



Alleviation of Poverty Through the Provision of Local Energy Services (APPLES)

Project no. EIE-04-168

**Project Deliverable No. 24:
Report on the Capacity Development Needs at
the Highflats Energy Centre**

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Abstract

The present report is deliverable no. 24 of the COOPENER project ‘ Alleviation of Poverty through the Provision of local Energy Services(APPLES)’ and covers Work Package 6. The APPLES project commenced on 1 June 2005 and is implemented in South Africa by ECN, The Netherlands, University of Oxford, UK, Risoe National Laboratory, Denmark, Parallax South Africa and the Energy Research Centre of the University of Cape Town.

The main objectives of APPLES are to understand the energy needs and energy priorities within the target communities, to determine and demonstrate the best practices for energy service provision to meet the needs of these communities, and to strengthen the embryonic networks of existing energy centres in South Africa.

The present report contains a description of the capacity development activities related to the establishment of the Highflats Energy Centre conducted in the APPLES project and provides an action plan for ongoing support of HEC with the aim to achieving independent HEC operation by the end of 2008. Furthermore, an assessment is presented of the training needs for co-op members after APPLES is ended and the identified service providers who can meet these needs.

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Disclaimer

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1. Overview

The focus of capacity development work for the APPLES project has been to support and enable the sustainable operation of the Highflats Energy Centre. As recognised at the outset of this project, a fundamental need in poor communities is identifying and recruiting local resources that properly understand conditions, and who can effectively communicate to target beneficiaries and key actors. Strengthening the capacity of end-users, entrepreneurs and local decision makers to access and finance energy services has been acknowledged by APPLES as inherent to the successful outcome of the project and so has been given priority attention throughout.

Now that the APPLES project has been completed, a key question remains: what are the capacity building needs to continue and expand the sustainable development benefits of the Highflats Energy Centre. Clearly local capacity development is key since HEC outreach is limited by the capacity of the Co-op members. Given the operational model adopted by APPLES, with the anticipated ongoing expansion of the co-op membership, there is an ongoing need for capacity development.

Some sources of support have already been put in place to provide continuity to HEC operations after the end of the APPLES project. The timing of support for APPLES provided by the UNDP/GEF-Small Grants Programme has been extended until the end of 2008, which will allow the preparation of future plans and relevant financing to sustain the operations. The continuing relationship with uBuhlebezwe Municipality is also an important factor that will help to support HEC after the completion of APPLES activities.

To meet the capacity development needs, appropriate training is clearly a key requirement and its success will be based upon the engagement of appropriate service providers. Such training is important for local HEC representatives to develop the skills required for the operation of a new business. The training provider selected must therefore demonstrate advanced business acumen, but also a good understanding of local conditions to enable the introduction and successful application of the new business skills acquired by the HEC Co-op.

The current scale of the HEC operation will naturally only address local energy needs in a very small area of rural South Africa. If the HEC model is shown to be successful by continuing its operations and attracting more membership, options for cost-effective expansion should be considered. This includes increasing the number of service providers but also the range of technical options that can be made available through the Centre.

One model that has been considered for the future development of the HEC concept is the introduction of a franchise structure. This would allow the replication of HEC throughout the KwaZulu Natal province, South Africa and potentially to other countries.

Regarding the future development of HEC, several opportunities have been explored in order to offer HEC a firm platform for future operations. Potential support is available in principle from the national Government (through the Free Basic Alternative Energy grant system or DTI Co-op Incentive Scheme), and international agents such as the UK programme and the GEF-SGP.

Overall, there is still much to address to guarantee the most effective and sustainable outcome to the APPLES project, but many opportunities have been identified during APPLES that provide great potential for HEC to expand and meet the energy-related needs of many more people in rural African communities.

2. Direct Capacity Development Needs

The need to train staff working at the Highflats Energy Centre was a key requirement for the project, and application of the best method(s) to achieve this was a particular challenge. Experience developed with community capacity development before and during the APPLES project suggested that mentoring is the only effective way to provide the lasting skills transfer that was required for the cooperative to succeed. The experience from the DME's Integrated Energy Centres suggests that the most successful operations are those that have engaged a suitably motivated entrepreneur who provides the driving force within the co-op. For HEC, the center manager Zimbili Kumalo was identified with the potential to play this role, but required intensive support from the APPLES team during the project. However, it was also important to recognize that an individual driver for a new initiative such as HEC can only be successful if the co-op consists of a receptive and driven set of individuals that will take up the challenge to succeed.

The principle capacity-building challenge for APPLES was to introduce new business concepts to the selected co-op members. There was a clear need to develop the ability of local members to enable their management of basic operations systems such as stock management (completion of stock cards, preparing delivery notes and invoices), order-books compilation and the keeping of customer records. This was provided by APPLES as part of the preparations for the launch of HEC.

