’ for energy establishes another market for residues which will make it economic to log species and forests which are currently unloggable and would be likely to lead to increases in logging rates or shorten rotation lengths, all of which would generate higher carbon dioxide emissions.
- Native forest biomass is not ‘waste’. In addition to a poor outcome for emissions, so called ‘wood waste’ plays a vital role in maintaining healthy bio-diverse forest ecosystems. The key driver behind native forest logging is pulplog production, mainly for woodchips, not sawlogs. In Victoria, 85% of native forest logging ends up as woodchips, waste and sawdust. In Tasmania, over 90% of native forest logged ends up as woodchips.
- The renewable energy market needs to receive clear signals to guide investment in truly renewable industries. The inclusion of native forest biomass allows subsidised native forest logging to compete on a non-level playing field with emerging, value added renewable technologies, including solar and wind.
- Controversy surrounding native forest wood waste will reduce public confidence in renewable energy and the National Renewable Energy Target Scheme.

There are many feedstocks for the production of bioenergy ranging from organic wastes, agricultural and plantation forestry residues and bioenergy plantations. Many forms of bioenergy are sustainable, renewable sources of energy and should be encouraged. As with any source of

---

<sup>10</sup> Dean, C., Roxburgh, S. & Mackey, B.G. (2003) Growth modelling of *Eucalyptus regnans* for carbon accounting at the landscape scale. *Modelling Forest Systems* (eds A. Amaro, D. Reed & P. Soares), pp. 27–39. CABI Publishing, Wallingford, UK.

<sup>11</sup> Luysaert, S. (September 2008) Old-growth forests as global carbon sinks. *Nature* 455, 213-215  
<http://www.nature.com/nature/journal/v455/n7210/full/nature07276.html>

energy the whole lifecycle of bioenergy production needs to be considered in order to ensure that it is sustainable.

It is incorrect to assume that burning of native forest biomass for energy production is carbon neutral, although this assumption is often made – naively by those who don't know and think 'renewable' somehow confers carbon neutrality, and cynically by those who are well aware of the emissions impact.

In March 2001, the Wilderness Society commissioned a Morgan Poll on behalf of environmental groups found that 88% of people opposed the use of native forest wood fired power. In addition only 8% of those polled thought burning native forests was renewable. This compared with 12% who thought that nuclear energy was renewable.

Although this Morgan Poll is almost ten years old, bioenergy from native forest remains deeply unpopular with the public.

Electricity retailers are reluctant to sell electricity from native forest biomass. In our discussions with electricity retailers they see this public awareness of the environmental problems associated with burning native forests as being a major disincentive to the purchase of (REC) Renewable Energy Certificates from power stations which burn native forest material. An industry publication once referred to them as 'dead Koala RECs'.

The controversy associated with native forest bioenergy is a threat to the public image of sustainable biomass and of renewable energy generally. Despite the environment movement repeatedly specifying that it is native forest bioenergy that is causing the environmental problems, continual bad publicity associated with native forest bioenergy projects has inevitably tarred sustainable bioenergy crops with the same brush.

During the implementation of Australia's renewable energy legislation, previous governments had committed to convening an expert panel to examine the issues around eligibility of native forest wood waste as a renewable energy source under MRET. This commitment was not carried through.

The Senate Committee that reviewed the legislation at the time made the following first recommendation:

- "The Committee recommends that non-plantation native forest wood products and wood wastes be specifically excluded from the list of eligible renewable energy sources."

The Wilderness Society strongly supports the development of a viable a vibrant renewables energy sector. However, the inevitable public controversy that would accompany native forest bioenergy production will damage public confidence in sustainable bioenergy and also damage the image of the renewable technologies industry in Australia.

The Wilderness Society believes that renewable energy legislation should reflect the same credentials as the current nationally recognised and accredited "GreenPower" program which outright prohibits the use of native forest biomass in green energy programs.

