



Carbon Finance for Waste Picker Organizations

Feasibility and Issues

Some waste picker organizations are interested in earning income from the sale of carbon credits in order to improve their personal and collective circumstances. However, many issues affect how realistic pursuing this source of income is for an organization.

As part of its work with Inclusive Cities to support waste picker organizations, WIEGO asked consultant Ernest Achtehl to look into the feasibility and requirements of accessing carbon finance through three sources – the UNFCCC Clean Development Mechanism (CDM); Voluntary Carbon Markets (in particular the Gold Standard); and the Green Climate Fund were examined. The detailed study is being published as a Technical Brief by WIEGO (2013).

How Recycling Creates Carbon Credits

Less fossil-fuel energy is required to manufacture products from recycled materials than from virgin materials. The carbon credits are equal to the difference between how much greenhouse gas is created from making the product from virgin materials and how much greenhouse gas is created when using recycled materials.

$$\text{Emissions from virgin materials} - \text{Emissions from recycled materials} = \text{Carbon credits}$$

One carbon credit is equal to one tonne of carbon dioxide (CO₂) (or another greenhouse gas equivalent to one tonne of CO₂) that a project prevents from entering the atmosphere.

UNFCCC Clean Development Mechanism (CDM)

Under the Kyoto Protocol of the United Nations Framework Convention on Climate Change (UNFCCC), developed countries have committed to reducing their emissions of greenhouse gases. They can meet part of this commitment by buying **carbon credits** from projects in developing countries. The buying and selling of carbon credits under the UNFCCC is called the **regulatory market**.

The UNFCCC's **Clean Development Mechanism (CDM)** is a set of rules and standards that govern carbon credits (officially called Certified Emission Reduction credits, or **CERs**). The process of having a project registered under the CDM is very difficult and requires specialized technical skills.

Developing and Registering a Project

To reach the goal of selling a carbon credit, an organization must first prepare a complex **Project Design Document**

(PDD). This should contain full details of the scope, duration and impact of the project. A comprehensive monitoring plan is required, along with all scientific calculations of how the project reduces greenhouse gases. The PDD must go through an independent evaluation to determine if it meets all the eligibility requirements of the CDM and that the project does reduce emissions. A letter of approval from the Designated National Authority—the body given responsibility by the national government to authorize and approve participation in CDM projects—is also required.

The process of developing, validating and registering a CDM project can take two or more years.

Financial Realities

To pay off the high cost of development, any carbon credit recycling program would have to operate on a large scale and very efficiently. The market for carbon credits is quite weak and the price has dropped (from a high topping US \$20 to less than US \$3 each).¹ New projects may not be worthwhile. Before beginning, an organization should

¹ European Union countries were the only significant carbon market, and that market has collapsed due to economic crises. However, new markets are emerging—for example in California, USA and Quebec, Canada—which may again increase demand for carbon credits.

assess whether a carbon credit project would actually generate sufficient revenue to boost members' incomes or to help meet collective goals such as improved facilities and better programmes.

Carbon offset projects are usually developed by large companies with significant technical, legal and project management capacity, or the resources to hire such expertise. Very few informal workers' organizations have the existing structure, relationships with governments, and technical expertise, so an outside consulting firm would be needed to develop (and potentially manage) the project.

Hiring a specialized company to develop a PDD can cost US \$50,000. Taking the PDD through the full process to registration will cost at least US \$100,000–\$250,000. After a project is validated, project participants also pay a registration fee.

Therefore, financial backing is crucial. Organizations would first need to invest in developing business proposals to demonstrate the financial viability of the project. Then they would have to either leverage existing relationships or invest in building new relationships with donor agencies, venture capitalists, banks or "carbon aggregators" that could cover the project development and registration costs.

Limiting Factors

Additionality: CDM projects must demonstrate that emissions are reduced *more than* what they would have been reduced without the specific project. In other words, the reductions to greenhouse gas emissions that *already* occur through the efforts of an organizations' members do not count—they are the starting baseline. To earn carbon credits, a project must create reductions over and above what the organization already does. This is called "additionality" and is validated using a technically complex tool. Waste picker organizations would need to find additional material (or material in new areas) to recycle, or to produce some new product from recycled material in order to meet this requirement.