This basic capacity development need also involved providing a better understanding of the HEC business concept to the Management Committee (and the HEC Manager) enabling them to pass on the required information to other co-op members. The process of targeting a small number of individuals for the detailed energy business explanations from APPLES experts, with the requirement for the Committee to pass on relevant messages, was accepted as a more effective approach than arranging only more general meetings with the whole co-operative.

By the completion of the APPLES project, the Highflats Energy Centre was established as a facility that was operated by the local staff employed, but is likely to mature to a fully-functional and cost-effective entity only if it receives on going support. Some of these ongoing needs include:

- more visits for the HEC Manager and/or Committee members to a number of successful IeCs and other coops to allow interaction with the coops and so a full first-hand understanding of relevant issues
- establishment of local community outlets by co-op members to operate firstly as sales points but also as centers for energy information and advice
- encourage the HEC management committee to proactively search for suppliers of local goods with existing local outlets, with the aim to convince these store-owners to supply energy products. This can only be done by HEC members who are fully aware of project details and understanding of the profit that can be made by vendors. (Note that telling them the market size is X means little to local vendors since they won't see that the market is accessible, unless they have the support that HEC can provide – see section 6)
- Provision of continued support to the Management Committee until each committee member can effectively describe to current and prospective co-op members exactly how the coop functions and how the members will benefit
- facilitating continued interaction with existing suppliers, and identification of new suppliers. This involves convincing relevant suppliers to provide active support by

means of road shows at the outlets in the rural areas. These have been very successfully used in the promotion of other FMCG¹ products like soap powders etc

As required, the APPLES project has certainly produced strengthened capacity among end-users, entrepreneurs and local decision-makers to access and finance energy services, develop businesses and link energy provision to local/regional economic development planning. However, it must be recognised that this capacity building cannot be restricted to a specific initiative but is rather an ongoing requirement.

The impact of the APPLES project, and the continuing capacity development needs are summarised in the table below:

| Target Beneficiaries/ Key Actors | APPLES Impact | Continuing Need |
|---|---|---|
| <i>End-users in poor communities</i> | Improved energy education and awareness to selected users ² through training and promotion | Transfer of the energy issues from co-op members to others in their communities. Also continued awareness raising for new co-o members |
| <i>Local entrepreneurs</i> | Introductory business and management capacity skills provided to locals interested in starting up new business | Business development is a long-term process requiring ongoing support. Such advice can be provided through HEC |
| <i>Energy centres and other local organisations within communities</i> | IeCs were visited to establish capacity needs. Other community vendors of energy services were invited to presentations from suppliers | Links with relevant bodies in the target communities need to be maintained to provide fora for energy-related feedback and issues |
| <i>Local authorities</i> | Excellent relations have been established with local and district municipalities, which will encourage the integration of energy issues into local development planning | An information resource, and ongoing awareness training should be available to public authorities to facilitate the development of appropriate strategy |
| <i>National authorities</i> | Close contact with the regional officer for IeCs has ensured ongoing information-sharing and relevant knowledge transfer. | To help integrate the APPLES energy centre model into the national framework for IeCs, strategic planning capacity is required by DME |
| <i>Private sector, especially suppliers of renewable & efficient energy sources and appliances, and utilities</i> | Local knowledge transfer to selected suppliers has built good awareness amongst the suppliers of the opportunities for non-grid energy supplies. | Once introduced, suppliers have their own incentive to develop relevant business. However, the involvement of more suppliers in the future should be facilitated. |

¹ Fast Moving Consumer Goods

² To ensure effective communication with local people, an understanding of English was a priority for the APPLES team and for local energy suppliers – this ensured that the messages were not misinterpreted, and allowed for the clarification of often new concepts. It was decided that co-op members should be the key audience for this interaction and therefore speaking English was a key criteria for selection.

3. Action Plan and Ongoing Support for HEC

Two essential requirements from the APPLES project were a plan of action for improved energy service delivery to the areas targeted for energy centre operation, and the provision of continued capacity development after the completion of APPLES to ensure the sustainability of HEC. These outcomes have been successfully achieved through the preparation of a detailed business plan and the extension of support from the GEF-Small Grants Programme (SGP). The business plan provides an essential foundation for all HEC activity, and has been presented (and continues to be explained) to HEC Management Committee members. The funding from GEF-SGP has enabled local APPLES team members to continue involvement with HEC, with a view to achieving independent HEC operation before year-end.³

The business plan developed (Annex 1) shows clearly that HEC represents a good income-generating opportunity for co-op members, whilst at the same time increasing energy access for poor people in remote communities. This makes it a replicable model for other disadvantaged areas in South Africa. To reach this conclusion, the plan provides a detailed assessment of all relevant operations, which provides the framework for the actions of all co-op members. It shows how HEC can bring several currently-unavailable modern energy products into the target communities. The market analysis suggests that there is a substantial market for these services (and more traditional energy products) in the uBuhlebezwe municipality that will allow HEC to become financially sustainable. The business plan is intended to show the nature of actions required to fulfil this market potential and hence increase energy access in the local areas addressed.