To avoid the perverse outcomes that burning of native forest biomass brings, the Wilderness Society strongly urges the Federal Government to alter its renewable energy legislation to outright prohibit the use of any native forest biomass for energy generation under the act.

## **Carbon sequestration**

The issue of long term storage of carbon in wood products is vexed and crediting carbon stored in such products would result in distorted and/or perverse outcomes while ever current approaches to carbon accounting in forests prevail.

The proportion of any logged natural forest which ends up in medium or long term wood products is very small. 80-90% of native forests logged end up woodchips and pulplogs. Native forest logged for bioenergy generation will immediately emit its CO<sub>2</sub> to atmosphere.

The inclusion of harvested wood products without the inclusion of the loss of carbon in the forest would be a case of partial accounting that would give incentives to create more emissions “off-book”. Any such approach would substantially increase Australia’s CO<sub>2</sub> emissions.

The Prime Minister’s Task Group Report discussed incentives for Harvested Wood Products but only in the context of plantation offsets. With plantation offsets the effects of emissions from logging is not an issue because in a Kyoto eligible plantation there was not a pre-existing store of carbon before the plantation was established.

However, with native forest there is currently no accounting for the emissions from logging. Thus a perverse incentive would be created to destroy an immense store of carbon while claiming emissions credits for a much smaller amount of sequestration in long term wood products. It would be perverse to give credit to offsets that actually increase carbon emissions.

Lobby groups who support the on-going woochipping of our native forests argue that logging native forests actually reduces greenhouse gas emissions. The arguments for this stance are misleading at best, as they fail to fully account for:

- True carbon carrying capacity of forest including live biomass, coarse woody debris, litter and soil carbon
- Post logging accelerated drying and decomposition of carbon stored in soil
- Accelerated decay of carbon in other forest biomass not removed from logging site
- Burning of forest biomass not removed from logging site in post-logging burns
- Burning of fossil fuels for machinery in logging coupes
- Burning of fossil fuels from transport of logs, often over hundreds of kilometers
- Burning of fossil fuels during manufacturing processes to make end product
- Emissions from end use of sawdust and waste from sawing and manufacturing processes
- Over estimation of sawlog recovery rates and current end-product account classifications
- Under estimation of volume of end-products that store carbon only for very short term
- Under estimation of the long time period required for logged forests to recover their carbon stores

The market needs clear messages about what does and does not emit carbon. Robust science, not rhetoric, must be used to inform Australian companies about climate change implications of their business decisions.

## **Opportunities for farm forestry**

Plantations now produce more than 80% of Australia's processed wood products. Native forest sawmilling has been reduced to a remnant market-share. We have enough plantation wood supply to meet almost all our domestic timber needs and to develop a strong export oriented timber industry. Hardwood plantations can now entirely replace native forest woodchip production.

Because processing is the richest source of employment in the forest industry most current timber worker jobs are generated by the plantation processing industry.

While Australia has a trade deficit in timber products arising mostly from imports of pulp and paper, a trade deficit on an individual commodity is not an issue for employment or economic growth because Australia's comparative advantage lies in other products and commodities. Appropriate investment in processing in the plantation sector could eliminate Australia's entire forest products trade deficit.

It is important that all proposed major forest based industries be properly assessed for their net carbon impact including the carbon opportunity costs associated with any development. Combining native forest logging and plantation establishment on cleared land as the same industry only further adds confusion to market messages.

Farm forestry can play a major role in producing Australia's timber products. This can happen at a time when marginal traditional farming operations are looking to diversify their income streams. The Australian Government should be looking to the farming sector to understand what contribution they can make to producing durable high value sawn timber from farm forestry. There are numerous successful examples around the country where small farms have produced high grade sawn timber products that are as good as what traditionally has come from native forests. Rather than invest all public funds, through state based logging agencies, governments should ensure this is diversified into any science gaps that look to producing durable class 1 and 2 timbers from plantations. Where the work has already been done, we need a policy vision that sees plantations not only provide low quality, high volume commodity pulp for paper production, but also high quality, low volume sawn timber for high end applications. Whilst the focus remains on native forest logging, this even playing field will not be achieved. As mentioned earlier, this does not require enormous public subsidy to the farming sector, it requires an acknowledgment that there is already a huge amount of research and on ground success to show that it can be done.

