



TreeSmart News

Start of a New Era

The past 12 months have seen massive changes in public and political perceptions of climate change in Australia. Starting with the visit of Al Gore in October 2006, and followed by the release of the Stern Review in the UK, and the worst drought to have been experienced in Australia for many years, public and then political perceptions of the reality of climate change have changed 180 degrees.

The 2007 Federal Elections saw the environment, and climate change in particular, being one of the top issues for consideration. The Howard Government, after many years of denial, finally accepted that climate change was real, and joined the Labor Party and the Greens in committing to action.

The election of the Rudd Labor Government has seen significant changes in direction. One of the first acts of the Rudd Government was to ratify the Kyoto Protocol and to have a substantial Ministerial presence at the Bali Convention, which finally succeeded in developing a "road map" for future action.

The next few years will see the start of a new era, where massive changes in this field of global challenge will take place. **TreeSmart Australia** is proud to play a small part in this new era, and welcomes you along for the ride. ☼

Australian Emissions Trading Schemes

Despite not having ratified the Kyoto Protocol until late-2007, Australia has been relatively active in the development of voluntary offset schemes (such as **TreeSmart**), and in planning for the introduction of an Emissions Trading Scheme.

In 2006, when the Howard Government appeared uninterested in Climate Change or an Emissions Trading Scheme, the states banded together to develop guidelines for a National Emissions Trading Scheme (NETS) based on a cap-and-trade system. In 2007, when climate change was becoming a more sensitive political issue, the Howard Government launched its own Task Group to investigate the issue of a Trading Scheme. In May 2007, the Task Group reported back to the Prime Minister, who in turn adopted the principles in the report in July 2007 for the creation of an Australian Emissions Trading Scheme (AETS).

By the time the Prime Minister's Task Group was created, the NETS team had been working on the issue for over 12 months, and had held many public consultation meetings (including one on forestry issues in December 2006). **TreeSmart** submitted a discussion of the issues raised during this workshop to the NETS team. The Task Group adopted many of the ideas in the NETS guidelines, but made some important additional points especially in relation to the coverage of the cap-and-trade scheme. Whereas the NETS scheme concentrated on stationary energy production (which accounts for 40% of Australian greenhouse emissions), the AETS scheme extended coverage to all sectors of the economy except Agriculture and Forestry (for the moment). This means that Agriculture and Forestry do not yet need to account for their own emissions, but can generate offsets that they can sell to the covered sectors.

A cap-and-trade scheme is where "covered parties" have a cap imposed on their total emissions, which if exceeded must be offset by buying carbon credits from other parties.

The Task Group proposed that AETS come into force in 2011, and in September 2007, a Discussion Paper was released for comment on transitional arrangements for those parties taking early action between 2007 and 2011.

continued on page 4

Inside This Issue

- 1 Start of a New Era
- 1 Australian Emissions Trading Schemes
- 2 The Role of Offsets – the MAORI Model
- 3 Typical Farm Forestry Plantations
- 4 Corporate Offsetting – the I-view Example
- 4 About TreeSmart Australia

The purpose of the **TreeSmart Newsletter** is to keep **TreeSmart** subscribers and farm foresters aware of some recent developments in carbon offsetting in Australia.

The Role of Offsets

- The MAORI Model

While *TreeSmart Australia* offers carbon offsets for the transport sector, it must be realised that offsets are only one part of an overall greenhouse emissions management strategy. *TreeSmart* has developed and works within the MAORI Model of Carbon Neutrality, which is composed of five major actions.



Measure

Avoid

Offset

Reduce

Iterate

Measure

The first step in going Carbon Neutral is to **Measure** (or at least estimate) the emissions associated with specific activities. In the context of transport, this is a relatively straight-forward task for land-based transport, since greenhouse emissions (mainly CO₂) are directly related to fuel consumption, and many methods exist for modelling and measuring fuel consumption from land-based transport. For air transport, the position is not quite so clear, since CO₂ is not the only (or the major) greenhouse emission from air transport. At high altitudes, other emissions (even water vapour) are significant contributors to greenhouse emissions, with the result that total greenhouse emissions are about 2-3 times greater than the CO₂ emissions, although debate persists as to the best value of this factor to apply.

