From Australasian Emissions Trading Forum Review February/March 2003 www.aetf.net.au

The World Bank's BioCarbon Fund

Ian Noble, World Bank

Market research by the World Bank[1] shows that during 2002 worldwide trading of credits in greenhouse gas emissions tripled to an estimated 67 million tonnes of CO_{2e} as companies prepare for the likely ratification of the Kyoto Protocol. But the same study also shows that only 13 percent of direct private sector carbon emission reduction purchases were made from projects in the developing world. Most investors are deterred by the high transaction costs and the uncertainties of dealing in new markets in parts of the world little known to them.

Extending the carbon market to the world's poor

To help develop these markets the World Bank announced the Community Development Carbon Fund (CDCF)[2] in September 2002, which will provide carbon finance to small-scale projects in the least-developed countries. And in November, the Bank announced the BioCarbon Fund[3], a public/private initiative to provide finance to projects that store carbon in vegetation and soils ("sinks") while helping to reverse land degradation, conserve biodiversity, and improve the livelihoods of local communities. The Fund will seek projects to sequester or conserve carbon in non-Annex 1 countries and in countries with economies in transition. Unless ways are found to benchmark the outstanding issues in crediting carbon from sinks, most CDM financing will go to energy projects in a few large developing countries that already receive the bulk of foreign investment. Sinks may in the end be the only significant option for many poor nations with only small industrial sectors and energy use, to benefit from the carbon finance business.

Both Funds build upon the successful US$180 million Prototype Carbon Fund (PCF), a public/private partnership of six governments and 17 companies. Launched in 2000 and with 26 projects in the final stages of preparation, the PCF demonstrates that emission reductions can be cost-effectively created, verified and certified via investment projects, despite the country and business risks inherent in developing or transition countries.

For the World Bank, carbon finance activities are a natural extension of the Bank's mission to reduce poverty - in this instance by tapping private sector capital rather than the declining pool of government development assistance dollars. From the perspective of a development bank, the BioCarbon Fund is timely because carbon sequestration offers the greatest convergence between the carbon market and sustainable development, between climate change, adaptation, and poverty reduction. Experience shows that such Funds can bring out the best in everyone involved - if you give companies a chance to invest in socially and environmentally responsible projects, they will; and if rural people in the poorest countries are given a chance to sustain themselves and sustainably manage their natural resources, they will.

The challenge of selling sinks

There are still many hurdles facing the BioCarbon Fund. Sinks have been a controversial issue throughout the climate change negotiations. Despite the fact that the rules of the Marrakesh Accords have blocked the feared scams that could have arisen from the misuse of sinks and despite demonstration that acceptable methodology exists, there is still strong opposition to the use of sinks credits from some sectors.

The BioCarbon Fund provides a cost effective way of tackling one of the remaining concerns - permanence. The Bank intends to manage the pool of BioCarbon Fund assets to achieve "mitigation equivalence". It will do this by seeking projects where there are long term incentives to maintain the stored carbon. For example, the rehabilitation of degraded lands to make them both more productive and carbon rich. These incentives will be backed by contractual obligations extending beyond the lifetime of the BioCarbon Fund. The Fund will also include a portion of assets based on reduction in emissions such as substitution of biofuels for fossil fuels. It will also manage its own internal insurance by ensuring that projects contain adequate buffers for under performance or the accidental loss of sequestered carbon, and by judicious purchase of options to buy permanent emission reductions.

One of the issues to be discussed at COP9 later this year will be the concept of temporary credits for sinks. The EU has modified the original Colombian proposal to suggest that Certified Emission Reductions (CERs) acquired through the CDM have to be renewed every 5 years. This amounts to a form of rental rather than outright purchase of an

[1] See http://prototypecarbonfund.org/router.cfm?Page=Research

[2] For information on the Bank's activities in carbon financing see www.carbonfinance.org

[3] See www.biocarbonfund.org

emission reduction. The onus is on the purchaser to renew the credit every commitment period but there is a matching incentive to the seller to renew the rental contract. The BioCarbon Fund can readily encompass such an arrangement and can offer potential buyers and sellers a great simplification of the complex and costly transactions that a rental system implies.