The vision for plantations must extend beyond high rainfall areas and look to what opportunities small scale farm forestry in low rainfall areas can bring to the industry. The benefits include the restoration of biodiverse plantings in areas where almost all native vegetation has been removed. Understanding the long term implications and costs of such a contribution is crucial to making it a reality and this cost must not just be placed on individual private land owners. Current subsidisation of public native forest logging must be recognised and accounted by government.

Once removed, a more even playing field needs to be established to ensure there are positive incentives for farm forestry.

## **Conclusion**

The Wilderness Society believes that the current crisis facing both the Australian timber industry and biodiversity (and other environmental values) dependent on Australia's native forests must be fixed once and for all. With industry and environment groups in civil discussion over the future of native forest management, the Australian government should show support for these discussions and renew its timber industry platform in light of these unique circumstances.

A new vision for Australia's timber industry is needed. This vision must:

- Understand exactly what Australia's timber industry is and what is the future outlook for wood products
- Acknowledge the role of current plantation sector in meeting our wood needs and what its future potential is, including smaller scale farm forestry
- End support for Australia's remaining Regional Forest Agreements
- Prohibit the burning of native forest biomass for any power generation
- Immediately move all commodity logging into plantations and end export woodchipping from native forests
- Consult with the farm forestry sector to gain an understanding of what is possible to transition the small percentage of high end sawn timber production from native forests to plantations
- Improve measurement of and accounting for the impacts of clearing and degrading of natural systems to ensure Australia fully quantifies the scale of emissions from native forest logging and clearing – this is critical for both domestic and international climate policy
- Support research into the current carbon stocks, natural carbon carrying capacity and degrading factors for all natural ecosystems including woodlands and forests in Australia.
- Look to a future that manages forests for biodiversity, water and carbon. This should occur within a broader ecosystem services policy approach that fully captures and accounts for a range of ecosystem services in accounting methodologies.
- Support ongoing negotiations between industry and environmental groups to end decades of conflict and deliver both native forest protection and jobs security in plantations

# Appendix A

## The Wilderness Society National Forest & Woodland Policy Principles

(references removed)

### Preamble

This document provides a broad set of national forest policy principles that underpin specific proposals prepared by National and State Based Campaign teams to meet the broad purpose of The Wilderness Society:

‘To protect, promote and restore wilderness and natural processes across Australia for the survival and ongoing evolution of life on Earth’

Our aspiration for Australia’s Forest and Woodlands:

*‘The forest and woodlands of Australia should be maintained and/or restored with their full complement of native species and ecosystems in their natural patterns of distribution and abundance where necessary to achieve The Wilderness Society’s purpose.’*

### 1 Definitions

Forests have been variously defined in Australia since the 1970’s and these definitions have broadened over time to encompass more and more of the continent’s perennial woody vegetation. Plantations and timber commodities have been separately defined below.

#### 1a Forest and woodland

All of the definitions have validity for the context in which they were written. The Wilderness Society accepts a broadened structural definition of native forest written for National Forest Inventory.

*‘. . . an area, incorporating all living and non-living components, that is dominated by trees having usually a single stem and a mature or potentially mature stand height exceeding 2 metres and with existing or potential crown cover of over-storey strata about equal to or greater than 10 per cent. This definition includes Australia’s diverse native forests regardless of age. It is also sufficiently broad to encompass areas of trees that are sometimes described as woodlands.’*

The Wilderness Society has removed plantations from this definition and expanded the woodland class by dropping the canopy cover percentage to 10%. The Wilderness Society accepts the biological definition of native forest written for the National Forest Policy Statement.

