



CREDIBLE CARBON

Project Name: Hout Bay Recycling Co-op (HBRC)

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Project Location: Imizamo yethu, Hout Bay, Cape Town, Western Cape, South Africa



Hout Bay is a racially and economically diverse peri-urban suburb with a population of approximately 50 000 people. Imizamo Yethu began as an informal settlement in Hout Bay and is now home to 30,000 of the valley's poorest people. The extension of basic services such as solid waste management, housing, sewerage treatment and electricity remains a challenge and compound high unemployment in the settlement.

Project Commencement Date:

1 July 2008

Project Period:

10 years

Anticipated GHG Savings Schedule:

- Year 2008 - Year 2011: 1,567 tons CO₂
- Year 2012: 345 tons CO₂ (volumes increased by Trashback incentive schemes for waste collection).
- Year 2013: 547 tons CO₂ (12 mo at $17 + 20 * 0.95$)
- Year 2014: 600 tons CO₂
- Year 2015: 600 tons CO₂

Project Partners:

The PACE Centre is a South African not-for-profit (NPO registration number 055-238-NPO), voluntary organisation whose registered office is at Office Annex, 2 Bokkemanskloof, Blue Valley Avenue, Hout Bay, 7806, South Africa. The registered postal address is 2 Bokkemanskloof, Blue Valley Avenue, Hout Bay, 7806, South Africa (www.carbon.org.za). PACE plays the role of Project Proponent in the Project. PACE, as project proponent, is responsible for registering the project with the Credible Carbon Registry, ensuring legal compliance of all transactions, marketing the project's carbon credits and ensuring accountable financial flows between buyers of credits, the project developer and the beneficiary community.

The Hout Bay Recycling Co-op (HBRC) is a South African cooperative based at the Hout Bay waste

drop-off site in Imizamo Yethu. HBRC plays the role of Project Developer in this project and is responsible for managing the waste collection and sorting and remunerating waste-pickers that are active at its site in Imizamo Yethu. The Project Developer is the recognised owner of credits emanating from the project, but in terms of the standards of the Credible Carbon Registry the Project Developer is obliged to return 70% of the net carbon revenue to the local community. HBRC is responsible for allocating the funds on the behalf of its members in order to improve recycling and waste solutions. It has been agreed that proceeds from any carbon revenue will be used to increase waste collection through the Trashback programme, purchase equipment such as balers, train HBRC personnel in management and business skills and develop the manufacturing of products from the recycled material (often called 'up-cycling').

Methodologies Involved in Emission Reduction:

Estimates of carbon savings are based on the principles contained in the approved CDM-Executive Board methodology for recovery and recycling of materials from solid waste: **AMS-3-AJ**, *including an informal waste sector, a recycling facility and a processing and manufacturing facility.*

Brief Description of the Project:

The project involves support for the ongoing implementation of a dry waste recycling solution for Hout Bay including 30, 000 residents of informal settlements who do not have access to door-to-door municipal services. Residents are able to bring household waste to the HBRC depot at the waste drop-off. HBRC members sort and on-sell the re-cyclable material that would otherwise end up in a municipal landfill. As of 2012 HBRC members will use some of the materials to manufacture new products such as furniture, metal tools and crafts.

The project sees local households, restaurants, and commercial ventures reducing their quantity of waste to landfill. This shift is associated with:

- An increase in recycling
- An increase in the reuse of materials (rather than to landfill or recycling)
- Income and job-creation through the on-sale of recycling
- Sustainable job and enterprise creation through waste and recycling management (transport, collection/delivery, processing) companies

- A reduction in greenhouse gas emissions
- Setting a replicable precedent for community-scale dry and wet waste recycling and management solutions

Dry waste recycling has been operational at the HBRC site since July 2008. Despite the implementation of a City of Cape Town door-to-door recycling service to Hout Bay and the resulting decrease in recycling material delivered to the waste drop-off, the co-op has continued to service the community. In 2012, a new partnership between HBRC and Trashback was initiated. Under this partnership incentives are provided to Trashback employees for waste collection and recycling at the HBRC. This partnership has already increased the volume of waste being recycled by HBRC.

Capacity Building and HBRC sustainability:

Training of HBRC members on organisation management, business practices, and computer literacy has been identified as key needs. Steps have been taken to provide training through volunteers and local partners. The aim of this training is to ensure greater sustainability of HBRC and to increase employment possibilities for HBRC members through skills transfer.

In collaboration with other local organisations including Zero Waste Hout Bay, Green Living, and Thrive, HBRC has participated in school and community based awareness raising on recycling and waste. The aim of this outreach is to encourage household recycling, increase understanding of waste and resources, and to ensure that all residents of Hout Bay are aware of the need for recycling and recycling opportunities.

Through partnerships with Thrive and Trashback, HBRC improves recycling and waste management for the low-income and township residents of Hout Bay. These services supplement City of Cape Town services that are unable to access these residential areas. In filling this gap, HBRC plays a role in improving the living conditions in the townships and assists municipal waste management.

Funding:

The project generates income through the on-sale of recyclable materials and through the anticipated sale of carbon credits. HBRC separates, weighs, and prepares the recycling material for

collection by a private waste management and transport company which then on-sells the materials to a final buyer that uses the material in manufacturing of new products. As the co-op does not have the funds for their own transport vehicle, the higher price that would be possible if sales were made directly to an end-buyer, are not yet realised. Other opportunities for increasing income include broadening the client base and selling material that receives higher prices in the recycling market. Realising these opportunities, however, would require greater management skills within HBRC and developing these skills over time is a priority for HBRC.



Image 1: Recycling collected by HBRC at the Hout Bay Waste Drop-off



Image 2: Nokwanda, a member of HBRC presenting the Uphindo Phina (Rewards for Rubbish) idea to Hout Bay Imizamo Yethu residents

Total Carbon Saved:

2008-2011: 1,567 tCO₂

2012: 345 tCO₂

2013: 547 tCO₂

2014: 600 tCO₂

Monitoring and evaluation:

The project generates revenue from its credits through the Credible Carbon Registry. The registry requires an independent audit of all projects in order to answer four definitive questions:

- i. Is the project real?
- ii. Is the described technology in place and functioning in accordance with its design specification?
- iii. Are the estimates of greenhouse gas emissions reduction reasonable in terms of accepted international standards and unbiased towards buyer or seller?
- iv. Is there a discernible impact on poverty?

The first two questions are established during a site visit conducted by the auditor. Estimates of CO₂e savings are established by checking on the quantity of waste recycled by HBRC and a cross-check of buyers so as to ensure that materials were received.

Detailed records of recycled waste are retained by HBRC and are checked by the auditor.

The fourth question is not subjected to a quantitative test, but it should be obvious to an informed independent auditor that the project beneficiaries are poor by South African standards and that the project makes some contribution to the alleviation of their poverty or livelihood risk.