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Rainforests could be traded on world market

By Damian Kahya
BBC News

Why would America's largest coal utility and Britain's biggest oil company invest in protecting a remote plot of Bolivian rainforest?



The Noel Kempff Mercado climate action project in Bolivia

American Electric Power and BP invested in the pilot project alongside environmental groups such as the Nature Conservancy to find out if protecting forests compensates for their own pollution.

The burning of tropical forests emits more carbon dioxide every year than all the cars, planes, and boats on the planet - about 17% of global emissions.

A deal at Copenhagen could mean both governments and businesses paying billions to keep the forests standing.

With agreement looking unlikely on many other areas, some negotiators feel preventing deforestation may be the most concrete outcome from the talks.

Valuing a forest

Professor Geoffrey Heal is working out how this money would be spent.

The Columbia University economist used to advise Opec on how to manage the oil market.

Now he teaches courses on corporate social responsibility and energy to Business MBA students.

In 2004, he was approached by a student who knew the prime minister of Papua New Guinea. The student had been sent to New York on a mission.

"Deforestation was a big issue there," he says. "The prime minister had asked him when he was in New York to look into whether there was any way to make money from the forests without cutting them down."

The Rainforest Coalition - a loose grouping of more than 20 nations - grew up in response to that question.

Their first task was to find a way to reward nations for not cutting down their forests.

"Basically the mechanism we've come up with is the following; countries reduce their rates of deforestation below what they historically have been and in exchange for that, they get carbon credits which they can sell on world carbon markets," says Heal.

To work out exactly how much money each country would get, they needed to calculate how much carbon was released by burning their forest. They get paid for every tonne they keep trapped.

Different forests contain different amounts of carbon.

So teams of conservationists turned economists are being dispatched around the world to work out a forest's value.

"It is possible to calculate the amount of carbon in a hectare of rainforest to a reasonable amount of precision," he says.

Data from numerous plots is then combined with satellite imagery of the forest.

Once the carbon stock is calculated, satellite pictures are used to track the impact of any deforestation.

Nations would be paid from annuities - the money would only keep coming if the forest kept standing.

Creating a market

Valuing the forest is complex - finding the money to pay for it even harder.

The movement has turned biologists into entrepreneurs. Andrew Mitchell is one. He wrote the Little REDD Book, on plans to fund forest protection.

"Well, I've been a biologist up in the trees and I realised that with all the scientists I worked with around the world, it's time we got out of the trees and the green jungles and into the concrete jungles. I spend a lot of time now talking to businesses," says Mr Mitchell. He has set up his own project, Canopy Capital, which allows investors to buy a stake in Ghanaian forests. Carbon credits are one-way investors - and forest residents - could earn a profit.

Only the private sector, he says, can raise the money needed.



Some biologists are becoming entrepreneurs

The British government's Eliasch Review put the cost of paying nations not to deforest at between \$17bn and \$33bn a year.

One way to raise that would be to allow polluters in the west to make a portion of their agreed emissions reductions by investing in preventing pollution from deforestation. That's what drove AEP, BP and Pacific Corp to invest in the Noel Kempff Mercado Climate Action Project in Bolivia's north-eastern rainforest a decade ago.

Like most countries, the British government supports the idea. Joan Ruddock is the UK climate change minister. Her team leads the EU's negotiations on avoided deforestation.

She says national governments will provide funding at the start - until the market kicks in.

"The public purses of developed countries will not be able to produce all the finance needed. In the latter stages, we hope it will be significantly a carbon market and that market will be global," she says.

The new US senate bill on climate change will force US firms to make tough emissions cuts. But the bill will allow them to make some of these cuts, about a quarter of a million tonnes of carbon dioxide, by paying for emissions reductions in other countries.

Firms such as American Electric Power are lobbying for the limit to be far higher. Their spokesperson, Melissa Chenry, argues preventing deforestation is a cheap way of cutting emissions.

It "provides a very economical way to reduce atmospheric concentrations of carbon dioxide", she says.

Reducing emissions by keeping trees standing is likely to be far cheaper than other solutions, such as converting power stations to capture their carbon dioxide.

Ultimately, it means consumers will have to pay less.

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Joan Ruddock, UK climate change minister

Funding dilemma

The economics pose a dilemma at Copenhagen.

Businesses will only pay to protect rainforests if it means they can avoid making more costly reductions to their own emissions.

Greenpeace's senior climate adviser, Charlie Kronick, worries protecting forests might provide a "get out of jail free card" to polluting western firms.

Few believe preventing deforestation can be a substitute for substantial emissions reductions in developed countries.

Paven Sukhdev, a career banker for Deutsche Bank who now works for the EU on the issue, argues that at least 65% of reductions must be made within developed countries.

That means firms such as AEP may still be limited in how much they can invest in projects abroad. Firms in developing countries may not have to buy credits at all.

That has led to worries in the City that there won't be enough money to buy all the forest carbon.

London's financial centre is home to the incipient global carbon market. Prof Heal believes that in a decade, the trade could be worth trillions of dollars.

But recently falling carbon prices and uncertainty have reduced demand for the few international schemes which currently exist.

Rupert Edwards, the managing director of Climate Change Capital, believes rainforest carbon could swamp the market - if not enough money is allowed in.

Rainforests "might be a big part of the potential supply, but it could swamp all the demand", he says.

The numbers could add up, he admits, but only if polluters around the world are forced to buy credits as well as making drastic reductions to their own emissions.

Such a solution may be more costly to firms and consumers than many are willing to accept.