Mitigation linked with environmental and social outcomes

Combating rural poverty and stabilising rural economies are among the biggest challenges facing developing countries. The BioCarbon Fund will help create an unprecedented opportunity for the poorest farmers and rural communities all over the developing world. Farmers and rural communities will find new value in their agricultural lands and forests as they earn income from sequestering or conserving carbon.

That makes for a compelling scenario - projects in developing countries get a new source of financing for sustainable agriculture, land rehabilitation and clean technologies, and ultimately adaptation to the inevitable climate changes that will occur, while industrialised countries can meet part of their Kyoto obligation, and the threat of climate change is reduced at lower overall cost.

The Marrakesh Accords limited the use of sinks in the CDM to afforestation and reforestation. These activities provide numerous opportunities for the BioCarbon Fund, especially through agroforestry and land rehabilitation through tree planting. The majority of the Fund's emission reduction acquisitions will be for such Kyoto compliant activities - the Fund's 'first window'.

In developing countries there are many activities, other than the limited set eligible for the first window, that can validly reduce the concentration of greenhouse gases in the atmosphere. These include better agricultural and forest management, revegetation with shrubs and grasses and the protection of immediately threatened forests. All of these options are available to Annex 1 countries both internally and through Article 6 mechanisms (JI), but not to developing countries.

A portion of the BioCarbon Fund will be used to explore the feasibility of such projects in developing countries—the Fund's 'second window'. These activities will not create Kyoto compliant credits, but a number of potential contributors to the Fund have expressed a desire to explore these options.

Credit for avoided deforestation was one of the most contentious issues in the negotiations leading to Marrakesh. It was strongly opposed by many parties and some environmental NGOs because of the potential for its misuse and the long term obligations imposed on host countries. However, with the various caps, the possibility of temporary CERs and other safety mechanisms, a number of parties and environmental NGOs are now urging the BioCarbon Fund to explore projects with a component of avoided deforestation.

Next steps for the BioCarbon Fund

The BioCarbon Fund has not formally been opened for contributions but there has been an extraordinarily strong flow of project proposals. The Fund will be in a position to choose projects that give the greatest opportunity to deliver its triple benefits, ie atmospheric, environmental and social. Most of the projects would have a landscape approach combining the delivery of benefits from a series of different activities. Examples of projects include one in Kenya that seeks to store and retain carbon across landscapes through agroforestry, planting legume trees to improve soil fertility, and conservation tillage. Another project in Uganda would establish plantations of indigenous tree species to create 'natural' forests buffers around encroached areas of land within two national parks. Local people would be able to collect non-timber products from these forests.

The minimum contribution of a participant in the BioCarbon Fund is US$2.5 million over the life of the Fund with participants being able to contribute to either one or both windows of the Fund. Contributors will receive a pro rata share of the emission reductions from the purchase agreements. It is open to contributors from all nations and contributors are free to use their emission reductions as they choose. Many anticipate emission reduction targets under Kyoto-based or alternative compliance regimes; some seek to demonstrate carbon neutrality of their products. So far eighteen companies have signed a Memorandum of Understanding to help develop the BioCarbon Fund. They range from power utilities to insurance companies, and include some major NGOs. The Fund is expected to begin operations by mid 2003 and run for about 18 years.

Like the PCF, the BioCarbon Fund will be a prototype fund in that it is designed to learn from the experience of doing real projects in real communities. The Fund will provide a commercially attractive source of carbon credits to those anticipating legal commitments and an opportunity to pioneer the "sink" business and the multiple benefits it can deliver.

Ian Noble is Chairman of the BioCarbon Fund Technical Advisory Committee, and former CEO of the CRC for Greenhouse Accounting.