#### 1b Timber Commodities

Timber commodities are usually considered to be solid wood or composite materials (eg chip board or medium density fibre board, with or without timber veneers) used to produce the

following: formwork, floor bearers, floor joists, floor boards, wall frames, roof frames, ceiling frames, roof and other structural trusses, architraves and skirtings, fascia boards, internal linings, internal doors, internal joinery, external cladding, window frames, pergolas, decks, external joinery, veranda posts and beams, external doors and fencing, wharves and jetties, pallets, bridges, poles, piles and sleepers. This list is not necessarily exhaustive.

Fine furniture timbers, boat-building timbers and craft-wood are not considered to be timber commodities for the purpose of this policy.

## **1c Plantations**

Plantations are defined in the National Forest Policy Statement. “Intensively managed stands of trees of either native species or exotic species, created by the regular placement of seedlings or seed.

## **2 Overarching Principles:**

The Wilderness Society subscribes to a set of overarching principles that underpin this and other policies. These principles are set out in summary or in full below.

### **2a The Precautionary Principle**

“In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. When there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation”

### **2b Intergenerational Equity**

“Sustainable development seeks to meet the needs and aspirations of the present without compromising the ability to meet those of the future.”

### **2c WildCountry Principles**

#### **WildCountry Scientific Principles**

The WildCountry scientific framework is founded on the premise that the conservation of biodiversity and related natural heritage values demands a landscape-wide approach to conservation that recognises the importance of *ecological connectivity* at continental and regional scales.

The processes that sustain and regenerate ecological systems operate across a range of time scales and spatial scales. Many, if not most, work at spatial and time scales that far exceed those at which humans perceive, use and manage land and natural resources. Thus, many important ecological processes involve connections at scales not considered by conventional conservation planning and management.



Protection of Australia's biodiversity into the long term is therefore more probable through conservation based on a multi-scaled, landscape and process based framework.

**Three key concepts are potentially relevant to the WildCountry scientific framework, namely:**

(1) continental and regional connectivity of *large core areas* is required to support the long-term conservation requirements of spatially extensive ecological processes

(2) *complementary land management* in surrounding landscapes; and,

(3) where necessary, *restoration of natural processes* and disturbance regimes, the control of invasive species, and the reintroduction of native species. Seven processes of *ecological connectivity* relevant to WildCountry have been identified:

1. Strongly interactive species
2. Hydro-ecology
3. Long distance biological movement
4. Disturbance regimes
5. Climate change and variability
6. Land / coastal zone fluxes
7. Long-term, spatially-extensive evolutionary processes
8. Geographic and temporal variation of plant productivity across Australia

## **2d Earth Charter**

The preamble to the Earth Charter is set out below and the full document can be found at:

<http://www.earthcharter.org/files/charter/charter.pdf>

### **Preamble**

We stand at a critical moment in Earth's history, a time when humanity must choose its future. As the world becomes increasingly interdependent and fragile, the future at once holds great peril and great promise. To move forward we must recognize that in the midst of a magnificent diversity of cultures and life forms we are one human family and one Earth community with a common destiny. We must join together to bring forth a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace. Towards this end, it is imperative that we, the peoples of Earth, declare our responsibility to one another, to the greater community of life, and to future generations.

### **Earth, Our Home**

Humanity is part of a vast evolving universe. Earth, our home, is alive with a unique community of life. The forces of nature make existence a demanding and uncertain adventure, but Earth has provided the conditions essential to life's evolution. The resilience of the community of life and the well-being of humanity depend upon preserving a healthy biosphere with all its ecological systems, a rich variety of plants and animals, fertile soils, pure waters, and clean air. The global

environment with its finite resources is a common concern of all peoples. The protection of Earth's vitality, diversity, and beauty is a sacred trust.

