



## NEW ZEALAND

### 1. EMERGING ISSUES

#### *Climate Change policy*

Climate Change will generate major changes for New Zealand forestry. These will not only relate to the impacts of climate change on growing conditions and forest management through enhanced risks from fire, wind and pests, but also to the various mechanisms being put in place globally to enhance forestry's contribution to climate change mitigation.

The domestic climate change policy for New Zealand announced last year has stalled as far as its potential to stimulate forestry. The new government elected at the end of 2008 has required the Emissions Trading Scheme (ETS) to be reviewed by a special select committee of Parliament. The new National (centre right) government is committed to retaining measures to address New Zealand's Kyoto obligations, but will be reviewing the extent and timing of emissions reductions. That said, the FOA considers that an Emissions Trading scheme will be retained. Indications are that a modified ETS will be implemented late 2009.

Although there is uncertainty surrounding future policies and mechanisms addressing climate change, opportunities should still arise from the:

- Generation of carbon credits from forests under an ETS, with likely effects flowing onto species choice, management practices and regime length;
- Greater demand for wood as a sustainable substitute to materials that produce intensive greenhouse gases;
- Enhanced viability for using woody biomass as an energy source arising from increasing demand for sustainable fuels and the implementation of an ETS.

An ETS will have significant implications for the forestry sector. The currently enacted, but being reviewed, ETS is the first internationally linked domestic emissions trading scheme where forest sinks can be used by emitters to meet obligations to surrender units.

Although billed as all sectors, all gases, the ETS is not yet that. The only sector at this stage that is in, with rules that apply from 1 January 2008, is the forest sector. Other sectors are proposed to be brought in with varying requirements at later dates. Agriculture will be the last sector with a proposed starting date of 2012.

While the rules now apply to forestry, the legislation has not yet been passed. As it is likely changes will be made to the ETS, and it is not known when or if other sectors will be included, this has understandably created investment uncertainty in the sector, particularly the market for carbon which has seen a number of pending deals fall over or be postponed.

The proposed approach has created numerous schisms amongst forest growers. Post-1990 forest owners are treated very differently to pre-1989 owners. Post-1990 owners of large forests are subject to a heavy deforestation tax while owners of small blocks are exempt. Owners of pre-1990 forests, who also purchased their forests after 2002, may receive less compensation than those who purchased pre-2002.

Adding to the uncertainty and confusion, the rules by which carbon will be measured and can be traded have yet to be developed.

Allowing owners of post-1989 established forests the option of selling Kyoto compliant carbon credits introduces a market opportunity but one that comes with some risks and forest management implications. For some it will provide a viable alternate revenue stream especially those whose forests were planted shortly after post-1989 and who are managing multiple age classes rather than a single, even aged, stand. Prices in the carbon market relative to the wood market could be an important future determinant of whether, and when, harvesting is undertaken. This is likely to have a positive impact on forest planting but, this will be tempered by the cost of acquiring land (price have doubled in the last 5 years) and the fact that agriculture does not currently face any emissions restrictions. Many will also chose to exercise the option because of the harvesting liability risk and the compliance costs.

Government has set a target of an additional 250,000 ha of forest by 2020 from 2007, or just under 20,000 ha/annum. In addition to the boost anticipated from carbon credits the government has also introduced an Afforestation Grant Scheme (AGS) as an option for those who do not want to enter the world of carbon monitoring and trading. This will involve a 10 year contract arrangement with government providing a grant but retaining the credits and liabilities. The AGS is also likely to encourage some planting despite the constraints above. In the absence of carbon related measures to encourage planting there would be little new afforestation. However, both these schemes have had limited success in attracting investment in new planting.

Aside from domestic policy the industry has identified a number of issues within the Land Use, Land Use Change and Forestry Rules of Kyoto that need addressing before New Zealand signs up to the next commitment period. These include recognition of the role of harvested wood products and the inadequacy of the instant oxidation assumption, the length of the next commitment period and the need for flexible land use arrangements for planted forests.

