

February 2011 saw the first certification of a project in the \$143bn-plus global carbon markets to earn carbon credits achieved by preserving forests. This was a landmark moment for Redd (Reducing Emissions from Deforestation and Degradation), which, it is hoped, will be a cornerstone of the fight against climate change. **Mike Scott** writes



# Reddy steady go



Source: Julian Peilman

**D**eforestation and forest degradation contribute at least 18 per cent of global greenhouse gas emissions, conservation groups say, and without addressing these emissions the world will not be able to keep global warming to below 2°C, the level targeted by the United Nations Intergovernmental Panel on Climate Change (IPCC). Deforestation is the permanent removal of forests and withdrawal of land from forest use, while forest degradation refers to damage to forests caused by activities such as logging, large-scale and open forest fires, collection of fuelwood and non-timber forest, production of charcoal and grazing, limiting production capacity.

The main drivers of rapid deforestation are industrial-scale agriculture such as soya and palm oil production and cattle ranching; industrial logging driven by international demand for timber; poverty and population pressure as people seek farmland, fuelwood and building materials and infrastructure development, especially for roads, mining and dams. Most of this deforestation is taking place in developing countries in Asia, Latin America and Africa – the very countries that will be hardest hit by the changing climate.

Forests outside the industrialised countries contain 538 gigatonnes of carbon, equivalent to 40 years of manmade greenhouse gas emissions at 2004 rates. With most measures to deal with climate change initiated in the industrialised or fast-growing emerging economies, forest projects offer a chance to get some of the world's poorest people involved in the fight against climate change in a way that also allows them to benefit from their actions.

South and Central America, Africa, Asia and Oceania are all significant stores of forest carbon. However, under business-as-usual scenarios, Africa will lose the biggest proportion of its forests to logging, agriculture and other development – 67 per cent or almost 300m hectares. This equates to more than 58 gigatonnes of carbon emissions. Asia and the Americas are also predicted to lose more than half their forests if nothing is done, so the consequences of not addressing the problem are huge.

Between 1990 and 2005, about 13m hectares of forests were lost per year, mainly through forests being converted to agricultural land. Deforestation results in the release of the carbon originally stored in trees as CO<sub>2</sub> emissions and about 1.7bn tonnes of

## What is Redd?

**R**edd is a mechanism to stop the destruction of forests and their contribution to climate change.

Papua New Guinea and Costa Rica put forward a proposal for reducing emissions from deforestation at international climate change talks in 2005 and the idea was soon extended to include “forest degradation”, and then proposals that agroforestry and agriculture should be added. In 2008, the idea of ‘Redd+’ emerged, which builds in conserving and sustainably managing forests, forest restoration and reforestation.

“Reducing deforestation is essential. Immediate action on Redd is a critical part of the climate change solution,” said Ban Ki-moon, secretary-general of the United Nations, in a speech prior to the COP 15 in Copenhagen.

Redd is seen as a companion to the global carbon markets that have been set up in the past decade, but

it will generate carbon credits from preserving forests (and therefore not releasing the carbon trapped in trees) rather than from reducing emissions from energy use. The aim is to create a situation where it is more valuable to leave a tree standing than to cut it down for timber, fuel or slash and burn agriculture.

Many details of the United Nations’ Redd policy, which is quite complex, are still being worked on and clarified, including areas such as ownership rights of the forest; the need to obtain consent from the forests’ indigenous people; the consistent collection of and access to data; and even, in some cases, the definition of a forest. Private sector early action projects such as the Wildlife Works model Redd project in Kenya are being used by the UN Redd team to aid the policy development process. Wildlife Works is in dialogue with the United Nations Environment Programme (Unep) to share its practical, on the ground experience.

carbon are released annually due to land use change, mainly from tropical deforestation.

Emissions from deforestation are higher than the amount emitted by the global transport sector, yet at the same time, an estimated 1.2bn people rely on forests for their livelihoods while more than 2bn people – a third of the world’s population – use biomass fuels, mainly firewood, to cook and to

heat their homes. As a result, reducing emissions from tropical forests offers the potential to mitigate a major source of global emissions at relatively low cost with readily-available technologies, say conservationists. “If the world is serious about avoiding dangerous climate change, terrestrial carbon emissions and sequestration must be part of the solution,” according to the Terrestrial Carbon Group. “Improved management of the world’s land represents one third

of the overall global abatement potential in 2030.”

