Final Report Mid-Term Evaluation

The Energy and Environment Partnership Programme
Phase II
Southern and East Africa

Ministry for Foreign Affairs of Finland

Submitted by:

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Disclaimer

The opinions, views and interpretations expressed in this document represent those of the team carrying out the Mid-Term Evaluation, which are not necessarily shared by the development partners (Ministry for Foreign Affairs of Finland, the Austrian Development Agency and the UK Department for International Development) or the EEP Coordination Office.

The present Mid-Term Evaluation is an evaluation of the Energy and Environment Partnership (EEP) Programme Southern and East Africa with a view to preparing recommendations on how to finalise Phase II and to reflect on the merits for and possible features of a Phase III. The evaluation team has not considered that it falls within its mandate to pass judgement on whether Phase II was an improvement on Phase I, and has interpreted its mandate as a forward looking one.

The MTE, in carrying out its mandate, has drawn on a combination of key informant interviews, field visits and an on-line survey as principal data inputs. These processes provided valuable data and the response rate to the on-line survey was high, particularly for Phase II projects with a response rate of almost 50%. Nonetheless, while the conclusions drawn are considered to be valid, this was not a "random sample" in the statistical sense.

The evaluation team appreciates the comments received from both the development partners and the EEP Coordination office. All comments have been considered and those that were deemed pertinent have been incorporated.

Energy and Environment Partnership Programme - Phase II - Southern and East Africa

Abbreviations and Acronyms

ACEF Africa Clean Energy Finance Initiative

ACP African, Caribbean, and Pacific

ADA Austrian Development Agency

BDS Business Development Services

BOOT Build, Own, Operate, Transfer

CC Climate Change

CfP Calls for Proposal

COP Conference of the Parties

CN Concept Note

CSO Civil Society Organisation

CSP Concentrated Solar Power

CSR Cooperation Social Responsibility

DAC Development Assistance Committee

DBSA Development Bank of South Africa

DfID Department for International Development

EAC East African Community

EACREE EAC Regional Centre for Renewable Energy and Energy Efficiency

EAPP East African Power Pool

ECO EEP Coordination Office

EE Energy Efficiency

EEP The Energy and Environment Partnership

EIA Environmental Impact Assessments

EOP End of Programme

EPC EEP Partner Committee

EQ Evaluation Question

ETG Energy Thematic Group

ESMAP Energy Sector Management Assistance Programme

EU European Union

EUEI-PDF EU Energy Initiative Partnership Dialogue Facility

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Energy and Environment Partnership Programme - Phase II - Southern and East Africa

FIs Financial Institution

FTE Full-Time Employee

GHG Greenhouse Gas

HH Household

ICP International Co-operating Partner

IE International Expert

JC Judgment Criteria

KES Kenyan Shilling

KEF Knowledge Exchange Forum

KM Knowledge Management

MD Man Days

MFA Ministry for Foreign Affairs of Finland

MTE Mid Term Evaluation

M&E Monitoring & Evaluation

NCs National Coordinators

NCG Nordic Consulting Group

NGO Non-Governmental Organisation

NPO Non-profit Organisation

OCI Outcome Indicator

OPI Output Indicator

OECD Organisation for Economic Co-operation and Development

PAYG Pay-As-You-Go

PD Programme Director / Project Document

PPA Power Purchase Agreement

PV Photovoltaics

RCO Regional Coordination Office

RBM Results Based Management

RE Renewable Energy

REACT Renewable Energy and Adaptation to Climate Technologies

REC Regional Economic Community

REEP Regional Environmental Education Programme

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Energy and Environment Partnership Programme - Phase II - Southern and East Africa

REEEP Renewable Energy and Energy Efficiency Partnership

SACREE SADC Regional Centre for Renewable Energy and Energy Efficiency

SADC Southern African Development Community

SAPP Southern African Power Pool

SE4ALL Sustainable Energy for All

SEA Southern and East Africa

SHS Solar Home System

SP Service Provider

SvB Supervisory Board

TANESCO Tanzania Electric Supply Company Limited

TOR Terms of Reference

UNFCC United Nations Framework Convention on Climate Change

VAT Value Added Tax

VfM Value for Money

VLEs Village Level Entrepreneurs

Glossary of Terms

"The Mechanism"

The EEP Mechanism refers to the funding mechanism and its structure, i.e. the challenge fund, launched through six calls for proposal (under Phase II) divided between the innovation and market creation windows.