At present if a pre-1990 forest is harvested and replanted in the same location the owner gains neither credits nor debits. If the same forest, absorbing the same amount of carbon, is relocated however the owner still receives no credits but is instantly liable for all the carbon absorbed in the forest. From an atmospheric point of view and the objectives of Kyoto, this is a nonsense that NZ will seek to have addressed.

A significant research programme is also being funded as part of a Plan of Action for Sustainable Land Management and Climate Change (SLMCC). Many of these are detailed further at <http://www.maf.govt.nz/climatechange/poa-investment-sheets> and include:

- Life cycle analysis of sustainable biofuel options;
- Carbon stocks and change in NZ's soils and forests;
- Developing a method for valuing forests and forest land in New Zealand in the presence of carbon pricing;
- Life Cycle Assessment (LCA) for building materials in New Zealand;
- Carbon trading and forestry decision-making; and
- Land-use mapping and LULUCF accounting

**1 hectare of radiata sequesters approx 25 tonnes CO2 per year. So NZ plantation forests sequest approx 45 m tonnes of carbon per yr. (Source: NZFOA Facts and Figures)**

### *Water*

New Zealand now faces real challenges, of varying degrees and causes across regions, in ensuring there is sufficient water in our lakes, rivers, and aquifers; protecting freshwater ecosystems, in limiting and remediating degradation of water quality; and in ensuring that society gains the greatest benefit from the allocation of available water.

While in general New Zealand is endowed with plentiful rain, its geographic distribution, and unfettered use, is now presenting significant ownership and allocation issues. For forestry this is manifesting itself in the form of catchment “no-go” zones for forestry on the basis that forest cover reduces the amount of water for downstream users such as dairying and viticulture. This, notwithstanding that many of the catchments were originally covered in native vegetation. Restrictions on establishment of forests based on water yield considerations usually ignore the positive benefits that forests can have on water quality (less sedimentation, reduced peak flows, less chemicals compared with some alternative land uses) and on other factors such as reduced soil erosion and greater carbon sequestration and storage;

Water quality issues are also emerging, largely attributable to an intensification of agriculture. About 30 percent of the country's lakes are considered likely to have poor water quality due to excessive nutrient levels. One third of the monitored groundwater has elevated nitrogen levels and 20 percent shows signs of contamination with fecal matter. However, streams draining indigenous forests and maturing plantation forests generally have high water quality and low concentrations of nutrients and suspended solids.

A key issue for non-forested land is nitrogen runoff and nitrogen trading is being investigated as a solution. The initial allocation under such a system is a point of contention given forestry's low level of N output which is penalized if grand-parenting of emissions is the allocation mechanism chosen. An alternative of providing only a catchment level average across all land users based on hectares would be an abrupt shock to a number of intensive dairying farming operations that produce nitrogen discharge levels many times this level. The issue is destined to be resolved in the Environment Court.

The government has proposed a National Policy Statement for Freshwater Management. However, the NZFOA considers that the NPS should be withdrawn unless the focus on "Land Use Development" is changed to "Land Use".

The challenge for the Proposed NPS is to address the quality and quantity of freshwater resources in New Zealand. Logically it would seem that the focus needs to be on takes, uses and discharges to water as opposed to focussing on land use or land-use development. Reference to, and the concept of, land-use development which is central to the NPS as currently drafted is flawed. The proposed definition of land-use development lacks clarity and creates uncertainty.

An NPS should treat water polluters equitably, regardless of whether they are existing water users or proposed. The underlying basis, as is the case with the Resource Management Act when it is correctly applied, should be for the polluter to pay.

### *Drug and Alcohol Code of Practice*

The forest industry has agreed to work toward an accident-free workplace. In doing so, we recognized that because of the threat they pose to health, safety and performance there was no place in our workplaces for people affected by drugs and alcohol. Several years work has culminated in the production of a significantly enhanced NZFOA Drug and Alcohol Code of Practice.

The 2008 Code of Practice is a further step toward an accident free industry. It is intended for adoption by all forest owners and industry employers, as part of a campaign to ensure that drug and alcohol abusers are not permitted to compromise the health and safety of their co-workers and themselves.