### **The Global Situation**

The dominant patterns of production and consumption are causing environmental devastation, the depletion of resources, and a massive extinction of species. Communities are being undermined. The benefits of development are not shared equitably and the gap between rich and poor is widening. Injustice, poverty, ignorance, and violent conflict are widespread and the cause of great suffering. An unprecedented rise in human population has overburdened ecological and social systems. The foundations of global security are threatened. These trends are perilous—but not inevitable.

### **The Challenges Ahead**

The choice is ours: form a global partnership to care for Earth and one another or risk the destruction of ourselves and the diversity of life. Fundamental changes are needed in our values, institutions, and ways of living. We must realize that when basic needs have been met, human development is primarily about being more, not having more. We have the knowledge and technology to provide for all and to reduce our impacts on the environment. The emergence of a global civil society is creating new opportunities to build a democratic and humane world. Our environmental, economic, political, social, and spiritual challenges are interconnected, and together we can forge inclusive solutions.

### **Universal Responsibility**

To realize these aspirations, we must decide to live with a sense of universal responsibility, identifying ourselves with the whole Earth community as well as our local communities. We are at once citizens of different nations and of one world in which the local and global are linked. Everyone shares responsibility for the present and future well-being of the human family and the larger living world. The spirit of human solidarity and kinship with all life is strengthened when we live with reverence for the mystery of being, gratitude for the gift of life, and humility regarding the human place in nature.

## **3 Conservation**

The Wilderness Society recognises that meeting long-term conservation objectives for Australia's forests requires a reservation network on public land and conservation management arrangements on private and leasehold land.

### **3a Public Land Reserves**

The Wilderness Society will help develop proposals for and campaign to have implemented a comprehensive (and where possible connected) forest reserve network across the continent. This has to be capable of being maintained into the future in order to secure the full range of ecosystem services that these forests provide. These forests should be in National Parks and other secure reserves. The Wilderness Society is preparing a reserve management policy.

The Wilderness Society recognises that a priority for reservation should be given to forest ecosystems that have one or more of the following characteristics:

- Satisfy the WildCountry Science Principles
- rare, threatened or endangered, or contain centres of endemism;
- old-growth;
- forested wilderness;
- Rainforest (including with emergent eucalypts);
- undisturbed / negligibly disturbed mature forests;
- highly (biologically) productive;
- have been identified as core habitats for local endemic, rare, threatened and endangered species;
- have been identified as having world heritage or of national heritage value;
- are located in areas with steep climate gradients;
- or form part of domestic supply or Wild River catchments.;
- refugia and/or of evolutionary significance;
- are significant carbon stores and;
- areas of high cultural and social significance.

These are the High Conservation Value (HCV) forests.

### **3b Private land conservation**

The Wilderness Society recognises that in order to secure long-term conservation objectives a range of measures need to be implemented with the cooperation of private landowners, governments and environmental non-government organizations. These will include:

Land purchases; private nature conservation reserves, appropriate regulatory measures, conservation covenants, conservation management agreements, incentive packages and voluntary conservation programs like Land for Wildlife.

These measures are needed to help provide connectivity in otherwise fragmented landscapes.

## **4 Forest Restoration**

The Wilderness Society recognises that many of Australian forest landscapes and ecosystems are either significantly fragmented by clearance and or highly disturbed by intensive forest use. In order to maintain ecosystem processes at the regional and landscape scale and or achieve good reserve design outcomes, areas of disturbed and or cleared land will need to be restored.

A suite of tools will need to be used to achieve this outcome. Restoration forestry ecological revegetation and remnant vegetation protection are all possible tools.

## **5 Forest Land Management**

### **5a Land clearing**

The Wilderness Society is opposed to the broad acre clearing of native forest for any purposes. Despite the undertaking's given by all State Premiers and the Commonwealth in the National Forest Policy Statement and other bilateral agreements with the Commonwealth, forests are still being cleared although this is closely regulated in most jurisdictions except Tasmania and the Northern Territory where plantation conversion of native forest is still a major driver of land clearance.