"Programme Management"

For the purposes of this evaluation, the programme management relates to the KPMG Finland team and implemented through the EEP Coordination Office.

"EEP Governance"

The governance structure relating to the EEP programme covers the Supervisory Board, the EEP Partner Committee, ECO and the National Coordinators, as described in the Programme Document.

"Project Performance"

Although individual project performance has not been assessed in detail during this assignment, through the projects visited and M&E data, the evaluators' views on whether the projects will contribute to the achievement of programme objectives are provided.

Executive Summary

The Ministry of Foreign Affairs of Finland commissioned this independent mid-term evaluation (MTE) of the Energy and Environment Partnership (EEP) – Southern and East Africa Phase II to provide accurate and independent information on the implementation of the second phase of the programme. The period covered by the MTE is from the beginning of Phase II (August 2013) until 31st July 2015 (2013-2015).

The objectives of the evaluation were to:

- Provide evidence-based findings relating to the programme mechanism, its management arrangements, governance structure and project performance;
- Based on these findings, to provide recommendations for the remaining period of the implementation of Phase II and to inform the design of a third phase.

1.1 Background and Context

The Energy and Environment Partnership (EEP) was developed in response to the growing recognition by governments, international development agencies and development intervention implementers that access to energy is a fundamental driver of socio-economic progress.

The EEP was initiated in 2010 by the Ministry of Foreign Affairs (MFA) of Finland, the Austrian Development Agency (ADA), and was subsequently joined by the Department for International Development (DFID). The aim of the programme was to address the issues and barriers to the uptake of renewable energy technologies across Southern and Eastern Africa. The EEP programme provides two types of grant financing support: seed funds to innovative projects and capital investment to the scaling up of projects. During implementation, projects receive implementation and business development support and are monitored. In addition, it aims to improve knowledge of what works, under which circumstances and why, as well as the drivers and barriers to the implementation of RE/EE interventions, to influence policy and the enabling environment.

The programme has completed the first phase (Phase I) of implementation (2010-2013) managed by the Development Bank of South Africa (DBSA). KPMG Finland is managing Phase II of the implementation through the EEP Coordination Office (ECO) in Pretoria. The implementation of this second phase is due to be completed by July 2017. The EEP geographical scope covers 13 countries, namely Botswana, Burundi, Kenya, Lesotho, Namibia, Mozambique, Rwanda, Seychelles, South Africa, Swaziland, Tanzania, Uganda, and Zambia.

1.2 The Methodology

The evaluation was undertaken across a number of axes: i) the OECD-DAC criteria, and ii) 4 areas of focus, namely the EEP mechanism, programme management, the governance framework, and project performance, to inform recommendations and the lessons learned. By defining the specific areas of focus, it has been possible to ensure that the priorities of the MFA in terms of the forward-looking approach could be addressed.

The framework for the evaluation was based on 10 <u>overarching evaluation questions</u> (EQs) (Annex E1) and an evaluation Theory of Change (Annex D) constructed to

address the five principal OECD/DAC evaluation criteria but also the various crosscutting issues, which are important elements in any major evaluation.

The MTE team undertook field visits to 22 projects in 5 countries and had telephone/skype conversation with one additional. Meetings were held with all the donor partners – MFA, DFID, and ADA - ECO, SADC and EAC secretariats, 4 National Coordinators, and 3 external stakeholders. An online survey was sent to 143 project developers and 54 responses were received (covering 58 projects, of which 47 were from CfP 5-10).

1.3 Summary of main findings

The EEP programme has contributed significantly towards achieving its outcomes and objectives during the first 2 years of Phase II. The programme has triggered investment and innovation in projects that address the under-served market segment due to its emphasis both on sustainable business models and development impact.

