



# **Alleviation of Poverty Through the Provision of Local Energy Services**

## **APPLIES**

**Project no. EIE-04-168**

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## 1. Project objectives and major achievements during the reporting period

### 1.1 Project objectives

The overall goal of the APPLES project is to find sustainable mechanism for the effective delivery of improved local energy services to poor communities in South Africa. Derived objectives are to:

- understand energy needs and priorities within urban, peri-urban and rural communities in South Africa
- determine and demonstrate best practices for energy service provision
- strengthen the embryonic network of existing Integrated energy Centres(IeCs)
- monitor the impacts of the APPLES project

The APPLES project is not an isolated activity but is strongly linked to existing policies in South Africa. The Department of Minerals and Energy(DME) of the South African Government has developed a policy for bringing energy services to poor communities. During the report period the Minister of DME became deputy Prime minister and Ms Buyelwa Patience Sonjica was appointed as new Minister on 22 May 2006. The new Minister has indicated that she will continue with the main policies formulated by her predecessor. This also is the case for the roll out plan for Integrated energy Centres(IeCs). Currently 5 IeCs have been established ( one closed down but will be reopened). The new IeCs probably will be linked to Multi Purpose Community Centres. The APPLES project aims to contribute to the establishment of 2 new rural IeCs (Highflats and Hluleka) and at least one peri-urban IeC (around Cape Town).

### 1.2 Summary of activities and results for the reporting period

The APPLES project commenced in June 2005 with the inception phase which was completed in September 2005. During the inception phase, discussions have been held with the Government of South Africa about the necessary co-funding for the local APPLES partners but unfortunately an agreement could not be reached and the project was put on hold in September 2005. Many discussions have been held with the Government of South Africa, in particular the Department of Minerals and Energy (DME)and the Department of Science and Technology (DST) with the aim to remove the deadlock and secure the required co-funding. This has resulted in an agreement with DME. The negotiations with DST are still ongoing but are positive and a final conclusion is expected very soon. Awaiting the final decision of DST, the project resumed its activities in July 2006 and started with the preparations for conducting the needs assessment in the selected locations and developing the baseline for the monitoring the impacts of the project.

## 1.3 Identified problems and corrective action taken

After the inception phase was completed the project team encountered problems related to the necessary co-funding for the local partners. During the preparation of the APPLES project proposal discussions have been held with the DME and the DST who both expressed their willingness to provide the necessary co-funding for the local partners: University of Cape Town and Parallax. After the start of the implementation of APPLES, a final agreement could be reached with DME and their financial contribution was transferred to the ECN account. However, DST made co-funding dependent on a set of addition requirements which would jeopardise the objectives and deliverables agreed upon with the Commission and therefore could not be fulfilled by the APPLES consortium. This resulted in a deadlock and the project was put on hold.

During the reporting period, many discussions have been held with DST in an attempt to remove the deadlock and explore the possibilities for reaching an agreement. With the help of the Delegation of the European Commission in South Africa, the responsibility for the APPLES project within DST was shifted during early 2006 to the department international co-operation. This department has recently set up a facility to enable organisations in South Africa to participate in programmes of the European Commission (especially the 7<sup>th</sup> Framework Programme). The facility provides co-funding to South African organisations for projects that are approved by the Commission. The project objectives and deliverables must be in line with DST's aims but once approved by the Commission DST is not going to change the scope of the project.

It was agreed that the APPLES consortium would prepare a cover letter explaining the contribution of APPLES to the DST goals and submit the letter to DST for official approval. In July 2006, the cover letter has been submitted to DST but no formal decision has been taken yet by DST.

## 2. Consortium management in the reporting period

The management of the consortium during the reporting period included the following activities:

- trying to overcome the existing deadlock in the negotiations for co-funding with the Government of South Africa
- informing and discussing the difficult situation with the project officer at the European Commission responsible for APPLES
- participating in the contractor's meeting held in December 2005
- Initiating the resumption of the project in July 2006.

During the reporting period, many discussions have been held between local partners, ECN and the European Delegation with the DST to explain the grant agreement signed between ECN and the Commission and the extent to which the various DST requirements could be fulfilled within this agreement. The DST wanted to spend a significant part of the budget on a technical measurement programme to assess the energy saving potential of new houses built in the Eastern Cape Province. The APPLES consortium has repeatedly indicated to DST that the COOPENER program is not meant for technological research activities and therefore this requirement could

only be met to a limited extent. No agreement could be reached on this resulting in the project to be put on hold.

