

The complexities of the trade in offsets

Carbon offsets continue to attract huge controversy. Their proponents say that they are a valid technique for counterbalancing emissions. By reducing emissions elsewhere, the net effect of taking a flight can be reduced to zero. Opponents say that offsets are conscience-saving tokens and merely put off the inevitable day when we realise that cheap air travel is incompatible with climate stability.

Which side is right? I looked in detail at one of the main projects of Climate Care, one of the UK's most reputable and best-established offset brokers. It operates the offset schemes sold by British Airway and Barclays Bank. Does your payment today to Climate Care actually result in a clear reduction of emissions somewhere else in the world? With considerable regret, I have to say that the link between your offset donation and emissions reduction in Honduras is by no means as clear as we might all hope.

The Honduras cooking stove project

Climate Care backs an important scheme in Honduras to provide fuel-efficient cooking stoves. Most families in Central America cook over open stoves, wasting fuel and causing health problems from smoke inhalation. Well designed enclosed stoves reduce the need for firewood, slowing the deforestation that is responsible for 20% of the world's emissions of greenhouse gases. Firewood consumes a large fraction of the income of the urban poor in many countries of the world. Smoke from open cooking stoves cause respiratory problems that affect the health of the vulnerable. Whatever the rights and wrongs of offsetting, fuel-efficient stoves are a vital advance in the fight against tropical poverty and climate change

The Ashden Award.

In July 2005, TWP, an American charity with an impeccable record, won one of the prestigious prizes awarded by the Ashden Trust, a Sainsbury family charity. This prize was substantial and was funded entirely by Climate Care. Despite the language used, the award is not a prize in the normal sense of the term. It does not simply reward past effort. The £30,000 paid by Climate Care was actually a payment in advance for services to be provided by TWP

Climate Care took the £30,000 out of its own resources. It is reimbursing itself by using money paid today by people seeking to offset their carbon emissions. Pay £20 as an offset today for a flight to the US and your cash is partly funding the prize money paid by Climate Care two years ago.

What form did the contract between Climate Care and TWP take?

Climate Care and TWP have not (as yet) made the precise terms of their mutual contract available to the public. However, as far as I can gather in the negotiations leading up to the final award of the prize to TWP, Climate Care sought to assure itself that its money

would generate 7,000 tonnes of incremental emissions reductions. TWP were contracted to use the money to ensure that 1,440 extra stoves would be installed over a two year period to mid 2007.

TWP has developed several models of fuel-efficient cooking stoves of different sizes and costs. Climate Care made clear to TWP that it would be flexible about the type of stoves to be installed. When the contract was signed, neither party had a secure idea of how much each stove would contribute to emissions reduction. Even now, almost two years later, this number is uncertain because the evaluation has not been completed. Climate Care has insisted to me that it had access to substantial academic research on the carbon savings from fuel-efficient stoves. It sent me one example of this research, which concerned stoves in Nicaragua not Honduras, is described as a 'pilot study', lasted one week and involved tests on six efficient stoves and one conventional open fire.

The money given to TWP was not directly employed to construct extra stoves in homes where they were needed. Instead the cash has helped establish workshops in which the metal and ceramic components are built and to add to the cash fund that provides credit to the households buying the stoves.

Does an appropriate body check that emissions reductions have actually taken place?

In its 2005 annual report, Climate Care reported that a company called Ambiental PV would provide independent verification that the offset payments delivered the emissions cuts that were claimed.

In telephone and email communications over the last few days, Climate Care seemed unsure whether and when Ambiental was actually doing the work. At various times I was told that researchers from the University of Illinois had taken over the job, that Ambiental was sharing it with other companies, or that the contract for verification had not been awarded yet. On its web site, Climate Care says Ambiental on one page, the University of Illinois on another

After repeated inquiry, I was finally assured that Ambiental was still in post and that the work would be completed by May 2007. So, almost two years after the Ashden Award was paid to TWP, the verification process is not finished. Climate Care said that it had yet to check how much carbon dioxide was actually being saved in the stoves that had been installed. Initial trials had shown that savings were at least as high as claimed on its web site, but further work was needed to back up this conclusion.

Has TWP installed 1,440 stoves as a result of the contract with Climate Care?

TWP says it is highly confident that it will meet the terms of its contract with Climate Care and will have installed 1,500 stoves in time for the two year anniversary of the Ashden prize. In a long conversation with me, TWP said that it had benefited from the flexibility provided by the Climate Care and that it had installed different types of stoves

to the one originally identified in the original contract. It had provided a regular six month report on its progress and on how the money was being used to construct the various different types of stoves.