The overall intention of the GEF-SGP is to support the APPLES project to find a sustainable mechanism for the effective delivery of improved and environmentally sound local energy services to poor communities in South Africa, thereby offering a route towards poverty alleviation and contributing to sustainable development. For GEF-SGP, the key objective for APPLES is to bring affordable, accessible and acceptable energy services to people in and around Nkweletsheni. The three main outputs required by GEF-SGP are:

- HEC established to provide an outlet for energy supplies and appliances, and to promote the use of environmentally sound energy sources through the appropriate dissemination of information
- Capacity of HEC increased to bring environmentally sound energy services to the local communities in and around Nkweletsheni
- HEC prepared as a viable long-term business, thereby ensuring the sustainable livelihoods of the team members and the sustainable provision of energy services to previously marginalized communities

Though initially intended to be completed at the same time as the other APPLES activity, GEF-SGP have recognised the local conditions and have granted an extension until end 2008 in order to ensure the necessary capacity development of the HEC management, and conclude any attempts to agree further ongoing support for HEC activities. The original GEF-SGP project summary is attached at Annex 2.⁴

³ The external delays experienced by the APPLES project has inevitably led to less operational experience for local HEC co-op members than originally anticipated. Continued support will help to achieve this aim.

⁴ Note that this original project summary has been continuously adapted in agreement with GEF-SGP. Most notably, the limit of anticipated support to the local Switch On Energy Services business has been redirected to support HEC.

4. Training Needs for Co-op Members

In view of the anticipated capacity development needs of local staff for the Highflats Energy Centre, the local APPLES partners explored early on the potential training providers that may be suitable for HEC co-op members. Business management was expected to be a key requirement, in addition to the general energy awareness that could be provided by interaction with the APPLES partners. Two possible local training providers were identified, namely the Small Enterprise Development Association and the local Further Education College in Sisonke District. Representatives from both organisations were invited to the initial HEC development meetings. It was decided that Seda was best placed to service the HEC needs.

According to Ms Dlatu, the Regional Manager, Seda can arrange training according to the needs of HEC members. There are for example training programmes for running a cooperative as well as courses on very basic business management. At the end of the latter type of course, attendants should be ready to register their businesses as SMMEs. The cost of the courses will vary according to the type of course needed and the number of attendants. A particular benefit is that Seda is a Government funded agency and so covers 90% of the total training costs – this was clearly an attraction for APPLES, since the ongoing training need for new co-op members had not been accounted for in the original budget estimates.⁵

The Small Enterprise Development Agency (Seda) was established in December 2004 in terms of the National Small Business Amendment Act. The role of Seda includes the support and promotion of co-operative enterprises, particularly those located in rural areas. The work of Seda is carried out in line with the Department of Trade and Industry's Integrated Small Enterprise Development Strategy, which aims to:

- Strengthen support for SMMEs' access to finance
- Create an enabling regulatory environment
- Expand market opportunities for specific categories of small enterprises
- Localise small business support through a grid of Seda-coordinated information and advice access points
- Initiate a national entrepreneurship drive and expand education and training for small business
- Co-fund minimum business infrastructure facilities in local authority areas across the country

After the APPLES project teams initial interaction with Seda, the prospects for meeting the project capacity building intentions seemed to be very good. Though Seda did not yet have an office in Ixopo (18kms from Highflats), one was planned to open in the near future. It was not necessary to wait for the Seda office in Ixopo to open to be able to access training through them in that area. Most significantly, Seda has developed some training modules (on co-operatives, for business start-ups) but does not carry out the trainings itself. When they identify a group of people in need of training they source a training provider (that is appropriate and closest to the area), find a venue and start the training. Though they can cover upto 90% of the training costs, this can vary depending on the training provider.

⁵ The original APPLES proposal did not consider the option of an expanding co-operative for the operation of management of the HEC Centre. Hence the unexpected extra costs and the particular value of the Government subsidy for Seda

The initial impression was very good and the speed of Seda response seemed to be fast. The Regional Manager suggested that she send a Seda representative to the first HEC formation meeting and if we manage to sign up people there and then, they would ask them when are they (the new co-op members) available for training and start the process right away. The training providers have 5 days to respond to Seda's enquiry, after that the training can start.

Seda's Regional Manager suggested two training courses for HEC: co-op training that explains what a co-op is for, how is it organized etc, lasting 5 days, then a week's break, followed by the business training (probably for the HEC Management Committee staff and HEC Manager only) which lasts another 5 days and consists of book-keeping, risk assessment, writing business plans etc. Seda also offered assistance with the co-op registration process. The Regional Manager was confident that there would be no problem in identifying a suitable training provider in the area that we were interested in.