Competition for the same credits: The CDM allows a carbon credit to be counted only once. For example, a credit generated by making a product from recycled materials can either be claimed by the manufacturing facility or by the waste pickers who collected the recyclables. The CDM requires that a contractual agreement exist between the recyclers and the manufacturer, guaranteeing that only one of them will claim the carbon credits. Thus, the waste picker organization has to be a formal organization with legal standing – and the manufacturing facility has to be willing to give up the carbon credits. Legal advice would likely be necessary.

Uncharted territory: To be registered, a carbon offset project must use an approved CDM methodology for designing and monitoring the project. A plastics recycling methodology (called "AMS-III.AJ. Recovery and recycling

of materials from solid wastes") has been created and refined by the CDM,² but (as of February 2013) has never been successfully used. This could signal that it is not financially viable at present. Any waste picker organization that pursued carbon finance under this methodology would be breaking new ground and would have to invest heavily in learning.

Supply risks: A project needs to be large and sustained to earn carbon credits, so a constant and predictable supply of waste materials is necessary. Organizations would need to be sure that supplies would not be disrupted (for example through disputes around the ownership of waste, or the cancellation of municipal agreements by newly elected officials).

Record keeping requirements: Payment for emissions reduction is based on the verified results of monitoring data. Organizations must carefully collect and store this data. Some would need to invest in increasing their administrative capacity to ensure adequate record keeping.

Voluntary Carbon Markets

The voluntary carbon market operates outside the UNFCCC CDM and enables individuals, organizations and governments to purchase carbon credits to offset emissions. Because waste picker organizations bring a social as well as environmental benefit, they may be able to attract a higher price for their carbon credits on the voluntary market. However, all projects must be certified by a voluntary standards organization. The most reputable of these is the Gold Standard, which does not sell carbon credits; rather, it ensures the quality and validity of projects.



Sorting recyclables, Asmare, Belo Horizonte, Brazil. Photo: L. Tuttle

² GAIA has been a significant advocate of improving this methodology. See GAIA (2012), *Problems with Clean Development Mechanism Waste Methodology AM0025*.

Projects eligible for Gold Standard certification can focus on renewable energy supply; end-use energy efficiency improvement; or waste handling and disposal – defined as *all waste handling activities that deliver an energy service (for example, landfill gas) or a useable product with sustainable development benefits (for example, composting)*.

While Gold Standard certification brings the highest price for carbon credits, it is also technically rigorous. It offers no shortcuts to getting a carbon offset project started, since all certified projects must meet the UNFCCC rules for CDM projects, and include a PDD using the same CDM template.

Micro-scale activities generating less than 10,000 tonnes of CO₂ reductions per year can use a simplified—though not simple—PDD. Also, the rules regarding additionality over the baseline may be relaxed in certain micro-scale projects, such as those located in a Least Developed Country, a Small Island Country or a Land Locked Developing Country (per United Nations designations), in an identified underdeveloped zone of a country, or where the project can be proven to benefit poor communities.

Fees are levied by the Gold Standard at different stages of the project development process, and are generally determined by the size of the project and the number of credits registered. The fees for (only) the internal verification and validation of a micro-scale project, for example, are US \$7,500.

In addition to baseline and monitoring information, a “Do No Harm Assessment” and an Environment and Social Impact Assessment are required, as is a local stakeholder consultation process. Even after a project is registered by the Gold Standard, there are stringent ongoing monitoring requirements. All reports must be verified, including through site visits, before credits are issued.

Once Gold Standard certified credits are issued, it is up to the project organization to find a buyer for those credits.

Ethical Considerations

Carbon offset trading is highly controversial. Some see it as transferring responsibility for greenhouse gas emissions from those who should carry the responsibility for climate change (the industrialized North) to developing countries in the global South. There are arguments that carbon trading makes emission reductions less likely, and creates “perverse incentives” to produce more waste so more carbon credits are generated—with negative impacts on the environment and on people’s well-being. Put starkly, some say it is buying permission to pollute; others dismiss it as just a new way for corporations to make money.