Avoid

Having identified the greenhouse emissions attributable to an individual, a household or an organization, there may be some activities that result in emissions that are relatively easy to **Avoid**. These activities are often referred to as "low-hanging fruit". Examples of such activities in the context of personal travel might include walking to the local shops instead of driving, combining activities on one round-trip rather than making separate trips, and car-pooling for trips where this is a viable alternative.

However, the number of such activities where emissions can easily be Avoided is likely to be relatively few in number, and the total emissions avoidable is likely to be relatively small. While short-term avoidance is important, these actions cannot achieve the required Greenhouse Gas emissions reductions on their own, and other options must be considered.

Offset

While other models of Carbon Neutrality tend to put offsetting at the end of the chain of activities, the MAORI model puts **Offsets** in the centre of activities, for two main reasons.

Firstly, as noted by Stern, there is a need for immediate action with respect to reductions in greenhouse emissions in the atmosphere. While the long-term aim might be to eliminate or change the activities which give rise to the emissions, such changes typically take a considerable period of time (e.g. changing over the fleet to low emission vehicles will take at least 10-20 years), and we simply can't wait that long to do something about reducing atmospheric CO₂. While waiting for the long-term changes to occur, we need to make immediate reductions in atmospheric CO₂, both for our current activities and also for past activities which have contributed to CO₂ emissions.

Secondly, having offset the emissions that cannot easily be avoided this year provides a metric and an incentive to proceed to the next steps in the MAORI process (Reducing and Iterating), as will be described below.

Reduce

Having removed the polluting activities that can easily be avoided, and then offset the emissions that cannot easily be avoided this year, the next step is to start to **Reduce** the emissions that are not easily avoided and that may take some time to completely remove. This process may take several years to completely implement. Examples of such changes (in a household context) might include reducing the number of vehicles in the household, changing those vehicles to low-emission vehicles, and changing residential location to be in a position to make better use of public transport services. None of these changes will occur overnight, and yet we need to make immediate changes in atmospheric CO₂ if we are to stave off the inevitable global warming consequences. This is why Offsets come before Reductions in the MAORI model. We need to take short-term action while we start implementing the long-term actions.

Iterate

The final step in the MAORI model is to **Iterate**, by going back around and doing it all again next year. Your experience in year 1 may show a few more emissions that can be easily Avoided. In year 2, you will still need to Offset what you haven't been able to Avoid or Reduce, but the amount of Offsets required in year 2 should be less than what was required in year 1. Indeed, the true test of the success of the MAORI model is that the offsets should reduce year by year until they reach a minimum level. ❁

Typical Farm Forestry Plantations

Many people ask us what we mean by a “farm forestry” plantation. In many people’s minds, the word “plantation” conjures up images either of native forests or of “wall-to-wall carpets” of monoculture trees in massive plantations. Neither of these images are relevant to farm forestry plantations.

A farm forestry plantation involves the establishment of a relatively small plantation (5-100 hectares) as part of an overall farm management plan. In many cases, these plantations are integrated with other agricultural or horticultural activities, with grazing or other plantings interwoven with the trees. Farm forestry plantations can be in the form of woodlots, shelterbelts, alley plantings or contour plantings. In addition to timber production, the plantation may be established for many other purposes such as salinity control, erosion control or bioenergy outcomes. These days, however, carbon sequestration is almost always a major consideration in the establishment of a farm forestry plantation.

Because a typical farm forestry plantation is relatively small, it is very difficult for farm foresters to enter directly into the carbon market, because the costs of entry prove to be a major barrier. It was for this reason that **TreeSmart** was formed, to act as a carbon pooler, linking the farm foresters (who sequester the emissions) with the transport sector (which produces the emissions).

TreeSmart works with newly established plantations and with plantations that have been established over the past ten years with a view to eventually selling the carbon being sequestered in those trees.

An example of a newly established plantation is shown below. This plantation of about 25 ha was planted in September 2006 on a 40 ha property in Thornton in north-east Victoria. The trees are planted on the contour, with all remnant trees being retained and with the creek bed being protected and revegetated with native species.



A different style of farm forestry plantation was established in nearby Taggerty over several years from 1997 through 2007. When the property was bought in the mid-90s, it was a fairly barren piece of farmland as shown below.