The Code is a quality management program with three main elements: education, drug and alcohol testing of all workers in safety sensitive positions and rehabilitation. All these elements are essential if the program is to be effective, lasting and compliant with NZ law. As a Code of Practice, it has similar status in law to a NZ Standard. As such, all forest owners have been advised to adopt drug and alcohol policies based upon the Code.

### ***Biosecurity Funding and Decision-Making***

As part of the development of a new Biosecurity Surveillance Strategy the Ministry of Agriculture and Forestry (MAF) is reviewing who should decide whether an exotic organism is contained or eradicated, and who should pay. Industry representatives are working with MAF representatives on a proposal for joint decision making and resourcing. It is proposed that MAF and affected industries would make significant strategic, financial, and operational decisions jointly for specific readiness and response activities.

The forest industry has welcomed all proposals to more formally involve the primary sectors in preparing for and dealing with incursions. The following principles have been incorporated into the draft agreement:

- there can be circumstances where it would be appropriate for an industry to contribute to an incursion response
- exacerbators are expected to be identified where possible and made to contribute in any response
- the efforts of the industry to prevent or minimise the impact of an incursion through surveillance, research etc, are to be taken into account. The forest growing industry is the only primary industry in New Zealand to have a formal surveillance programme for plant pests and diseases, funded by growers themselves. This was recently subject to an independent review and achieved a glowing report.

## *Certification*

Independent third-party certification has continued to grow – with 55 percent of the 1.8 million hectares of plantation forest area in New Zealand now certified. In New Zealand the only internationally recognised third party certification that has been pursued to date is FSC. The industry is thus highly supportive of FSC.

Fifteen managers of significant plantation holdings in New Zealand already hold Forest Stewardship Council certification. In total this represents around 1 million hectares.

In addition, information supplied from NZFOA FSC certificate holders in New Zealand shows that around 50% of the volume produced by forest growing companies (9.8 million cubic metres) is currently captured by an FSC Chain of Custody.

The group of “certified” plantation managers has formed an FSC cluster to co-operate on FSC issues of common interest. It has already funded, and will continue to fund, industry good activities related to certification. The cluster is supported by NZFOA.

This group, in conjunction with NZFOA, has collaborated closely with Australian FSC forest interests, and more recently established links with Canadian and United States certificate holders (the CANZUS group represents over 20 million hectares).

FSC International has recently initiated reviews of two key areas of policy for plantation forest owners. Firstly a review of the policy applying to Plantation Forests and secondly a review of pesticides used in such forests. Both reviews are very important to planted forest growers.

The pesticide review was undertaken by the Pesticide Action Network UK, which is an environmental organisation focused on eliminating pesticide use. Several pesticides commonly used in New Zealand have been designated highly hazardous and require “derogation” (consent) from FSC to use. Derogation is not guaranteed and a successful derogation lasts for five years with a presumption of non-renewal. Also derogation applications must have the support of environmental and social groups, which is clearly not guaranteed.

Several NZ pesticides are essential for biosecurity, pest control and economically sustainable primary land use. In particular NZ forestry cannot successfully operate completely without the use of some pesticides and is therefore at considerable risk of losing the ability to hold FSC certification. The FSC Pesticide Policy also threatens the ability of NZ to manage and/or respond to existing and new biosecurity threats (i.e. possums, buddlejia, painted apple moth, Asian gypsy moth).

New Zealand has just received the response to its application for derogations and will now be working through this. There is already a level of concern, however, that the decisions by FSC reflect a lack of understanding about local conditions, e.g. suggestions for trials that have already been undertaken. Nonetheless the industry is committed to, and has discussed with FSC, a continual improvement process that would quantify progress towards the objectives of the derogations and the goal of minimizing use.

### *NZ Wood*

Wood has a great story to tell as a renewable resource with relatively low embodied energy. The NZ Wood program (jointly funded by industry and government) was launched towards the end of 2007. This marked the first promotional phase of presenting the environmental credentials of NZ forests and wood to the building and design sector.

