



# The SouthSouthNorth Project : A Capacity Building Initiative

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# The SouthSouthNorth Project...

We are monitored by HELIO INTERNATIONAL



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# Strategy and Aim

- To see if Multilateral Environmental Agreements can be used to directly address poverty alleviation
- Test whether we could use Kyoto mechanisms to drive cleaner energy development
- To scope on the basis of eligibility, sustainable development and feasibility criteria
- To scope for projects included “high and low hanging CDM fruit”
- To find champions to drive projects within the organisations (Energy advisors, and long standing environmental champions)

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# The SA-Kuyasa Case Study

## Background

- This is a housing development Project in Kuyasa Township, Khayelitsha, Cape Town and ties into the SA government's Reconstruction and Development Programme (RDP).
- The RDP housing units are 30m<sup>2</sup>, are electrified, but have no water storage geysers and no ceilings and ceiling insulation and are fitted with incandescent light bulbs. The households rely on batch heating for hot water on demand, and thermal heating during the coldest months of the year.



# Community Profile

- Household income in this area ranges between \$115 and \$500 a month.
- even though the community manage their energy services very efficiently, approximately 25 % of their income is spent on energy services



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# The Project Activity

To retrofit 2309 RDP units with:

- Solar Water Heaters
- Ceilings and Ceiling Insulation
- Energy Efficient Lighting



# The Project Structures



## *The Project Design Team :*



### **1. Community of Kuyasa**

Represented by the **Project Steering Committee** appointed by the community, which reports to the Ward Development Forum (WDF).

### **2. The City of Cape Town**

Represented by a **Seed Advisor**.

### **3. Development Facilitators.**

**SSN Trained Facilitators** who facilitate and advise on the CDM processes AND other CDM related social development processes in Kuyasa.

### **4. Technical Team.**

Mainly SSN and energy consultants who advise on both energy issues and CDM issues.

### **5. Helio International Monitors**

Monitor consistency, transparency, technicalities, sustainability etc. in all the CDM related processes. They work closely with the team and Helio International.

## Energy Poverty and Suppressed Demand

- Energy poverty can be understood to as limited access to energy services which includes both access to fuels and appliances, thus affecting energy choices and consumption patterns of the poor.
- However, with social upliftment, economic status of the poor households and their ability to consume goods and services will change. Poor households tend to acquire a similar variety of energy sources and energy consumption patterns as that seen in their energy well-off counterparts who are highly inefficient energy users!



# ...continued

- Rationale: "As these poor households improve their status –the increased energy service consumption will be used to fulfill the current shortfall in energy services-satisfying their energy service needs"
- Therefore, in energy poor households there is a "suppressed demand for energy services".



## The Clean Development Mechanism-requirements

- Baseline Methodology-determination (Paragraph 46 of M&P): “Baseline may include a scenario where future anthropogenic emissions by sources are projected to rise above current levels, due to the specific circumstances of the host Party”

# Suppressed Demand Methodology for energy services

- Main question: *How a current suppressed demand for energy services can be incorporated into the design of an emissions baseline in terms of the provisions of Paragraph 46 (M&P).*
- Technical and Behavioural monitoring of the households has also been undertaken over a 4 month period
- Information from these two monitoring studies has been used to calibrate a theoretical model.

## Results from this study

- Average energy saved from the two periods is 1345 KWH/annum, representing a 19.4 % saving on energy used for space heating.
- This methodology has been submitted to the Methodologies Panel to clarify if the interpretations given are consistent and correct with Paragraph 46 (M&P). Initial response from the Methodology Panel has been inconclusive as it has not acknowledged poverty as a pillar of suppressed demand.



# Other Benefits

- Energy savings for the community
- Job creation opportunities
- Respiratory health benefits



## Financial Status: Unresolved issues

- Upfront capital cost for the three interventions per house is approximately \$771, and based on conservative assumptions, the CER revenue will cover 22 percent of this costs. Where will the bridging finance be sourced?
- This project holds an immense opportunity for replication at a national level, currently there are 1.5 million RDP houses in SA which could benefit from this project design. Does the political will exist?
- Given that the community already spend 25 % of their income on energy services, can the residents be asked to contribute for upfront costs as this will ensure ownership and sustainability of the projects and technologies?



# Next steps...

- Establish maintenance regime for equipment (ceilings and SWHs) and ongoing availability of CFLs
- Establish SPV for City's CERs
- Take the project to the market (buyer of credits)
- Take the project to financier (to finance 70%)
- Take the project to an auditor (validator)
- Take financiers, offer to purchase CERs, etc to City with advice as to arrangements
- Transact
- Prepare for implementation

# Thank you

– For further information please contact:

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