The technical officer within the IEEA responsible for APPLES has been kept informed regularly on the situation and various possibilities have been discussed to try to remove the deadlock and secure the necessary co-funding from DST.

In December 2005, ECN and Parallax participated in the contractor's meeting held in Brussels. A short presentation was given on the outcome of the inception mission and the revised workplan.

Based on the agreement with the DME and the positive developments of the negotiations with DST it was decided in July 2006 to continue with the implementation of APPLES in order not to jeopardise the achievement of the project's objectives. A mission to South Africa was undertaken by ECN in June 2006 to discuss the revised workplan and by Risoe in July/August to work on the needs assessment and monitoring activities.

### 3. Progress of each work package in the period

The project was on hold during most part of the reporting period and therefore only limited progress can be mentioned in the present progress report.

#### 3.1 Progress on work plan against initial objectives

##### *WP1: Inception and General Management*

The activities planned for WP 1 are:

- Inception Phase activities
- Ongoing project management

The ongoing project management activities were carried out during the report period with an emphasis on resolving the co-funding issue. The activities involved discussions with DST and among the project partners, preparation of the application to DST and preparing a revised workplan and project time schedule.

Further discussions have been held among the team members regarding the composition of the Project Steering Committee(PSC) but no invitations have been sent out yet.

A project team meeting was held on 8 June 2006 in Cape Town, attended by Robert Maake (DME), Nico van der Linden (ECN), Bill Cowan (ERC), Dean Cooper (Parallax) and Sten Dieden (Risoe). Main points discussed were:

- the DST co-funding issue still hampers a smooth implementation of the project. Possible alternative sources of funding have been identified in case DST funding would not come through

- the progress achieved so far and necessary changes in the approach for each WP was discussed
- The delivery dates for the deliverables have been revised as a result of the delay in the implementation of the project
- The project schedule was revised based on the most realistic planning for the remaining duration of the project
- The cover letter for the APPLES application has been prepared and a first draft version sent to DST.

*WP 2: Planning for Improved Energy Services Provision in South Africa*

The activities initially planned for this WP were:

- 1) planning of the contribution by APPLES to the National Action Plan
- 2) establishment of links to other donor initiatives to ensure close co-operation and avoid duplication

The first activity was initially designed to ensure close co-ordination with the project that was being undertaken by the Government Department of Minerals and Energy (DME) with support from the Global Village Enterprise Programme (GVEP) of the UNDP. This GVEP activity lasted from November 2004 to March 2006 and helped to provide a foundation for the planned roll-out of Integrated Energy Centres (IeCs) across South Africa. The development of a National Action Plan (NAP) referred to in 1) above was an early objective for the GVEP activity. This was superseded by an IeC strategy when GVEP decided that the existing White Papers for energy, renewable energy and energy efficiency in South Africa would make an additional NAP redundant. (The NAP was a general requirement in most African countries working with GVEP, which did not have relevant policy papers already developed).

Consequently, the focus for APPLES has been how best to contribute to the Integrated Energy Centre programme of the DME, which continues even after the initial GVEP project. IeCs to date have been financially supported by the two oil companies, Sasol and Total. The model for an IeC has therefore been based upon a rural petrol station with provision for the retail of additional fuels and energy information. After three such IeCs had been established, Government concern over the programme postponed any further roll-out before the completion of a detailed review in 2005. Following this investigation, DME has stated its interest for APPLES to explore alternative models for energy centres that will allow greater energy access for poorer communities.

APPLES is therefore now intended to make a direct contribution to the strategy of DME in the form of new models for IeCs. Despite the delays in progressing the APPLES project, DME confirmed its commitment to this APPLES contribution in June 2006 and is eagerly waiting for the APPLES project to demonstrate new approaches to energy provision. On this basis, APPLES now intends to pursue the development of four energy centres, with two in rural areas and two in peri-urban locations. The models intended for these APPLES centres will vary:

- o Highflats – provision has been made for an energy centre to be part of the planned Multi-Purpose Community Centre. This MPCC is part of a national rollout programme and will provide the opportunity for replication across the country if successful
- o Hluleka – previous work in the planned location has raised awareness of energy needs and opportunities in the targeted location. Local representatives have been identified to develop an energy centre to meet the community needs

- Khayeltisha – an energy centre concept is being developed which is likely to consist of a network of information points within the community, using existing infrastructure such as schools and community centres. A co-ordinating structure will be the focus of the energy centre
- Hout Bay – the initial selection of location is being reviewed due to DME concerns over a match with poverty nodal areas, which is a key feature of DME strategy. The intended energy centre will again make use of existing infrastructure in a peri-urban community

These centres will form part of the DME IeC roll-out, to be launched at community meetings with high level (Ministerial) representation from DME. In this way, the APPLES project will make a very important and high profile contribution to the national energy strategy.