The programme is a joint initiative between the wood processing and forest industries under the pan-industry WoodCo “Association of Associations” and in partnership with government. The common goals increased wood consumption and greater awareness of the environmental credentials of wood and forests, particularly in the fight against climate change.

Much activity has taken place over the last year with significant positive feedback both from within, and from outside, the industry. The website <http://www.nzwood.co.nz> is under continual development.

The programme involves promotion and advertising, research, website and information channels, a NZ Wood brand, design resources and training initiatives. Additional NZ Wood resources are continually being added to the site or published, such as the recent release of television advertisements promoting timber use, to the publication of the “Living with Wood – For a Better World” pamphlet. To firmly secure wood’s place as a preferred environmental choice a sustained multi-year campaign is required.

## **2. INDUSTRY SITUATION**

### *Production Forestry Sector*

Today there are 1.8 million hectares of plantation forests, which cover 7 percent of New Zealand’s land area; 93% privately owned. Plantation forests are dominated by radiata pine (89 percent by area), with Douglas fir accounting for 6 percent by area. With the maturing of the plantations established in the 1970’s and 1980’s, there is capacity to increase the sustainable annual harvest by up to 50 percent over the next 12 years.

The current New Zealand production forest sector operating environment is characterised by:

- An historically low level of new planting, although most harvested forests are replanted, as NZ Forest Owners struggle with low investment returns, high land costs, and lack of certainty in the legislative environment
- Harvest level significantly lower than available supply
- A negligible indigenous harvest, and all of it on a sustainable basis
- Domestic consumption of approximately 30% of the harvest, with this forecast to grow at a much slower rate than the volume available for harvest
- Processing in New Zealand of around 65% (roundwood equivalent) of the harvest
- Increasing importance of environmental management and social responsibility to consumers and the public. Non wood products supplied by forests are becoming more important, with the industry struggling to find a way to value these (water quality, recreation, landscape, etc) in a manner which provides a suitable return to the forest owner.

Unprecedented levels of deforestation that took place leading up to the start of 2008 have not reoccurred as owners have become liable for the carbon associated with these stands. In addition, the major driver for conversions, namely soaring dairy returns, is no longer as significant as dairy prices have significantly declined.

Growing concerns about environmental sustainability mean that attention is increasingly focusing on the “environmental services” provided by New Zealand’s forests. These are wide ranging and largely unvalued. They include the maintenance of biodiversity, the mitigation of soil erosion, the maintenance of water quality, the sequestration of carbon, landscape values and the provision of recreational opportunities.

New Zealand’s geographic location and the cost of shipping ensures that the markets of the Asia-Pacific region will remain the focus for New Zealand’s exported wood products for the foreseeable future. Development of high value products capable of competing on European markets presents a challenge in the current financial environment.

Tight market conditions and investment uncertainty generated by the global financial crisis and the confusion around emerging climate change policies also means that forest planting remains subdued.

### *Economic situation*

The US, UK, Europe and Japan have all entered severe recessions after the banking crisis of last year. Forecasts for world economic growth continue to be slashed. The global growth outlook for 2009 is worse than the recessions of the early 1970's, 1980's or 1990's. The New Zealand economy is set to slow markedly this year, as firms face a squeeze on profitability from the global financial crisis. In New Zealand, in the short term, it appears interest rates will continue to drop as the NZ Reserve Bank continues to set policy to stimulate the market.

Falling world demand has, and will continue to cause a decline in New Zealand's forest exports. A lower NZD will spread some of the pain for exporters, as will significantly lower shipping costs. Freight rates are expected to continue to be weak in the short to medium term but to come up off the uneconomic levels reached in the first 2 months of 2009.

Slowing economies globally, in particular lower housing starts in New Zealand, Japan, Korea, Australia and the United States as the housing markets undergo a substantial correction, are already significantly affecting demand. Lower exports from countries such as China are also reducing the demand for packaging lumber. This has led to an oversupply situation in these markets, creating challenging market conditions, despite a weakening NZ\$ and shipping rates reaching historic lows.