On this basis, it was expected that the training from Seda would commence, and ideally be completed, well before the launch of HEC. Unfortunately, the process to secure the necessary training has not been as efficient as anticipated, facing extended delays before the launch and now continued uncertainty over the details. It is however expected that the two courses planned will be offered to relevant HEC members within the next few weeks. The arrangements will be supported by the extended GEF-SGP budget.

It seems clear that this type of training for new co-op members will be an ongoing requirement and therefore reliable links to appropriate training providers will be key. It is hoped that the HEC Centre will be able to work closely with Seda in the future, despite the unfortunate time delays with the training required for the APPLES project. Should Seda fail to deliver before the APPLES project deadline for completion, training will be organised directly with the training providers, with the cost met through the GEF-SGP budget.

5. Options for Business Expansion

At the end of the APPLES project, it was already clear that the potential market for the type of services offered by HEC far exceeded the capacity of HEC to supply. This is a clear need for expansion of the business model, which is dependent upon the provision of capacity development requirements. Consequently, there is a clear need for an ongoing capacity development service to ensure that the APPLES concept can expand at a rate that will be sufficient to meet the expected demand.

One of the future capacity requirements will simply be additional staff required to operate a growing centre in Highflats or to operate any similar new centres that may be opened elsewhere. Another requirement is likely to involve the expansion of the range of technical services that are currently offered by the Centre. This would mean an additional need for training provision that is not currently in place at HEC.

One option for business expansion that has been explored briefly by the APPLES team is the potential for a franchise model. Already, the HEC approach is something like a model in that it involves a search for local outlets where the franchiser (the HEC Centre) provides all the input material and marketing support and where the franchisee (HEC Co-op members) can see existing operations that are successful. Given this inherent franchise structure and approach, it may be useful to consider the replication of the full HEC concept on this basis. This would mean the establishment of a center similar to HEC in another hub of a local municipality.

Therefore, providing that the longer-term operation of HEC can be demonstrated to be sustainable, which will require profitability from the services offered, there now seems to be great po-

tential to use this first Energy Centre as a model for others to be established elsewhere to serve rural communities in South Africa. There have been many lessons learned from the establishment of HEC. These, and the continuing lessons learned from ongoing operations, can help the HEC model to improve with replication, resulting in a national (potentially international) network of energy centres that will increase public awareness and access to appropriate energy sources. The expansion of the HEC model would also lead to extensive local capacity development, providing job opportunities and income generation for an increasing number of local people, thereby helping to develop and sustain a local market and hence improve living conditions for all.

6. Future Opportunities for HEC

Throughout the APPLES project, opportunities to support the sustainability of the HEC operation have been investigated with a view to developing capacity in the appropriate areas and hence to bring the maximum benefit to local communities in need of appropriate energy services. From these investigations, five opportunities seem to have greatest potential:

- continued support from the GEF-SGP, with the focus on small business development to supply energy services and to encourage local entrepreneurs to make use of the energy now available
- support from the UK Government (Foreign and Commonwealth Office) on the basis of the carbon reductions achieved through the supply of non-grid energy in South Africa (Annex 3)
- registration for the Free Basic Alternative Energy (FBAE) programme of the South African government, which is now managed at the local Municipality level and could subsidise a significant proportion of HEC activity (Annex 4)
- a grant from the DTI's Co-operative Incentive Scheme (CIS), which is an incentive for cooperative enterprises in the emerging economy to acquire competitive business development services (Annex 5)
- application to the National Development Agency, (NDA) which aims to contribute towards the eradication of poverty and its causes by granting funds to local organisations for the purposes of implementing development projects in poor communities

Personal contacts with representatives from GEF-SGP and the UKFCO have been made by the HEC Management Committee during the launch of HEC in Highflats. Interest was expressed by these donor agencies to support the continued operation of HEC, which would provide extended capacity development for co-op members across the region.

Registration of the HEC Co-op for FBAE has been discussed by the APPLES team with representatives from uBuhlebezwe Municipality and seems like a good possibility. According to Sindili Lithul, Financial Manager at the Municipality, the utilization of the uBuhlebezwe's R45 million FBAE grant for 2008/9 has not yet been decided. Currently the municipality's has not finalised any plans but the money cannot be touched without more senior approval. The municipality would respond to a proposal from the HEC Co-op, though the time frame involved is unclear.

An application has been submitted by the HEC Co-op to NDA and is currently under consideration for funding. Again, a significant element of any such follow-up activity will be continued capacity development, particularly through the training of new co-op members.

In this way, APPLES has laid a solid foundation for building further the capacity development needs in the local area. Any follow-up funding accessed by the HEC Co-op will certainly involve the building of such capacity and therefore APPLES will have stimulated an increased potential for individual development and extensive economic growth.