The EEP is very relevant in relation to national and regional policy. Whilst national governments and regional bodies are focusing on energy access, national initiatives are still generally aiming to implement large-scale electrification through extensions of the national grid. This is not always socially inclusive as the governments cannot afford to meet the needs of the last mile customer; neither does this address the needs of non-connected households in areas covered by the grid. Energy efficiency is addressed through top-down policy reform (as defined in policies), which primarily affects those that are on the grid and using appliances.

The Mechanism

The challenge fund mechanism is working well. The mechanism has achieved its objective of triggering innovation and the expansion of renewable energy technologies. While effective, the two-stage CfP could be tightened up to reduce the number of full proposals that are accepted to progress to full proposal stage but are subsequently rejected at EPC meetings on the basis of non-compliance or inadequate information. The increase in the grant ceiling has improved the level of impact of the EEP programme, opening up funding to large-scale projects.

The projects supported by the EEP Programme have in general been selected for their innovative value or their potential for scaling-up. There are a number of projects that are using tried-and-tested models, for example improved stoves production, however there are examples of business models combining energy and mobile phone technology (especially for financial transactions, servicing, and stock management), which has grown in importance in the region since Phase I was implemented. The mechanism was considered to be slow to turn around decisions and provide feedback in some cases, cited as a problem particularly for start-up companies. The requirements to report on impact are not the priority for the private sector as they respond to market forces, resulting in ECO collecting impact data during site visits.

The sustainability of the mechanism is heavily dependent on donor commitment, which was not secured for the full period of the EEP Phase II until 2014. The need for a mechanism, such as challenge funds that allows for EE/RE business models to be developed persists on the basis that traditional financing institutions are still risk averse and financing options make bottom-of-the-pyramid approaches unfeasible. To

¹ Relevance, Efficiency, Effectiveness, Impact, and Sustainability

enhance sustainability, there therefore needs to be a more flexible solution to the funding pool with the inclusion of a diversity of supporters over longer periods. The EEP challenge funds aim to support projects that then become commercially sustainable and are capable of leveraging own financing.

Project developers in Kenya, South Africa and Tanzania are the main applicants in terms of volume and number of the EEP grants, reflecting the level of awareness and readiness to develop innovative and scale-up projects. However, increasing awareness has led to a growing number of applications from other countries, and grants have now been attributed to beneficiaries in all 13 participating countries, reflecting an increasing interest and/ or ability to prepare good proposals.

Programme Management

The implementation of 6 CfPs during Phase II has resulted in a portfolio worth €112 million of which 34.5% is funded through the EEP. According to monitoring data produced by ECO, all projects are on track.

The ECO team was confronted with a significant challenge due to the 113 projects that were carried over from Phase I to Phase II. There was a need to get to grips with these projects, most importantly to begin disbursements due to the significant hiatus in funding. At the same time, the management systems to monitor and manage the grants were established, and the next CfPs prepared for launch. Significant improvements have been made in the management systems since Phase I.

There is no doubt that the ECO has worked very hard to be efficient. It should be recognized that launching and completing 6 CfPs within 18 months is a great achievement. The processes appear to generally have been effective although the number of rejected full proposals was still significant, despite the support received from ECO. For example out of 49 rejected full proposals 10 proposals were rejected because they were incomplete, unclear or inconsistent.

The projects visited that have communicated with the ECO team have confirmed that the support they received was efficient and useful. Communications have primarily been managed through email, although the grant management team does phone/skype their projects; in addition 22 Phase II projects² and 61 Phase I have been visited by the ECO team.

The management systems include a results-based framework, which guides the programme implementation. The budget for M&E doesn't include in-depth impact studies that would be greatly beneficial to the programme to understand better whether the mechanism is achieving the results that the M&E system assumes as the basis of its calculations. The yearly targets in the results based framework have been linearly extrapolated upwards based on the 2014 levels, but some of these targets appear to be easily achievable ahead of schedule based on current progress. In general the indicators used are appropriate and reflect well the priorities of the EEP programme, but indicators related to the business advisory support and innovation are missing.