On a positive note, in the medium term, trade benefits can be expected if New Zealand is successful in achieving a free-trade agreement with India. Initial benefits are likely to be an increase in processed wood exports, reducing the current domination of log exports to the Indian market. Also potentially very positive for New Zealand wood product exporters, the proposed Russian log tax, possibly moving from 25% to 80% in early 2010, will if it is implemented offer New Zealand log and lumber exporters, particularly to China, excellent opportunities to improve market share and prices.

### *Socio-economic contribution of the New Zealand Forest Industry*

New Zealand's plantation resource is the foundation for NZ's wood processing industries, which include about 370 sawmills, seven pulp and paper mills, three medium density fibreboard (MDF) mills, three particleboard mills, six plywood and laminated veneer plants and about 80 remanufacturing plants.

In the year ended March 2008, 20.6 million cubic metres of roundwood were harvested in NZ, of which 99.9 percent came from plantation forests.

About 70 percent of the harvested volume (roundwood equivalent) is exported, earning \$3.5 billion in the year ended March 2008, or approximately \$2,000 for every hectare of plantation forest existing in that year. In the same year, the forestry sector accounted for about 10 percent of the total value of New Zealand's export trade.

The forestry sector directly contributed 3.8 percent to GDP for the year ended March 2008.

Forestry and sawmilling employed approximately 20,000 people in New Zealand as at February 2007. There is potential for the current harvest of approximately 18 million cubic metres to increase by at least a third and this would result in expansion in all sectors of the forest industry. Expansion of the harvest is dependent upon market demand which is likely to remain depressed until the current correction in the housing markets is completed, and global trade recovers – creating demand for packaging materials.

Forest sector employment has a number of beneficial characteristics associated with it including being spread among settlements small and large, and providing mostly year-round fulltime rather than seasonal and part-time. The sector also attracts and employs a higher proportion of young people (aged 15-39 years). This younger, permanent workforce assists communities retain schools, active sports clubs, etc.

Forest companies generally have a strong community involvement through, for example, provision of firewood, involvement in local community fire-fighting units and enabling access to recreational opportunities in forestry blocks such hiking, orienteering, biking, four-wheel and rally driving, horse riding, hunting and fishing.

Forest management in New Zealand provides an undisturbed environment for maintaining archaeological remains, historical monuments, sacred cultural sites and burial grounds which are identified and protected. It is also utilized for improving the social landscape through visual screening, e.g. of industrial or mining sites, and as a noise barrier. Forests are also important in maintaining water quality and management of erosion prone soils

Plantation forestry in New Zealand has provided particular benefits for Maori who are significant, and increasing, owners of forests.

From the 1960's Maori found themselves owners of large areas of relatively unproductive land that was not suitable for farming. Financial reserves for development of the land were limited and Maori land was not able to be used for security to raise capital for investment. There was also a significant and on-going drain of young Maori from the rural lands to the urban centres.

Leasing arrangements with government who subsequently developed forestry have provided a means of transitioning many Maori groups. Over time, as the forests managed by the Crown are harvested the bare land will be handed back to Maori who are then able to utilize their share of the stumpage income to replant and manage the second rotation crop.

With the cash-flow hurdles overcome, and the lands secured, Maori are able to take on the forest management business. It is a business that is managed with a view to the long-term and according to Maori cultural relationships with the land. It is also a business that provides for their economic well being. The ability to create stable, inter-generational, employment has been one of the strong appeals of forestry which has provided career management paths for many. The numbers employed do at times involve a trade-off with machinery which is dictated by economic efficiency and safety. Funds have been used for establishing educational scholarships, Marae development, and cultural and health initiatives.

As well as improving confidence and optimism, the forests have provided important paid hunting and other recreational opportunities as well as fuelwood supply.

A handwritten signature in black ink, appearing to read 'D. Rhodes', with a stylized, cursive script.

David S. Rhodes  
Chief Executive  
**New Zealand Forest Owner's Association**