

Coal could pay to save forests

Jim Douglas

THE HIGH-level conference on global deforestation held in Sydney a few days ago, co-hosted by the Australian ministers for environment and foreign affairs, attracted large numbers of ministers, diplomats and officials from about 70 countries and international development agencies.

This impressive turnout demonstrated, if nothing else, that the subject of large-scale loss of natural forests is a matter of considerable global interest, as well it should be.



Apart from the local environmental impacts of forest loss, in global terms deforestation is generally believed to contribute at least 20 per cent of all human-sourced greenhouse gas emissions.

The Australian Government has made a high-profile commitment of about \$200million to a global initiative on forests and climate, and will be joined in this by the United States and other countries, the World Bank and other interested groups. So far, so good.

According to the Minister for the Environment, Malcolm Turnbull, Australia's contribution will focus on "practical measures", such as the promotion of better forest management, plantation of new forests and the use of remote-sensing technology to monitor the progress of deforestation in Indonesia, the Philippines and Pacific nations.

Again, this is welcome news, but there is one major caveat.

The stark truth is that sustainable forest management in natural forests in the tropics is very often simply not as rewarding economically as the combination of rapid logging and conversion of the land to other uses.

Crudely put, natural forests are seen by many national and local interest groups as being worth more dead than alive.

Much more money than is contemplated under the proposed global initiative has already been spent by international donors and other interest groups in recent decades on measures to encourage better forest management, in all sorts of ways, but the result to date has been disappointing.

Much of it has focused on diagnosis and prescription for the symptoms not the fundamental cause of the disease.

What needs to happen is for the perceived value of these forests as living resources to rise in the eyes of those who presently destroy them.

The new element in this, creating all the interest, is the huge carbon load that natural forest (especially tropical rainforest) carries in its biomass.

When these forests are cleared and burnt, or allowed to decompose, enormous amounts of this stored carbon are released into the atmosphere.

As the world moves on the challenge of reducing greenhouse gas emissions, the carbon stored in natural forests that are under continued threat of destruction acquires potential value.

At the recent high-level meeting, Turnbull estimated that for one country alone Indonesia halving its current rate of forest loss could be worth \$3billion a year in retained carbon value.

It's a figure that, at face value, would seem likely to be enough to reverse all those perverse industry incentives, corrupt practices, community livelihood imperatives and other causes of the two million hectares or so of forest lost in Indonesia every year.

But the bottom line is: someone has to pay for the carbon emission prevented all of it for this to become a reality.

Who on earth could do so, year in-year out?

The answer is that high greenhouse gas emitting industries could, if they had the incentives to do so.

We can see how this could happen if we join the dots between the Indonesian rainforests and just one possible source of financing: the Australian coal-fired energy sector.

Presently, business-as-usual projections of coal consumption for power in Australia suggests that by 2030 about 50 per cent more coal than is presently being used will be consumed.

If, however, the consumption of coal were to follow the trend needed for it to play its proportional part in reducing Australia's level of greenhouse gas to 50 or 60 per cent of current levels by 2050, then by 2030, to be on track, consumption would have to be down to about 75 per cent of present levels.

The Stern report, among others, stresses the need for reductions to begin happening sooner rather than later, otherwise, the costs of making the necessary reductions, and the risks engendered from serious climatic shifts in the meantime, become prohibitive.

If the coal industry was to begin purchasing avoided deforestation credits from Indonesia, to offset the difference between its actual use of coal and the amount it would have to reduce this use by to meet targets, it would need to buy about 60,000ha of avoided deforestation credit in the first year, and this would rise rapidly to a formidable 1.4 million ha or so by 2030.

Even if this was actually the path followed, and if the price paid for that carbon rose from a present level of \$15 a tonne to, say, \$45 by 2030 (as demand for offset carbon supplies grows), then the prices for electricity generated from coal would rise by about 3.8 per cent in 2015, 8 per cent in 2020 and 20 per cent in 2030.

These rises would be no means "ruinous", as Prime Minister John Howard has suggested would be the case if emission targets such as those discussed were to be introduced.

They would, in fact, be considerably less than the price rises of 40-100 per cent for electrical power that would be required by one of the Prime Minister's favoured options, nuclear power.

It is quite likely that, in fact, the situation with offset carbon purchases from avoided deforestation would not play out the way laid out here.

Under the impetus of emission targets, lower emission alternatives for baseload power, such as natural gas and geo-thermal options, supplemented by wind, solar and other technologies, would gain greater market share, and perhaps the coal industry itself might crack the clean coal problem eventually.

The avoided deforestation option should be seen as an interim strategy, one which hopefully would add sufficiently to growth and development in Indonesia to take the desperate livelihood pressures off those great natural forests in the medium term, while allowing Australia to make a serious start now on its own emission reductions.

This brings us full circle.

A significant and credible market for avoided deforestation requires not only serious intent on the part of the country which supplies the carbon good in that form, but also a viable market for that carbon good.

A country such as Indonesia which embarks on such a program is going to require considerable up-front financial assistance to implement such a program and significant reassurance that the risks of doing so will be worth it.

From Indonesia's point of view, reducing deforestation will by no means be a low-cost exercise.

For a country to be able to validly sell carbon from avoided deforestation, aggregate levels of forest loss across the country as a whole must come down.

This is not a product that can be sold in small lots.

It will require a broad international undertaking to implement a viable global market for avoided deforestation, and this probably means that a Kyoto-style international treaty will be required, whether the Australian Government likes it or not.

It will also require that countries seeking to persuade Indonesia and other forested nations to retain their forests for carbon retention purposes will need to demonstrate their own bona fides as potential buyers of that carbon.

This would be in the form of serious measures that will require greenhouse gas emissions to begin falling in line with international target levels. Again, this will be the reality, whether the Australian Government likes it or not.

Jim Douglas worked on climate change and natural resource issues when employed as the forests adviser to the World Bank, in Washington, and continues to do so since his return to Australia.