The programme management is directed at the level of activities and there is a general focus on administering the programme, as opposed to providing technical (energy and environment) and business support and optimising on project outcomes. This is in part due to the nature of the results-based contract and the way it is being implemented. There is also a tension between the EPC and ECO, primarily due to a

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² as at 31st August 2015

lack of a common understanding of principles of the programme (such as the basis for project selection) and inadequate programme analysis/ oversight, necessitating close management. As a result of the budget reductions during contract negotiations, the adequacy of the budget for the knowledge management and business advisory activities is debated even though this forms part of the Terms of Reference, albeit somewhat vaguely. Now that the CfPs have been completed, the ECO team is committed to focusing on the other components of the programme.

Knowledge exchange is limited by the fact that an up-to-date overview of the project portfolio is not readily available. A knowledge-management vision has been presented but is on hold until the portfolio analysis is performed in October 2015.

EEP Governance

The current governance structure has facilitated the efficiency of the implementation significantly since Phase I. The Supervisory Board (SvB) includes the donors as well as a representative from each of the RECs – SADC and EAC. However the latter are considered to be observers to the SvB and their role and legitimacy is not clear given that the decision-making responsibility rests with the donors.

The EPC is committed to ensuring good results and takes an active part in ensuring the quality of proposals that are finally approved. There is constructive engagement between the donors and recognition that MFA is overall responsible for the delivery of the programme. However there remain challenges associated with the different organisational cultures, emphases and approaches of the donors and the coordination unit. The segregation of responsibilities and membership between the SvB and EPC needs to be maintained to reflect their purposes.

Due to issues of transparency and engagement, and following the evaluation of Phase I, the role of the NCs was reduced in Phase II. This appears to have had a negative effect on their continued involvement in the programme. As with the RECs, the NCs role is almost perfunctory although the intention is to work with them to influence policy through the knowledge exchange platform. An effort has recently been made to re-engage the NCs but clarity needs to be provided on what value the EEP adds to the NCs. For projects that have a strong reliance on the legal and regulatory framework, the lack of engagement with NCs is a missed opportunity.

The governance structure is appropriate but it does require some revision to make it more relevant to the government members. In order to make the most of the time dedicated by national government staff, it is critical that any knowledge sharing activities are catered to their national context and is relevant for them. The national/regional context and barriers to RE/EE should drive the knowledge management agenda, particularly for the bottom-of-the-pyramid but also at the regional and national policy level.

Project Performance

The projects selected under the CfPs 6-10 during Phase II are reportedly on track to deliver on the agreed milestones. However, 20% of projects that responded to the online survey stated that they were experiencing challenges.³

 $^{^3}$ Where the analysis is split between Phase I and Phase II, 16% report problems for Phase II, with 33% reporting challenges for Phase I projects.

The most significant barrier to projects that wish to scale up remains to identify attractive financing that is not overly risk averse when it comes to RE/EE. Therefore, the reliance on challenge funds continues post-implementation.

One of the greatest successes of the mechanism is the use of principles from other sectors, such as the Pay-as-You-Go (PAYG) principle to make energy accessible to the poor, through solar home systems for example. However, there continues to be an unserved market – those households whose ability to pay (or current energy consumption) is too low to make a commercially viable business by providing an alternative to their present energy sources.

The impact of the EEP programme has not been possible to assess with any reliability. The data used in the M&E framework is based on assumed CO_2 savings and benefits (jobs, savings and income) and has not been verified. Data is not collected by projects on impact. In-depth studies are required to establish the impact of the interventions that have been implemented so far.

The inclusion of the private sector is a more sustainable approach to improving energy access for the poor, as long as the business case remains attractive and the requirement to incorporate a development impact is maintained. The greatest challenge for sustainability of the programme interventions is securing financing on attractive terms in order to scale-up projects. It is therefore important to focus on assisting projects with the potential to scale-up to identify possible sources of financing.

1.4 Recommendations

This section covers the recommendations for the remainder of Phase II, with the next section focussing on the recommendations for Phase III. The recommendations cover the following areas of focus: The Mechanism; Programme Management; EEP Governance; Project Performance; Results-based Contracting and Monitoring & Evaluation. They are based on a series of detailed findings described in Section 4.

Overall Recommendation for Phase II:

It is recommended that the remainder of Phase II is focused on providing business development support to improve project sustainability, producing knowledge that is catered for and relevant to specific national contexts, and influencing RE/EE policy in EEP partner countries by sharing these knowledge products and engaging NCs.