However, forests are valuable not just for their roles in storing carbon and providing timber and fuel. They also act as water catchment areas, weather regulators, sources of food and medicines as well as repositories of a huge amount of biodiversity. Proponents of Redd say that if these functions are recognised as services or commodities, the value of forests will rise, and the different services can be marketed and paid for.

### Wildlife Works

Perhaps the easiest way to explain how Redd works is to look at the world’s first successfully validated project to issue verified emissions reductions in Kenya’s Kasigau Corridor. The project has been developed by a US-based company called Wildlife Works and it protects more than 500,000 acres of forest while also securing the entire wildlife migration corridor between Kenya’s Tsavo East and Tsavo West National Parks.

“Our approach to wildlife is to focus on the local community and solve their needs. The idea was always to find economic options for conservation,” says Mike Korchinsky, a former business consultant who founded the company 14 years ago. “The design of the Redd market is perfect because we can attach real value to the intangible value of preserving wilderness and provide above market rate returns for our investors while creating jobs, financing local businesses and supporting conservation.”

The Kasigau Corridor was chosen because it is between two national parks – it is an important migration path for animals but also a place rife with poaching. “Redd is about how you protect a standing forest from a community who are destroying it because of economic need,” Korchinsky continues. “Jobs give the community a real alternative to killing animals and

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destroying their environment for survival. Job creation is the essence of Wildlife Works' Redd strategy," he adds. "Our projects create jobs for conservation rangers, factory workers, horticulturalists, machinists, seamstresses, foresters, carpenters, construction workers, drivers, mechanics and administrative personnel and they finance the development of small businesses such as a clothing factory, sustainable charcoal producers and distributors, and soap makers."

The company has also provided a range of community benefits including building schools and providing scholarships. Other initiatives include financing water catchment systems, supporting health clinics and sponsoring women's groups.

Clearly, REDD projects are different to the typical carbon market project, which might involve only a focus on installing new technologies aimed at reducing greenhouse gases or other industrial emissions, such as a flue gas scrubber on a factory. Both wildlife and community issues are crucial to Redd projects, Korchinsky believes. That is why the Kasigau Corridor project has been validated and the emissions reductions verified not just by VCS (Verified Carbon Standard), a carbon certification body, but also by CCB (Climate, Community and Biodiversity Standard), which focuses on community and environmental benefits and which awarded the project a gold level status, the first in Africa to achieve this for exceptional biodiversity and climate benefits. Because of the complexities of Redd and the immaturity of the market, Wildlife Works developed a methodology in its bid for certification, which is now available for use by other developers. Additionally, there are three other Redd methodologies already approved by VCS.

"Redd credits resonate with people and have been awaited for a long time," says David Antonioli, chief executive

officer of VCS. "They are also iconic, and when combined with CCBA (Climate, Community and Biodiversity Alliance), buyers have the comfort of knowing that this is not just 'carbon for carbon's sake' but that it also helps communities and wildlife, delivering real sustainable development and additional environmental benefits."

At this early stage, while the market is still made up of voluntary buyers, strong performance on community issues is crucial, says Korchinsky. "Redd projects that deliver real and sustainable community benefits are driving demand as corporations want to do their part towards carbon neutrality and ensure their carbon offset purchases are making a positive impact that they can tell their customers about."

Creating a Redd project is an exercise in bringing together different stakeholders, he says. These are the government, the community, the carbon rights owner – which can be the government, local people or a private individual – the project developer (which could be Wildlife Works but the project could also involve local non-government organisations) and the financiers. "Everyone has to be willing to negotiate openly with the others because if anyone feels cheated, they won't sign," Korchinsky explains.



Mike Korchinsky, CEO, Wildlife Works

Likely buyers of the credits generated by Redd projects are large companies with corporate social responsibility reporting or high emissions. For example, PPR, the French luxury brand holding company, has offset its 2010 CO<sub>2</sub> emissions by buying credits from the Kenyan project. PPR's Puma brand has also agreed to partner with Wildlife Works to produce co-branded clothing at Wildlife Works' eco-factory in Kenya. However enthusiastic buyers are, at the moment, some potential buyers are still cautious, as these are a new carbon credit type.

### The finance

It takes a certain leap of faith, to get a market off the ground – and, in this case, that came from the South African bank Nedbank, which agreed to buy all the credits from the first phase of the project, - 1.16m tonnes of CO<sub>2</sub> equivalents. "It was a critically important first step for us and it was very brave of them," Korchinsky says. "They put their money at risk at a time when others were sitting on the sidelines waiting to see how the market would develop."