7. Immediate Capacity Building Action Plan at HEC

There are two main areas of capacity building needs that require urgent attention to ensure the sustainability and fulfil the potential of HEC, namely business operations and business marketing/growth. Several requirements within these two broad issues have been identified and will form the basis for immediate follow-up of the APPLES project:

- a) Operational and business understanding – a key requirement is business training for co-op members. Seda training has been requested for business management. Training is to be arranged as soon as possible. Follow-up with Seda is required (if Seda is not responsive within the necessary timeframe, then contact will be made with the training providers directly). (If funding is restrictive, then HEC Management Committee members and the HEC Manager will be targeted to ensure detailed and focussed training). Urgent operational needs include:
 - Security arrangements with relevant individuals. Budget for security = 3 x R1500/month. Additional security needs to be considered for future budget
 - VAT registration to be arranged
 - Make arrangements for electricity (Eskom) and water (District Munic)
 - Finalise the business model for HEC. Arrange and record operations procedures in place; assess any additional operational requirements and provide support as required
- b) Ongoing Marketing & Business Expansion of HEC
 - Follow up Village Voice coverage of the launch
 - Register HEC as a service provider for FBAE (present HEC to the management team at the Local Munic and look out for FBAE tender to be launched soon)
 - Consider replication prospects such as franchise
 - Consider carbon income potential
 - Arrange for paraffin tank and packaging of paraffin at HEC (job creation)
 - Start-up energy-related business training for local entrepreneurs

Annex 1: Business Plan for the Highflats Energy Centre Co-op

HIGHFLATS ENERGY CENTRE

Business plan

Tjasa Bole (ECN)

Dean Cooper (Parallax)



APRIL 2008

Executive Summary

The Energy Centre at Highflats in the province of KwaZulu Natal is the direct outcome of the Alleviation of Poverty through the Provision of Local Energy Services (APPLES) project. The overall goal of the project is to find a sustainable mechanism for the effective delivery of improved local energy services to poor communities in South Africa, thereby, offering a route towards poverty alleviation and contributing to sustainable development.

To achieve this, it builds on one of the most important initiatives of the South African government with regard to overcoming barriers to a better provision of energy, which is the DME's IeC Strategy & Action plan of 2005 that aims at establishing a network of self-sustaining energy centres with the purpose of facilitating and extending access to modern energy services to the poor population. Together with the petrol companies, the DME established a number of centres based around the sale of petrol, diesel and paraffin. The main objective for the establishment and operation of an Energy Centre under the APPLES project is to demonstrate an alternative model to the current format of IeCs being rolled out by DME. The APPLES project seeks to establish an energy centre model that is self-sustaining without a petrol company as the anchor.

Although a new approach is required for the APPLES project, this must still meet the overall objectives set by DME for such energy centres. As indicated in DME's IeC Strategy & Action Plan of 2005, the four key needs are: education, access, affordability and key partnerships. An Integrated Energy Centre is intended to be "a one-stop energy shop owned and operated by a community cooperative and organised as a community project. It provides energy solutions to communities, access to affordable safe and sustainable energy services and information" (DME, 2005). To ensure those solutions are really the most adequate ones and reflect the true needs of the community, a participatory needs assessment was carried out in 2007 to identify the priority energy needs of the community to be met by the new Highflats Energy Centre (HEC).

The energy centre to be established under the APPLES project will be linked to the Multi-Purpose Community Centre in Highflats. The centre will be structured as a three-division enterprise, comprising a *supply and distribution hub*, an *information centre* and a *sales point*. The sales point is expected to become an important retail business where energy products and services will be made available at affordable prices for people living within walking distance from the centre and people visiting Highflats on other business. The supply and distribution hub of the centre will give the co-op members a chance to become distributors of energy products in their own communities by giving them access to energy products easier and cheaper and encourage them to pass these savings on to their customers. In this process, HEC will stimulate further development of the distribution network into more remote areas. An information and education service will form an important part of the centre, where people can increase their knowledge on issues such as energy safety and different supply options, as well as take part in practical demonstrations of best practice technologies, such as solar lanterns and solar cookers etc.

The centre will be organized as a cooperative to ensure maximum buy-in and support of the community. Anyone with a serious interest in energy provision or a business that needs reliable and affordable energy supply will be welcome to join the cooperative. The centre will have three distinct income streams: sales revenues, the cumulative cooperative membership fee and donations or grants (at least in the beginning). The aim is for the IeC to become completely self-sustaining and cross-subsidize the information division with revenues from the retail and distribution divisions, although at first, it is realistic to expect a need for outside funding for the non-income generating part of the IeC's activities.

In addition to the public-private funding sources, a Board to ensure transparent and credible governance will be elected. The most significant, and cost-effective, personnel for the energy centre will be members of the co-operative. The cooperative scheme will ensure high motivation

of the people involved in running and contributing to the centre's activities and its proximity to a range of offices offering other services within the MPCC constitutes a strategic location. Government backing and bulk orders gives the centre high leverage in negotiation prices for its energy supplies that will be transferred to its customers. Nevertheless, the aim of the centre is not to compete with existing businesses currently providing limited energy services in the area, but rather allow the possibility to join the cooperative and benefit from more convenient supplies themselves as long as they transfer the price reduction to the final users. All this ensures an effective, locally run and sustainable enterprise to help overcome the many barriers to a provision of modern energy services to poor rural areas in South Africa.