TWP is backed by a large number of different bodies around the world, including the German government and the US Environmental Protection Agency. It is therefore almost inevitable that Climate Care's cash is mingled with that of other funding agencies and it becomes impossible to tell whether the Ashden Prize can be demonstrated to have reduced emissions. In telephone interviews with Climate Care, I asked whether TWP's stoves were properly earmarked as coming from carbon offsets. The company assured me that this was the case. TWP gave me a different view, saying the stoves installed under the arrangement with Climate Care were partly funded by Finnish money and partly from cash provided by a US charitable foundation.

There is nothing necessarily wrong with this arrangement, but it does suggest that Climate Care's money has not demonstrably added 1,440 stoves. Part of the problem arises because TWP is widely seen as an extraordinarily effective charity working on a project of huge importance. Funders are rightly eager to back its initiatives. The Ashden Prize was important to TWP because it gave an impressive endorsement. But disentangling Climate Care's financial contributions from those of other bodies is impossible. The value of the Prize was equivalent to about £20 for every stove that TWP promised to build. The cost of the stoves varies between the various models but is typically several times this amount. Climate Care's money is far from enough to fund 1,440 stoves and other sources were needed. The company says that my comment misses the point; all emissions reduction projects use multiple sources of funding, including contributions from the household beneficiaries themselves.

How much CO2 do the stoves save?

No-one disputes that the stoves save firewood, and that wood is increasingly short supply in Central America. Most of the forests have already disappeared and at current rates the rest of the timber will be gone in a matter of decades. Reducing fuel use is important. But data on the effects of the new stoves on CO2 emissions is still not available. The benefit seems to vary very considerably between the different types of stove and depends on how they are used in working kitchens. The problems in assessing whether Climate Care's cash has truly saved 7,000 tonnes of emissions are increased by the flexibility given to TWP to install whatever model of stove it preferred.

No-one can yet estimate the amount of CO2 saved by the Ashden money. In fairness to TWP, it should be said that this is unsurprising. Measuring CO2 savings is extremely difficult and TWP's initial objectives when it started the project were not necessarily to reduce emissions. Its main aim was to improve the health of urban dwellers and diminish forest loss, not to reduce CO2 output.

Climate Care may not have been as clear as it might be on the difficulties of ensuring that CO2 reductions are properly assessed. It has also used different figures for its own

estimates of the savings. At some points on its web site it says 1.5 tonnes per year, at others 1-1.5 tonnes and at others about 1 tonne. The Ashden Awards web site gives a much lower figure of 0.28 tonnes, but Climate Care says that this is a mistake and will be corrected.

Some problems with the way Climate Care is reporting its relationship with TWP.

In statements on its web site, Climate Care asserts that it is central to TWP's continued operations. At one point it says '*TWP are keen to move from installing a few stoves on a subsidised basis to market commercialisation*'. This statement and others like it exaggerate the role of Climate Care in the Honduras project. By the end of 2005, TWP had constructed 16,000 stoves in Central America and 4,000 just in Honduras. Climate Care's 1,440 units are an important element, but by no means as primary as the offset broker implies.

Climate Care also does not mention the role played by other funders in TWP's projects. In particular, other donors have helped establish the fund to offer micro-credit to potential purchasers. There is little doubt that a system of providing credit would have evolved without the Ashden money.

A summary.

Climate Care is a highly ethical business, eager to use market-based mechanisms to provide voluntary offsetting of personal carbon emissions. Its work is extremely valuable and it operates to the highest standards. TWP is a first-rate charity working with some of Central America's poorest people to improve living standards and the health of families.

However, their partnership demonstrates many of the problems with carbon offsetting projects. It is nearly impossible to show that a payment today to Climate Care will reduce emissions. Many users of Climate Care would assume that the company collects their payments and then sends them to Honduras to install stoves. They would expect that each stove installed would be identifiable as being funded by Climate Care, and that the emissions reduction would be quantified and reasonably certain. People buying offsets would generally assume that the transaction would also be financially audited and money kept separate from other donations.

For reasons that are perfectly understandable, none of this appears to happen in Honduras. There's nothing at all wrong with giving money to Climate Care or indeed directly to TWP, but you shouldn't assume that your donation can be tied to a defined installation of a stove, or a quantified cut in emissions. View the money as a gift to a very worthy cause, not a way of wiping out your carbon debt.

Chris Goodall
c.goodall@which.net
07767 386696
24th March 2007

The following comment was sent to me by Climate Care, along with several specific criticisms of the comments contained in this note. I have gone back to the source material and checked the accuracy of my statements.

500 million people need access to efficient cooking for health reasons. Recent research has estimated that one tonne of charcoal (about the average used by a family in Africa) burnt on a traditional fire in Africa emits six tonnes of CO₂. Carbon finance has significant potential to reduce emission, improve health and livelihoods. We currently have a methodology for efficient cooking projects of a much larger scale submitted to the relevant authorities. If the ground breaking work was not done in communities such as Honduras, the scale up would not be possible. Supporting projects like the one in Honduras has proved key to this scaling up, which could make carbon finance available on a significant scale in promoting efficient cooking technologies in the developing world.