According to Kevin Whitfield, head of carbon finance for Nedbank Capital, the project was an excellent fit with the bank's approach to sustainable development and investment.

The primary significance of the validation and verification of the project is not only the fact that it has resulted in the successful delivery of carbon credits to Nedbank, but also that it endorses Redd carbon credits as a truly viable commercial investment market rather than merely a means of delivering on environmental targets, he adds.

The benefit of the Nedbank deal was immediately obvious as it was followed by a deal with BNP Paribas, signed at the end of 2010, which saw the French bank offering Wildlife Works a \$50m project finance facility agreement to cover project development expenses for future schemes. "This has enabled us to

aggressively pursue the development of a portfolio of additional Redd projects in Africa with an aim to protect 5m hectares of native forest that will avoid the release of 25m tonnes of CO<sub>2</sub> emissions annually and create thousands of sustainable jobs for rural Africans," Korchinsky says.

The idea behind Wildlife Works, he adds, was always to create a model that could be replicated around the world,

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and the company is "pursuing opportunities in Panama, Nepal, Sumatra and throughout Africa". The business case for taking an early mover advantage in the forestry market became evident after the Bali climate conference, when it became clear that a forestry carbon market was on the way, says Christian del Valle, director, environmental markets in commodity derivatives at BNP Paribas.

However, we are still at the stage where the development of the forest carbon market is the result of "a few committed individuals that have taken the time to understand the reasons why forests are important for the climate and why they have such a vitally important role to play in mitigation and adaptation," he adds. "This is a complex sector with many characteristics that are new compared with other asset classes.

"It can be difficult to understand and it can look quite esoteric to start with but actually nothing could be more fundamental to human enterprise and longer-term prosperity than valuing natural capital. We have every confidence that this sector will grow over time."

To meet the IPCC's climate targets, emissions from deforestation and degradation have to be halved by 2020 and completely halted by 2030. "That comes with a pretty hefty price tag – something like \$50bn a year," he adds. "After the financial crisis, that sort of money is not going to come from the public sector. Forest countries are looking to see what level of investment is needed to stop forest loss, while still allowing forest countries to develop, and

it is vital that the policy architecture is private sector-friendly for the sake of its own success."

Projects are plentiful, Whitfield points out. "The problem is that to make the projects work, you need to have active demand for Redd credits. There is not huge demand for offset credits at the moment. For this to take off, there must be a compliance element."

Partly, this is about building scale, but there is also a need to deal with structural issues. "The voluntary market plays an important role, but I'm not sure to what extent it is taking into account a wider perspective. To deal with issues such as leakage, the market has to take into account the national context," says Ivo Mulder, programme officer for biodiversity and water at the United Nations Environment Programme Finance Initiative (Unep-FI). "Before the bottom-up development of the market can happen, we need to get in place the structures from the top-down."

This requires agreement on a comprehensive global deal on climate change to be reached at the next UN

climate conference in Durban at the end of this year, Mulder adds. "If there is an agreement, there will be a lot of money flowing into this sector and it will become a new asset class. Financial institutions will need to jump into the sector."

At the moment, the best hope for a compliance market seems to be in California, where the state's AB32 climate law currently calls for the establishment of a cap-and-trade scheme by 2012 that could create demand for up to 74m tons of CO<sub>2</sub> equivalent, according to the Unep.

While the chief winner initially will be the US forestry sector and farmers, the law leaves the door open for organisations subject to emissions restrictions to buy credits from international Redd+ projects to help meet their targets. According to a Unep report, Reddy Set Grow, a briefing for financial institutions, "it is likely that international Redd+ credits could be imported into the AB32 cap-and-trade system by 2015".

However, beyond California, "there is still uncertainty about the form of a future Redd regime, which will depend on an international agreement being reached in the context of post-2012 climate negotiations," the report says.

In the meantime, while policy makers work through the process to set the rules to incorporate Redd in future compliance markets, Wildlife Works has closed several multi-million dollar sales contracts demonstrating that demand in the voluntary market exists today. Korchinsky continues: "It's clear the global voluntary carbon marketplace is ready for carbon credits that the average consumer can relate to. Carbon credits that protect natural forests, endangered species and the livelihoods of Africa's rural communities will be massively appealing to organisations or consumers wanting to do their part by reducing their own carbon footprint." ■