The energy centre will bring into the area several currently unavailable modern energy products thus increasing sustainability and importantly also safety of use. For example, pre-packaged paraffin that is less likely to be ingested by children and solar powered devices are currently not being distributed in the area. Our market analysis suggests that there is a substantial market for those (and more traditional energy products) in the uBuhlebezwe municipality that will allow for the centre to financially sustain itself. It must be stressed however, that the aim of the energy centre is not profit but increased energy access for the poor population in the area, which is why the mark-up on the products sold by the centre is minimal and only covers the centre's operational costs. On the other hand, affiliation with the energy centre represents a clear business opportunity for members of the energy co-operative that will be able to generate a fair income by distributing energy products in their communities. Our financial projections show that the very small loss generated by the energy centre can be compensated with the annual membership fee contributed by the co-op members.

In summary, the business case represents a good income generating opportunity for co-op members while at the same time increasing energy access to for poor people, which makes it a replicable model for other disadvantaged areas in South Africa.

Annex 2: Framework of Current GEF-SGP Support for HEC

Alleviation of Poverty through the Provision of Local Energy Services (APPLES)

Project Supported by UNDP/GEF Small Grants Programme, South Africa

The APPLES project in full has several components, with this proposal to UNDP/GEF intended to support the activities relating to Switch On Energy Services, the rural community business that is the local partner in KwaZulu Natal. The key environmental problem that this proposal seeks to address is the contribution to climate change from the use of primary fossil fuels in remote rural areas of South Africa. Lack of access to affordable, modern energy sources means that the residents of such communities are forced to rely on the use of fuelwood, paraffin and, where available, coal. In addition to the negative environmental impact from combustion emissions and the degradation of forests (natural carbon sinks), this presents a range of associated problems related to poor health and safety conditions. The burden of wood collection, a task that is usually carried out by women and children, is also time-consuming (reducing the time available for productive activity or education) and often hazardous.

The overall goal of the APPLES project is to find a sustainable mechanism for the effective delivery of improved and environmentally sound local energy services to poor communities in South Africa, thereby offering a route towards poverty alleviation and contributing to sustainable development. In its tenth year of democracy, South Africa has a positive outlook after years of economic and political turmoil that led to energy sector instability and a need to find accessible and affordable energy supplies to previously unserved communities. The APPLES project aims to meet this need.

Key barriers that prevent the target poor communities from taking advantage of energy options with minimum negative environmental impact are lack of capacity, lack of infrastructure, lack of integration of initiatives, a wrong energy focus at existing facilities that does not meet the needs of poor communities, and poverty itself. For these reasons, poor communities in South Africa lack accessibility to affordable and acceptable energy sources, services and appliances. Consequently they must rely on basic fossil fuels, making a significant contribution to climate change exacerbation.

The aims of the APPLES project funders - including the European Union, the Dutch Government, the Danish Government and the South African Government - in addition to the aims of the UNDP/GEF Small Grants Programme, allow for activity that can overcome these barriers. The use of locally available resources, often based on renewable sources of energy, will address both the security of supply and the need to reduce carbon emissions, whilst increasing the access of consumers to a range of cost-effective and efficient energy options that will help to develop competition. On this basis, and in order to meet the energy demands of poor communities in South Africa, a focus of the APPLES project will be the promotion of renewable energy sources and energy efficiency.

The principle objectives of the APPLES project are to understand the energy needs and energy priorities within the target communities, to determine and demonstrate the best practices for energy service provision to meet the needs of these communities, and to strengthen the embryonic networks of existing energy centres that will supply energy information, products and services to

the poor communities. The project will target communities in urban, peri-urban and rural areas. In the longer term, job creation and income generation from business development within these communities, based upon energy efficient use and access to new secure energy supplies, will represent a major contribution to poverty alleviation.

The target community addressed by Switch On, the recipient of the financial support requested from this proposal to UNDP/GEF, is Nkweletsheni, near Ixopo in KwaZulu Natal. Those aspects of the APPLES project that relate to this proposal are as follows.

The key **aim** of the project is to build effective and sustainable energy services capacity within the targeted rural community of Nkweletsheni in KwaZulu Natal. The **immediate objective** is to bring affordable, accessible and acceptable energy services to people in and around Nkweletsheni. The main **outputs** and **tasks** are:

Output 1: Capacity of Switch On increased to bring environmentally sound energy services to the local communities in and around Nkweletsheni

- Consultation – with all key actors, target beneficiaries and other stakeholders to ensure acceptance and buy-in. Local and cultural requirements and protocols must be taken into account.
- Training & Recruitment – to build the capacity of the Switch On business.
- Developing supply chains –for modern energy sources and appliances to remote areas
- Identifying and accessing finance - required by various key actors, as well as by end-users, who may need loans, leasing or other financing schemes in order to afford modern energy.