Links to other related donor initiatives were originally made in 2005, prior to the project delays caused by internal restructuring within the Department of Science and Technology (DST), which provides most of the local financing for the project. Further contact and ongoing interaction will be necessary for the duration of the APPLES work to ensure that sufficient awareness and co-operation is maintained. The bi-lateral donors that have indicated activities that may be relevant to APPLES include Denmark (DANIDA), France (through the Agence Francaise de Development), Netherlands, Canada (CIDA), Norway (NORAD) and the UK (through the Global Opportunities Fund).

In addition to bilateral activity, several multi-lateral donors also have programmes that involve energy efficiency and renewable energy activity which could draw close links to APPLES. One result of the G8 meeting hosted by the UK in Scotland earlier this year was to give increased political priority to co-operation with Africa and to climate change mitigation activity. This has resulted in alternative and efficient energy use receiving more attention. The UNDP acts as an operating agency for the Global Environment Facility and currently has a range of programmes including coverage of solar water heaters, wind energy and solar cookers, which could all be serviced by IeCs. The World Bank and the Development Bank of Southern Africa have also indicated interest in energy efficiency and renewable energy activities on the basis of climate change mitigation. The Renewable Energy and Energy Efficiency Programme is run from a head office in Geneva and receives multi-donor support for activities that will also have some impact on the approach intended for the APPLES energy centres. The EU Energy Initiative, though aimed primarily at Member States of the EU will also have provision for activity in third countries such as South Africa, with development objectives.

In recognition of the range of donor activity, and the need for co-ordination to support national energy policy objectives such as IeCs, the DME is planning a donor co-ordination conference to take place in South Africa in the third week of October. Though all arrangements are not yet in place, and the meeting is still to be officially confirmed, the APPLES project consortium has been invited to make a presentation to the conference. This is intended to raise awareness of the APPLES contribution to the IeC programme, and to ensure that any new donor activity can be well-co-ordinated with the APPLES project.

### *WP 3: Establishing Energy-Related Priorities for Poor Communities in Urban, Peri-Urban & Rural Settings*

The activities foreseen for this WP are:

- the selection of several institutional and community contexts for working with energy-poor communities,
- establishing energy-related priorities for poor people in each of these contexts

Regarding the first activity, a preliminary selection of locations was done during the inception mission and the relevant developments in these locations have been monitored during the report period. The locations in Highflats, Hluleka and Cape Town still seem suitable for the project's needs. The housing project in Buffalo City is delayed considerably and also because of the technological nature this location now looks less suitable for APPLES

During the period 21 July to 20 August a researcher from UNEP Risø, Sten Dieden, visited the South African project partners. In course of this time, the final South African team was assembled. In collaboration, and in as far as possible, symmetrical methodologies for the work package field work in all locations were agreed upon. (These methods involve a mix of stakeholder interviews, focus groups, workshops and participatory field work methods.) In course of the discussions, means were identified by which these approaches would effectively extend into Work Package 5. Two candidate project sites in Cape Town were also identified; The township Khayelitsha is certainly going to be a project location, while the other, Imizamo Yethu, may need formal approval from the South African co-funders, since it is not a recognized "poverty node". (A major advantage applicable to both sites is the already available quantitative survey data, which can be used both for this work package and possibly for the consecutive one, as well as to some extent for Work Package 5.) In planning the Needs Assessment field work, it was discovered that the current distribution of man-days funding, between the various work packages and between the two South African collaboration partners, is not sufficient for a satisfactory work-package end product. Hence, there is an urgent need for a budget revision. Finally, a preliminary time plan for the Needs Assessment field work was drawn up. While the sequencing of events in that time plan is still applicable, the plan does need revision due to the sustained delay of funding from the South African Department of Science and Technology.

*WP 4: Identification, Communication & Demonstration of targeted Best Energy Practices for the poor*

The implementation of WP 4 has not yet started.

