KHANYISA PROJECTS CASE STUDY

Cato Manor Green Street Retrofit

AT A GLANCE

FUNDERS

Green Building Council of South Africa
With key contributions by the British High Commission and the Australian Government.

TIMELINE

2011 to 2012

AREAS

Cato Manor in eThekwini Municipality (Durban)

OBJECTIVES

What: Khanyisa Projects was asked to assist with project management and community and stakeholder engagement on the country's first "green street" upgrade in a low income area.

When: The first phase of the project was completed ahead of the COP17 international climate change talks in late 2011.

How: In Phase 1 and phase 2, a total of 56 low cost houses in a small road in the historical township of cato manor benefited from the upgrade or retrofit.

Aim: The project aimed to demonstrate the range of socio-economic, health and environmental benefits which are possible from the implementation of resource-efficient interventions in low income houses while keeping the country on a low carbon path.

KEY INTERVENTIONS:

- Solar water heaters
- Insulated ceilings
- Insulated cookers
- Energy efficient lighting
- LED street lights
- Rainwater harvesting and food gardens
- Clean-up and rehabilitation of water courses in the area
- Awareness and advocacy
- Small business development

KEY FINDINGS

- Hot water from SWH was the most popular intervention
- Households saved up to 75% of the electricity costs from the range of interventions
- Peak temperatures on summer days dropped by 4 – 6 degrees

Post intervention assessments and measurement illustrated the potential energy and carbon emission savings if the project was extended to all the RDP houses in the country.

FULL OVERVIEW

Khanyisa Projects was asked to assist with project management and community and stakeholder engagement on the country's first "green street" upgrade in a low income area. The first phase of the project was completed ahead of the COP17 international climate change talks in late 2011.

In phase 1 and phase 2, a total of 56 low cost houses in a small road in the historical township of cato manor benefited from the upgrade or retrofit. The project was initiated by the green building council of south africa and received the majority of its funding from the british high commission (phase 1) and the australian government (phase 2).

The project aimed to demonstrate the range of socio-economic, health and environmental benefits which are possible from the implementation of resource – efficient interventions in low income houses while keeping the country on a low carbon path.

Key interventions included:

- Solar water heaters
- Insulated ceilings
- Insulated cookers
- Energy efficient lighting
- LED street lights
- Rainwater harvesting and food gardens
- Clean-up and rehabilitation of water courses in the area
- Awareness and advocacy

Phase 2 interventions included a solid waste recycling audit, alternative ventilation and insulation solutions and entrepreneurial and skills training for community members.

Khanyisa Projects demonstrated its ability to engage effectively with community, council and departmental stakeholders which allowed the project to progress smoothly, providing the greatest benefit for the local community.

Khanyisa also ensured that the project stayed within the programme and budget.

Key findings from the intervention included;

- Hot water from SWH was the most popular intervention
- Households saved up to 75% of the electricity costs from the range of interventions
- Peak temperatures on summer days dropped by 4 – 6 degrees

Other benefits included:

- Better safety and security through safe wiring
- Economic opportunities through training and mentoring
- Improved nutrition from food gardens
- Improved health through reduction in use of paraffin, coal and wood for fuel
- New building skills providing for economic opportunities

The green building council calculated that if green retrofits were undertaken on the country's 3 million low cost houses, the estimated electricity and water savings could be up to R3 billion per year.