Output 2: An Integrated Energy Centre (IeC) established to support the local Switch On business, to provide an outlet for energy supplies and appliances, and to promote the use of environmentally sound energy sources through the appropriate dissemination of information

- Identification – to find an existing community establishment or prepare a new structure
- Training & Recruitment – to build the capacity of the IeC.
- Strengthening retail aspect – this activity will ensure the sustainability of the IeC. The best retail options will be assessed, with particular consideration of environmental impact.
- Marketing & promotion – communication and dissemination of appropriate energy use and sound environmental practice to target end-users

Output 3: Switch On prepared as a viable long-term business, thereby ensuring the sustainable livelihoods of the team members and the sustainable provision of energy services to previously marginalized communities

- Business Plan development – to ensure the viability of Switch On and the IeC, the development of business plans will be facilitated.

The APPLES approach to bringing appropriate energy services to remote communities is based upon a “bottom-up” intervention. In the rural community served by Switch On, the business is formed from members of the local community who are trained to provide an essential basic service for their own community. This innovative model dramatically reduces the overheads associated with the extended supply chains and remote management structures that are necessary for centralised operations with head offices in main towns. This cost reduction allows appropriate energy services to be offered at affordable prices. Through this method of replacing primary

fossil fuels, the Switch On model has great potential for widespread replication, thereby helping to address global environmental problems.

In rural communities, women are often responsible for energy needs but men still retain the decision-making authority, despite long periods of absence away from the household due to work commitments in urban centres. The APPLES approach to energy service allows direct interaction with women in the community, since the local Switch On team has full understanding of all the social and cultural requirements. The services provided by Switch On can then be tailored to meet the needs of the women, who are responsible for energy consumption and the local environmental impact. In this way, the gender imbalances often evident in rural communities are addressed by APPLES.

In order to select appropriate members of the community to form the Switch On team, to ensure community buy-in to the services provided and to allow the expansion of Switch On business to a level of sustainability, close consultation with all relevant stakeholders is a key element of the APPLES project. This participation in the development of the Switch On business model is essential to establish the most effective, and sustainable, means of meeting the community needs.

Annex 3: Free Basic Alternative Energy Programme Outline

FREE BASIC ALTERNATIVE ENERGY – SUMMARY

Department of Minerals and Energy

Introduction

The Free Basic Alternative Energy programme's objective is to support indigent households in un-electrified areas by providing them with free basic energy to meet some of their basic needs such as cooking, etc. This intervention by government is therefore aimed at alleviating some of the difficulties associated with access to energy in those households. The focus in Free Basic Alternative Energy is on the indigent households, it is important that the proper identification of the indigent households is emphasized for the program to yield desired results. The Municipalities should exercise diligence in selecting the beneficiaries of the FBAE program so as to maximize the impact and uplift the un-electrified indigent households. Municipalities have a responsibility to administer and provide FBAE to indigent households within their jurisdiction.

Objectives

The objectives of the policy are the following:

- to facilitate the provision of basic energy needs to indigent South African households that do not have access to electricity;
- where possible, to address a whole suite of socio-economic issues that arise from inadequate provision of energy to households, inter-alia. job creation, etc;
- to minimise health risk by promoting safe use of these energy carriers;
- to ensure that energy carriers chosen are sustainable, safe and easily accessible to the indigent households;
- to maximize efficient use of energy carriers for the benefit of all citizens.

Funding of FBAE

Funding is a critical aspect to a successful implementation of any poverty alleviation initiative including FBAE. In line with national government support to its programme, funds are already allocated to Municipalities for this programme through the Equitable Share grant disbursed by DPLG to local government. These funds are classified as Free Basic Electricity/Energy, where no electricity infrastructure exists; these funds must be channelled to fund FBAE. Municipalities are encouraged to supplement the FBE grant from their own income in ensuring that indigent households receive the FBAE.

Beneficiaries of FBAE

The sole intention of FBAE policy is to assist in the provision of energy to households. Municipalities are well placed to take a leading role in providing this service as well as identifying the right beneficiaries of FBAE.

Guide for selecting FBAE areas

The FBAE programme must commence in areas:

- most distant from the grid electricity;
- where no Solar Home System **Programme is planned**
- where there are no immediate plans **to electrify the area;**
- where energy poverty is prevalent.

Guide to energy carriers to be funded through the FBAE programme

Municipalities must select suitable energy carrier/s to be funded and supplied through their areas. The following aspects need to be considered carefully before a final choice is made of the carriers:

- the energy carrier must be safe and environmentally friendly;
- supply channels must be available or easily be established within the jurisdiction of the Municipality;
- the energy carrier must be affordable to the Municipality;
- the energy carrier must be sustainable;
- provision of such an energy carrier must create job opportunities for local people where possible;
- the energy carrier must be adaptable to indigent households

Conclusion

Given the scale of energy poverty in certain areas, it is expected that an affected Municipality will quickly engage the role players in ensuring that the affected community is served as per objectives of the policy. A Municipality:

- Has an obligation to identify a suitable energy source(s) for its community and ensure its effective distribution to the identified indigent households;
- May choose various energy carriers as the situation may dictate;
- Must give energy to the value of R55 as a minimum to an un-electrified indigent household.
- Must ensure that the FBAE programme reaches indigent households; and
- Has a responsibility to ensure fraud prevention measures are in place.