Some waste and other organizations refuse to engage in carbon trading on principle. Others, however, see it not as a question of ethics but a question of economics—and argue that if it can be used to channel money to the working poor, it is worth considering.



Waste picker union KKP KP's Recycling Point in Pune, India.
Photo: J. Luckham

It should be understood that in most cases, an organization would have no control over who buys the carbon credits generated by a project. The buyer could be a corporation that an organization finds objectionable. While corporate social responsibility relationships also raise ethical concerns, at least an organization can choose who it deals with.

The issues and ethics around carbon offset trading require discussion and debate at the membership level.

Green Climate Fund (GCF)

The Green Climate Fund (GCF) is a new funding mechanism created under the UNFCCC that is intended to transfer money from the developed to the developing world to assist in dealing with climate change. The GCF will support projects, programmes, policies and other activities that limit or reduce greenhouse gas emissions. The assumption is that the GCF may look for innovative, grassroots-led waste management solutions that are tailored to local conditions. However, the GCF is not yet operational and won't be until at least 2015. It does not yet have funding in place to support projects, and mechanisms and guidelines have not yet been developed.

It is assumed that the GCF will sidestep the cumbersome regulations of international carbon financing agencies. However, it is too early to assess whether it will offer a feasible source of income for waste picker organizations.

Waste picker organizations should stay engaged with the process of developing the GCF (as GAIA and the Global Alliance of Waste Pickers have been for years). However, since there is still much uncertainty around this fund, organizations should not pin their funding strategies on it, but should instead focus on existing sources of available funding.

Other Funding Options & Solutions

Waste pickers play a key role in addressing global climate change, and their organizations are seeking increased income and benefits for their members or improvements to the workplace and working conditions. Given these straightforward needs—and the limited time and resources available—there may be simpler, less risky and more viable funding options than carbon financing projects.

Other sources of public or private climate change funding may be simpler to access and should be considered. For a list of some of these, see www.climatefundsupdate.org/listing. Organizations should also explore whether they can access their country's national climate change funds.

Negotiating contracts with municipal authorities for the collection and recycling of municipal solid waste has proven advantageous for some waste picker organizations, which have become recognized and valued partners in municipal collection.

Investing in innovation by transforming and adding value to waste-derived raw materials and **moving up the value chain** through development of enterprises from collection to processing (e.g., plastic to flake, cooking oil to bio-diesel, small to medium scale biogas) are possibilities. Here, too, initial funding is needed for feasibility studies, business plan development, and seed capital until the waste picker enterprise is in a position to manage commercial loans and equity investment.

Corporate support is available from companies willing to invest in the combined social and environmental benefits of waste picker organizations. (Corporate social responsibility relationships, however, should be approached carefully to avoid exploitation by the corporation similar to that experienced through middlemen.)



Waste pickers from the Hulene Dump, cooperative RECICLA, Maputo, Mozambique. Photo courtesy of S.Dias

Information Sources

UNFCCC CDM: cdm.unfccc.int

CDM Methodology Booklet (contains one-page descriptions of different project methodologies): cdm.unfccc.int/methodologies/documentation/meth_booklet.pdf

Gold Standard Certification: www.cdmgoldstandard.org

Green Climate Fund: gcfund.net/home.html

Other international sources of climate funding: www.climatefundsupdate.org/listing

For more information and resources, please see WIEGO's Technical Brief on this subject at <http://wiego.org/wiego/wiego-briefs#technical>

Inclusive Cities project: Inclusive Cities focuses on support and capacity building for membership-based organizations (MBOs) of the working poor in the urban informal economy. Through organizing, advocacy, and policy analysis, informal workers are making their needs heard within urban planning processes. Partners in the Inclusive Cities project include MBOs of the working poor and technical support organizations committed to improving the situation of the working poor. For more information, and to access research and publications on inclusive urban planning and capacity building tools for MBOs, visit: www.InclusiveCities.org.