United Nations Framework Convention on Climate Change

CDM PROJECT CO-BENEFITS IN CAPE TOWN, SOUTH AFRICA

Enhancing living conditions through energy upgrades to low-cost housing

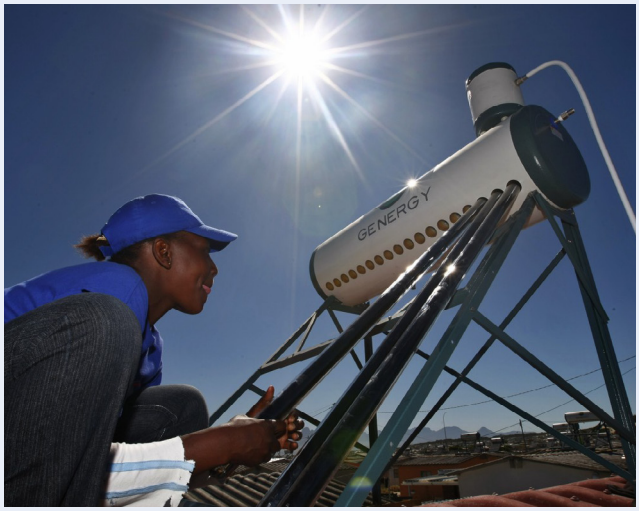
Project description	**The Kuyasa CDM pilot project involves retrofitting over 2,300 low-cost homes in the district of Khayelitsha, Cape Town, South Africa, with solar water heaters, ceiling insulation, and energy efficiency lighting.** The government of South Africa has ambitious plans for the construction of low-cost housing to help alleviate the country's acute housing shortage. Around 2.4 million units have been built in the previous 15 years, with a further 3 million planned over the next 15 years. This project shows how low-cost housing can be implemented in a more sustainable way.
Co-benefits	**The project illustrates how the CDM can help to improve health and quality of life for people in low-income urban communities by:** • Reducing the cost of providing heat, light and hot water, thereby lowering household expenses and increasing access to basic energy services • Increasing health and welfare by enabling warmer homes in winter • Creating jobs for, and improving the skills of, local residents • Empowering communities to take part in decision-making and learn about climate change

"The project brought skills and jobs for young men, they don't hang around street corners anymore, it has brought dignity to the community … Our children are much safer now, no more hanging wires…We are warm. We are saving. We don't get flu as often. Life is much easier." (Quotes from a survey of residents, Kuyasa Project implementation team, 2010)

KEY PROJECT BENEFIT

Reducing costs, improving living conditions and generating jobs and skills

The project has led to the creation of 85 full-time jobs, with related training and skill transfer



One of a number of Kuyasa residents who were selected, trained and employed as solar hot water installers
(Courtesy of Nic Bothma)

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CO-BENEFITS IN DETAIL

Economic	• Increases the value of residents' homes through infrastructure improvements • Results in a 56 % decrease in households spending more than R100/month (USD 14) on electricity, equal to savings of around R50/month (USD 7) • Creates jobs for 85 people, mainly young people (50), women (28) and people with disabilities (3). • Reduces peak electricity demand, helping offset the need for load-shedding or new power generation capacity for the city of Cape Town
Social	• Enhances living conditions by providing significantly improved hot water, space heating and lighting services, thereby improving the welfare of residents • Increases access to energy services due to reduced costs • Improves human health, with household surveys reporting a 76 % reduction in the incidence of respiratory illness as a result of warmer homes in winter
Empowerment	• Increases skills and knowledge of Kuyasa residents through more than 3,000 accredited training days and nearly 2,000 non-accredited training days, empowering people to further transform their own and other communities • Allows local community-based participation and decision-making, with the opportunity to learn about climate change and sustainable energy

PROJECT FACTS

Project title & number	Kuyasa Low Cost Urban Housing Energy Upgrade – 79 Gold Standard – 337
Project type & methodology	Energy efficiency in households – lighting, insulation and solar AMS-I.C. – Thermal energy for the user and AMS-II.C.- Demand-side energy efficiency programmes for specific technologies and AMS-II.E. – Energy efficiency and fuel switching measures for buildings
Location	Khayelitsha, Cape Town, South Africa Lat: 34° 2' 25" S Long: 18° 40' 27" E
History & CERs	Registered: 27 August 2005 Project operational life: 21 years Expected CERs: 6,580 (tCO_2 eq/year) Expected total CERs: 138,180 (tCO_2 eq) CERs issued to date: Request yet to be submitted
Project link	<http://cdm.unfccc.int/Projects/DB/DNV-CUK1121165382.34/view>
Facts as at	November 2010

Solar hot water installation
(courtesy of Nic Bothma)

This factsheet has been compiled from information provided by project participants of the CDM project, either through the project design document, monitoring reports or subsequent correspondence with project participants. The information is not verified as part of the CDM registration or issuance processes. This factsheet is one of a series produced by the UNFCCC secretariat to highlight the types of co-benefits generated by the CDM.