*WP 5: Facilitation of Access to Energy Services for Rural Communities in South Africa*

The implementation of WP 5 has not yet started.

*WP 6: Capacity Development*

The implementation of WP 6 has not yet started

*WP 7: Monitoring & Evaluation*

The approach for monitoring the impacts of the APPLES project has been presented in the inception report and during the reporting period the approach was further elaborated and revised based on experiences gained in other projects implemented by the University of Cape Town. The key components of the approach include:

- Identify a handful of suitable women on each location through the focus groups

- Train the women in participatory methods
- Equip the women with e.g. disposable cameras and have them write “photographic journals”.

In addition, existing household surveys will provide the input for establishing the baseline for the monitoring activity.

#### *WP 8: Communication & Dissemination*

The establishment of the APPLES project website (applesonline.info) and keeping it up-to-date is part of WP 8. The website was established during the inception phase and during the reporting period the site was updated if needed.

#### *WP 9: Common dissemination activities*

ECN and Parallax from South Africa have participated in the contractor’s meeting held in December 2005 in Brussels. An APPLES poster was produced and presented at the meeting and Mr van der Linden gave a short presentation outlining the results of the inception mission. Very useful working relationships were established during the meeting with other COOPENER projects in the region.

### 3.2 Deviations from the work plan

Significant deviations from the initial work plan have occurred as a result of the delay in the implementation of APPLES caused by the co-financing issue. The project was put on hold for nearly a year and implementation resumed in July 2006.

A revised workplan has been discussed and drawn up with the aim to make up for time lost by allocating extra staff to the APPLES project for the rest of the project duration as soon as a final agreement has been reached with DST.

The delay in implementation obviously also affects the timing of the deliverables. The new deadlines for the deliverables based on the assumption that the financial issues will be resolved soon is presented in Annex I.

### 3.3 Update of time schedule

In this section the initial APPLES timetable as included in the Annex I to the contract is presented as well as the revised timetable which takes into account the findings of the inception phase and the delay in the implementation of the project due to co-financing problem.

Table 1 Initial APPLES timetable as included in Annex I to the contract

Project phase / Duration of the project (in months)		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32		
Work Package	Package Name																																		
1	Inception & General Management																																		
2	Planning for Improved Energy Service Provision in South Africa																																		
3	Establishing Energy-Related Priorities for Poor Communities in Urban, Peri-Urban & Rural Settings (South Africa)																																		
4	Identification, Communication & Demonstration of targeted Best Energy Practices (South Africa)																																		
5	Facilitation of Access to Energy Services for Rural Communities in South Africa																																		
6	Capacity Development																																		
7	Monitoring & Evaluation																																		
8	Communication & Dissemination																																		
9	Common Dissemination Activities																																		
	Project meetings	X							X							X							X							X					
	Project deliverables*		1	13-17	20	7	2-18-19-21	25				5-6	2-18-19-21						10-11	2-18-18-19-21	14	3			8-9-12-15	2-18-19-21	16				23	17-25	22-24	4	

Table 2 Revised APPLES timetable

Project phase / Duration of the project (in months)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38		
<b>Package Name</b>																																								
Inception & General Management																																								
Planning for Improved Energy Service Provision in South Africa																																								
Establishing Energy-Related Priorities for Poor Communities in Urban, Peri-Urban & Rural Settings (South Africa)																																								
Identification, Communication & Demonstration of targeted Best Energy Practices (South Africa)																																								
Facilitation of Access to Energy Services for Rural Communities in South Africa																																								
Capacity Development																																								
Monitoring & Evaluation																																								
Communication & Dissemination																																								
Common Dissemination Activities																																								
Project team meetings in South Africa	X												X						X																					
Project deliverables*				1-2	3	5									11		10-7	8	15	6	12-13-18	9-14		21	23	16	25-27	18			26-19-20-	28-29	17-22				24-27	30		