Ten years on, the transformation is remarkable, as shown above in a picture taken from exactly the same place as in 1997. A wide variety of different tree lots covering over 25 ha has been established, some commercial, some for experimental purposes, some biodiversity plantings and even some exotic plantings. An example of one of the plantations, integrating *E. Nitens* with various acacias and other native plantings, is shown below.



Farm forestry plantations can cover a wide range of options, with each design attempting to satisfy multiple criteria. As the nature of farm life continues to change, there will be greater opportunities for integrating trees into the farming landscape, with a resultant increase in environmental benefits. ☼

Farm forestry plantations can be in the form of woodlots, shelterbelts, alley plantings or contour plantings. In addition to timber production, the plantation may be established for many other purposes such as salinity control, erosion control or bioenergy outcomes., but with a keen eye also on the potential for carbon sequestration.

continued from page 1

Given the change in Federal government in late-2007, it is likely that the NETS and AETS proposals will be merged, with a possible earlier starting date of 2010.

TreeSmart has always been different from other forestry-based offset schemes, in that **TreeSmart** has always argued that the carbon that continues to be sequestered in timber products after harvest should be counted as permanently sequestered carbon. NETS and AETS have recognised this position, as shown in the following quote from the PM's Task Group Report.

“Current methodologies in international emissions accounting assume that all carbon within a tree is emitted upon harvest. However, carbon remains locked in the timber until it decays. Australia should make it a priority to explore and demonstrate more rigorous methodologies for plantation offsets, which take into account the carbon contained in harvested wood products.”

(Report of the PM's Task Group on Emissions Trading)

Thus while the **TreeSmart** position is currently outside the conventional Kyoto framework on this point, it is likely to be well-positioned for when the post-Kyoto framework also recognises the carbon sequestered in harvested wood products, as in indicated in the outputs of several UN Working Groups.

The next few years will see significant changes in the political and economic environment in which carbon offsets are traded. The introduction of AETS in Australia will see the demand for carbon credits (offsets) rise dramatically, and Australia's ratification of the Kyoto Protocol and its active participation in the development of the post-Kyoto framework will see the international demand for Australian offsets also increase.

TreeSmart looks forward to being part of this process. ☼

Corporate Offsetting



- The I-view Example

The Directors of TreeSmart (Dr. Tony Richardson and Dr. Rita Seethaler) also run a transport consultancy business, The Urban Transport Institute (www.tuti.com.au). In that business, they design, conduct and analyse many large scale urban travel surveys in Australia and New Zealand for public and private sector clients.

For several years, they have worked in collaboration with I-view Pty Ltd, a large market research organisation that provides the field expertise for the conduct of large-scale surveys.

A necessary component of running field surveys is that field staff must drive to and from their survey areas, in order to conduct interviews or deliver questionnaires. Being an international operation, I-view management also travel interstate and overseas relatively frequently to work on projects.

I-view senior management, however, are well aware of the environmental consequences of their operations, and so, in 2006, Kylie Brosnan (Director of Marketing in the Brisbane office) approached TreeSmart with a view to offsetting all the emissions from their field staff travel and their management flights. They have repeated this initiative again in 2007.

In 2007, I-view field staff drove over 1 million kilometres on field work duties, while about 600,000 kms were travelled by air. All these emissions were 100% offset by TreeSmart for a total cost of about \$6000.

I-view Pty Ltd is a good example of a socially and environmentally responsible corporation assuming responsibility for their own emissions, and taking pro-active action in advance of the introduction of emissions trading schemes in Australia. ☼

About TreeSmart Australia

TreeSmart Australia is a carbon pooling organisation which offsets emissions primarily from the transport sector by supporting the establishment and management of farm forestry plantations.

Farm foresters are paid for the carbon sequestered in their trees according to the amount sequestered each year.

TreeSmart uses a year-for-year carbon accounting system, whereby the emissions produced each year are offset by the amount of carbon sequestered in that, or previous, years. No forward borrowing of sequestered carbon (offsetting past or current emissions through future growth of trees) is allowed.

TreeSmart Australia is a private company, with all profits re-invested in growing more trees for sequestration purposes.

www.TreeSmart.com.au

PO Box 363, Alexandra, Vic, 3714

(03) 5774 7617

info@TreeSmart.com.au