### **5b Forestry**

The Wilderness Society does not support the use of native forests to supply woodchips for pulp, wood for power generation, charcoal production, commercial firewood or timber commodities.

The Wilderness Society will support sustainable traditional indigenous use of timber and locally sourced wood for low volume housing needs.

The Wilderness Society does not believe that there is a native forest logging systems in use in Australia that has been proven to be ecologically sustainable, in terms of the full range of ecosystem services provided by forests that are in a natural state, over the natural life cycle of those forest ecosystems.

It is acknowledged that the lower the intensity and frequency of logging events the lower the likely overall impact of the disturbance. On the basis of this understanding The Wilderness Society is prepared to examine proposals to log very small volumes of wood for high value products outside proposed reserves – preferably as part of a transition strategy to rely on purpose planted trees and only if all commodity production from those areas has ceased.

The Wilderness Society recognises that transition strategies are required both to provide wood flows while industry restructures to alternatives from plantations and that areas of heavily logged forest outside of reserves in some cases will require ecological management interventions such as thinning of stands where trees have effectively stopped growing because of competition for water and nutrients (restoration forestry). This would continue to provide significant wood flows in some regions in the short to medium term.

The purpose of any interventions would be to increase the diversity of forest age structures and ecological functionality.

## **5c Mining**

Where the removal of vegetation as part of mining operations is inevitable, TWS will not oppose traditional owners recovering wood.

## **6 Plantation Management and Establishment**

The Wilderness Society believes that all of Australia's pulpwood, commercial firewood and timber commodity production should come from extant plantations of softwood and hardwood and that this would deliver higher rates of return to State Forest agencies than maintaining wood flows from crown native forests.

In many areas of Australia it will not be appropriate to establish plantations until current serious plantation management issues are addressed. Indeed there will be areas of plantations which will need to be restored to as close to native forests as possible.

In other areas plantations can be an important part of ecological restoration processes, including those planted for commodity production.

Current plantation management practices, particularly as they relate to post land-clearing establishment, are unacceptable. A series of concerns in respect of these issues have been a matter of public record since 1990.

The Wilderness Society does not support any use, including aerial application, of: the triazine group of chemicals, synthetic pyrethroids, any of the other chemicals with known human or ecological toxic impacts, or 1080 poison baiting for herbivores.

Similar concerns have been raised in respect of the genetic pollution of native forests either as a result of plantation species invading native forest or the more insidious problem of genetic contamination of native gene pools with genetically modified, exotic or non-local provenances of commercial species. These issues need to be recognised in species and site selection for plantings.

Catchment management issues relating to plantation establishment, rotation length and watercourse protection need to be addressed. The Wilderness Society believes that water quantity and quality outcomes must take precedence over wood supply outcomes.

## **7 Forest Certification**

Forest Certification is a branding exercise that gives timber producers access to markets or very rarely a price premium in the market. The best certification schemes have criteria, which if properly applied can deliver certainty that the management system certified has been delivered. Only one forest certification scheme FSC (Forest Stewardship Council) currently allows environmental NGO-stakeholders access to the accreditation process.

Certification schemes are not a guarantee of environmental outcomes and in many cases merely certify the status quo for legal but very bad forestry practices. The Australian Forestry Standard (AFS) is such a scheme, claiming that it establishes that AFS certified wood comes from sustainably managed forests.

The Wilderness Society does not support or recognise the validity of the Australian Forest Standard. There are other brands, which from time to time make environmental claims that either mean nothing or are misleading. The Wilderness Society will publish material in respect of these brands when appropriate.

The Wilderness Society recognises and supports the accreditation of plantations and plantations undergoing restoration that meet the criteria for FSC Certification but not where certified companies have interests in the logging of High Conservation value forests.

This support is not meant to condone bad chemical governance by an accredited company. The Wilderness Society is not making a claim that certification equates to ecological sustainability.