Annex 4: UK Government Low Carbon High Growth Programme

The Global Opportunity Fund - Climate Change and Energy programme was a programme of climate security and energy security projects in 15 priority countries, including South Africa. The Programme objective was to contribute significantly to UK climate change and energy security (CCE) objectives: "*Achieving climate security by promoting a rapid transition to a sustainable low carbon, global economy and access to clean, secure and affordable energy supplies for the UK*" through project work in three focal areas:

- Strengthening the evidence base which supports ambitious CCE decision making
- Engaging new constituencies and mobilising political support to promote strong and early CCE action
- Creating the enabling regulatory environment that will stimulate a shift in investment towards a low carbon economy

In particular, the Programme supported and contributed to delivery of the Government's International Strategic Priority (ISP) 6 "*Achieving climate security by promoting a faster transition to a sustainable, low carbon global economy*". It also contributed to other foreign policy priorities, including sustainable development (ISP 7: "*Promoting sustainable development and poverty reduction underpinned by human rights, democracy, good governance and protection of the environment.*")

The Global Opportunities Fund has recently been replaced by the Strategic Programme Fund, which is a programme of climate security, energy security and economic reform projects in 22 priority countries. It is the result of a merger of the old Climate Change and Energy and Economic Governance programmes, and therefore still incorporates most of the previous CCE objectives.

The Low Carbon High Growth programme does this through supporting delivery of the following outcomes:

- A visible and accelerated shift in investment initiated in the major economies towards low carbon.
- Political conditions created for an equitable post-2012 agreement at the UNFCCC COP in Copenhagen in December 2009 of sufficient ambition to avoid dangerous climate change.
- Risks to UK and EU energy security managed through more diverse and reliable external sources of supply and more efficient global consumption.
- Increased international commitment to an open, stable and equitable low carbon global economy delivering higher standards of living.

The combined programme has £13.2m available in 2008-9. Two bidding rounds have been completed, and a third bidding round is underway. The next bidding round, for projects starting in April 2009, will be announced in December.

Annex 5: DTI Co-operative Incentive Scheme

The definition of the incentive scheme

The Co-operative Incentive Scheme is a 90:10 matching cash grant for registered co-operatives. The maximum grant that can be offered to one co-operative entity under the scheme is R300 000 (three hundred thousand Rand). The CIS is an incentive for cooperative enterprises in the emerging economy to acquire competitive business development services.

The aim of the incentive scheme

- Promote co-operatives through the provision of a matching grant
- Improve the viability and competitiveness of co-operative enterprises by lowering the cost of doing business
- Assist co-operatives to acquire their start up requirements
- Build an initial asset base for emerging co-operatives to enable them to leverage other support
- Provide an incentive that supports broad-based black economic empowerment

Eligible entities

- Be incorporated and registered in South Africa in terms of the Co-operatives Act of 1991
- Be operating or will operate in the emerging sector
- Adhere to co-operative principles
- Be an emerging co-operative owned by historically disadvantaged individuals
- Be rural and semi-urban biased
- Be biased towards women, youth and people with disability

Qualifying criteria for the incentive scheme

- Business development services
- Business profile development
- Feasibility studies / market research
- Production efficiency
- Technological improvement projects
- Plants and machinery
- Start-up requirements
- Working capital requirements

Applying for the co-operative incentive scheme

Application form: The application form should be completed in full, dully signed and submitted to the DTI by the applying co-operative to indicate the intention to participate in the CIS

Proof of registration: Applications must provide proof of incorporation in the form of a certificate of registration indicating the name of the cooperative, its registration number, information about the registered office and the names of directors

Proof of decision to apply for funding: The applying co-operative must be able to provide a resolution for it to apply for the CIS. This could be by way of attaching the minutes of the co-operative Board on the session taking the decision to apply for the grant.

Enterprise Development Plan / Pre Diagnostic Report: The report is for assessing the enterprise development needs of the co-operative. It may be compiled with the assistance of a field official

Co-operative Business Plan: Applicants must attach a business plan. A template is included in the application forms

Quotation: Should an application include the purchase of goods, three valid and comparable quotations should be attached to it

Tax clearance: The applicant must submit a valid tax clearance certificate

Certified copies of IDs of Directors: The applicant must submit certified copies of the identity documents of the Directors of the co-operative

Constitution: The applicant must submit a certified copy of the constitution of the co-operative applying for the grant.