### 3.4 List of deliverables

The list of deliverables is presented in Annex 1

## 4. Progress regarding performance indicators

WP	Indicator	Progress
WP1	-Project Steering Committee in place	Composition PSC under discussion but not yet in place
	-Good communication and co-ordination within consortium	Communication channels have been established and are working satisfactorily
	- Significant level of participation of sub-contractors	Participation in terms of hours substantially (more than 50%)
	- timely and appropriate reporting	Inception and progress reports submitted on time
	-level and quality of work with other activities	appropriate
	-project progresses on time and budget	project experienced delay due to co-financing issue but actions have been taken to make up for time lost and achieve objectives.
WP 2	-Approval of work Programme	no progress
	- Interest expressed in starting new business	Some progress made in Highflats where interest has been expressed by local business community in the energy centre
WP 3	selected locations have significant number of people in poverty	three of the four proposed target location are poverty nodal areas
WP 4	WP 4 has not yet started	
WP 5	WP 5 has not yet started	
WP 6	WP 6 has not yet started	
WP 7	-establishing baseline	approach for establishing baseline has been developed
WP 8	-project presented to appropriate level in national government	APPLES has been presented to DST and DME, Government of South Africa
	- project results presented in the media	no progress
	- results of project posted on international web sites	results of inception mission posted on APPLES website
WP 9	-participation in contractor's meetings	APPLES participated in contractor's meeting held in December 2005

## Annex 1 Overview of current status of deliverables

<b>Del. N°</b>	<b>Deliverable name</b>	<b>Related work package N°</b>	<b>Date due</b>	<b>Actual/Forecast submission deadline</b>
1	Inception report	1	September 2005	submitted
2	Information Sheet	8	September 2005	submitted
3	First progress report	1	November 2005	submitted
4	Report on the selected locations	3	December 2005	October 2006
5	Project website established	8	December 2005	website established
6	Report on evaluation methodology	7	January 2006	January 2007
7	Report on contribution by APPLES to National Strategy	2	February 2006	October 2006
8	Evidence of co-ordination with other donor initiatives	2	February 2006	November 2006
9	Report on energy needs assessment	3	May 2006	March 2007
10	Second progress report	1	May 2006	October 2006
11	Update project website	8	June 2006	Submitted 2006
12	Training material for capacity building	5	August 2006	February 2007
13	Energy centre information material	5	November 2006	February 2007
14	Third progress report	1	November 2006	March 2007
15	Update project website	8	December 2006	December 2006
16	Interim implementation report & financial statement	1	January 2006	July 2007
17	Report on selected best practices	4	April 2007	February 2008
18	Set of implementation guidelines	4	April 2007	September 2007
19	Report from community visits	6	May 2007	December 2007
20	Material from workshops & courses	6	May 2007	December 2007

<b>Del. N°</b>	<b>Deliverable name</b>	<b>Related work package N°</b>	<b>Date due</b>	<b>Actual/Forecast submission deadline</b>
21	Report on the procedures undertaken to strengthen the existing centres	5	May 2007	May 2007
22	Fourth progress report	1	May 2007	February 2008
23	Update project website	8	June 2007	June 2007
24	Report summary from WP3&4	8	August 2007	June 2008
25	Report of capacity development needs ( when project is over what are the CB needs to continue the project)	6	August 2007	August 2007
26	Project website updated	8	December 2007	December 2007
27	Final evaluation report	7	January 2008	June 2008
28	Copies of TV and/or radio broadcasts	8	January 2008	January 2008
29	Project case study	8	January 2008	January 2008
30	Final technical implementation report and final cost statement	1	February 2008	September 2008

Annex 2: Overview table on the state of advancement (in %) of the budget expenditure per partner and per work package

<b>Work package</b>	<b>Actual/Planned Achievements</b>	<b>Total Partners</b>	<b>ECN</b>	<b>Riso</b>	<b>ECI</b>
WP 1: Inception & general Management	Actual	80 %	80 %	80 %	80 %
	Planned	80 %	60 %	80 %	80 %
WP 2: Planning	Actual	10%	10%	10%	10%
	Planned	75%	75%	75%	75%
WP 3: Priorities	Actual	15 %	5 %	20 %	0 %
	Planned	65%	65%	65%	65%
WP 4: Best practices	Actual	0%	0%	0%	0%
	Planned	0%	0%	0%	0%
WP 5: Facilitation	Actual	0%	0%	0%	0%
	Planned	5%	5%	5%	5%
WP 6: Capacity Building	Actual	0%	0%	0%	0%
	Planned	5%	5%	5%	5%
WP 7: Monitoring & Evaluation	Actual	3%	0%	5%	0%
	Planned	12%	12%	12%	12%
WP8: Communication & Dissemination	Actual	12%	15%	5%	5%
	Planned	12%	12%	5%	5%
WP 9: Common Dissemination	Actual	30%	30%	0%	0%
	Planned	30%	30%	0%	0%