The Wilderness Society encourages those purchasing wood sourced from developing countries to choose FSC labelled products as this provides guarantees as to the legality and intensity of the logging and could help reduce logging pressures in these countries if widely adopted as a purchasing preference.

The Wilderness Society does not believe that there is currently any native forest logging systems in Australia that could be legitimately environmentally branded. Wood taken from native forest restoration and or low intensity forestry (see 5b above) might be appropriate for accreditation once regional high conservation value forest reservation outcomes have been met.

## **8 Forests and Climate**

Deforestation (landclearing) accounts for at least 18% of current global CO<sub>2</sub> emissions.

Forest degradation (logging and burning) is also a major contributor. Avoiding deforestation and forest degradation will be crucial if we are to prevent dangerous climate change (i.e. avert more than a two degrees Celcius rise in average global temperatures).

Australia contains some of the most carbon dense forest and woodland ecosystems in the world. Logging and land clearing in Australia contribute substantially to our national emissions of CO<sub>2</sub>.

The Wilderness Society endorses the need for Australia to have an agreed long term binding target for the reduction of all greenhouse gases. The Wilderness Society in line with most Australian environmental non-government organisations supports emissions reductions of 30% by 2020, rising to a reduction of 80% by 2050 (based on 1990 levels).

There are a number of mechanisms, instruments and policy protocols that would help avoid the worst impacts of climate change. Ratifying the Kyoto Protocol is an important part of a suite of approaches to deal with this urgent problem.

The Wilderness Society supports initiatives to purchase legal forestry use rights for conversion to legal carbon sequestration rights on public and private land. These initiatives could operate independently of any mandatory emissions trading schemes. Initiatives should be based on a robust set of principles and criteria; and have robust governance structures that are open,

transparent and participatory. Measurement and/or estimates of stored carbon need to be scientifically rigorous.

Short rotation pulp plantations grown on cleared agricultural land offer very limited opportunities to sequester carbon unless management practices are significantly changed to retain carbon *in situ* at harvesting. As the net contribution to CO<sub>2</sub> reduction over the cropping period is low, they should not form part of any emissions trading scheme developed for Australia.

The Wilderness Society (in line with forest definitions established under the Kyoto protocol) recognises that plantations established on native forest sites cleared post-1990 are net sources of very significant emissions and should never be eligible to receive carbon credits in any emissions trading schemes.

Under no circumstances should forest products, e.g. sawntimber, be credited as stored carbon in emissions trading schemes. Such an approach does not account for the emissions resulting from the logging operation which produced the wood product. Such partial accounting can create perverse incentives to log that result in greater carbon emissions and a worse climate outcome.

The purchase of clearing permits in Australia for carbon credits has established a model which demonstrates the economic feasibility and validity of converting one land use right to another. In Australia, the opportunities for both biodiversity protection and climate mitigation from converting destructive land-use options into rights to sequester carbon are enormous.

As well as the obvious ecological benefits there may be significant opportunities for carbon sequestration in broad scale landscape restoration. The economic opportunities, landscapes involved and timescales associated with the purchase of carbon rights of these types of projects will be closely examined as appropriate.

In particular, Indigenous Australians who own or hold rights over millions of hectares of forests and woodlands around Australia, and who are under increasing pressure to approve the clearing of those forests and woodlands, should receive economic benefits from the protection of those forests and woodlands and their carbon and biodiversity values.

## **9 Peaceful Protests**

The Wilderness Society asserts its right to protest to highlight the plight of threatened forests and or the bad environmental behaviours of industry and government.

## **10 Working with Industry**

The Wilderness Society welcomes any opportunity to work with the logging industry and users of wood commodities to achieve agreed conservation and industry goals. The Wilderness Society strongly supports transitional industry change that helps secure critical conservation objectives and a long-term competitive future for the wood and wood products sector.

## **11 Indigenous Issues**

The Wilderness Society has an indigenous policy. This will be applied where appropriate in relation to this policy.