The Mechanism

It is recommended that: during the remainder of Phase II, the work that has begun in developing new partnerships with similar programmes and defining knowledge management vision continues. In addition, effort is placed into improving the commercial viability and financing of projects for scale-up, and business advisory support is prioritised. The specifics of the topics of focus can be guided by the portfolio analysis (but should include commercialisation and scale-up) and may have implications for the skills set mobilised in ECO to reflect a more technical profile.

Programme Management

It is recommended that: the programme management system maximises the potential inter-linkages and synergies between its activities, establishing efficiencies by combining activities. Feedback between implementation units within ECO is provided formally and routinely, specifically between the M&E, grant management and knowledge management teams.

EEP Governance

It is recommended that: the EEP legitimise the role of the National Coordinators and its own role vis-à-vis the National Coordinators so that EEP outputs (projects, knowledge management, etc.) support the NCs in engaging in RE/EE policy in their contexts.

Project Performance

It is recommended that: the EEP focuses on supporting on-going projects attempts to scale-up through business advisory services, through encouraging the banking/finance sector to support RE/EE and through linking developers with financing institutions/investment funding.

Results-based contracting

It is recommended that: the activity budget is reviewed and expectations of the EPC in terms of results to be achieved under the remaining outcomes, specifically OC2 and 3, are defined explicitly. The contract should then be converted to a lumpsum contract that is paid based on achievement of the defined results and deliverables.

Monitoring and Evaluation

It is recommended that: the M&E activities combine elements of problem solving at individual project level with a lessons-learning approach which impacts on future RE/EE strategies, including whether RE/EE interventions funded remain on course to achieve their development objectives and the bottom-of-the-pyramid focus. The targets set for the indicators should be reviewed to take into account actual achievements and potential achievements, in order to make those more realistic.

1.5 Recommendation for a Phase III.

<u>Overall Recommendation for Phase III:</u> It is recommended that EEP goes into a third phase, building on the current model by adopting a more differentiated implementation approach between start-up and scale-up projects. Further, that EEP maintains the development impact emphasis, diversifying the sources of funds to include financing institutions and other investors.

The Mechanism

It is recommended that: the EEP continue as a challenge fund mechanism, retaining its development impact focus and with an expanded funding pool (which could include additional donors but also financial institutions) opening up for a blend of financing instruments to support the scaling-up of interventions.

Programme Management

It is recommended that: programme management setup for EEP Phase III reflects both the administrative/ financial management responsibilities, as well as the energy sector through the inclusion of a regional think-tank or knowledge sharing institution that can coordinate knowledge management within the region.

EEP Governance

It is recommended that: a strategy for the active involvement of NCs and RECs needs to be developed assessing the potential benefits for the national governments through EEPs knowledge management activities (e.g. knowledge about projects' scale-up potential, financing opportunities, and legal/ institutional bottlenecks and possible options to resolve these). The possibility of establishing a formal agreement with national governments and regional institutions should be investigated, spelling out obligations for EEP and the NCs and RECs. The partner governments should be required to contribute by appointing an NC and allocating associated resources.

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Project Performance

It is recommended that: support to innovative and scale-up projects be continued, while ensuring that there is a strong focus on development impact, and on women and girls, as part of the selection criteria; and that business development support is provided to develop a pipeline of projects that continue receive technical and financial support into the scale-up phase.

Energy and Environment Partnership Programme - Phase II - Southern and East Africa

1 Introduction

1.1 Background and Context

The Energy and Environment Partnership (EEP) was developed in response to the growing recognition by governments, international development agencies and development intervention implementers that access to modern energy services is a fundamental driver of socio-economic progress.

The EEP was initiated in 2010 by the Ministry for Foreign Affairs (MFA) of Finland. the Austrian Development Agency (ADA), and was subsequently joined by the UK Department for International Development (DFID). The aim of the programme was to address the issues and barriers to the uptake of RE/EE technologies across Southern and Eastern Africa. The EEP programme is effectively a challenge fund that seeks to support innovative test projects, as well provide capital support to the scaling up of large-scale projects.

The programme has completed the first phase (Phase I) of implementation (2010-2013) managed by the Development Bank of South Africa (DBSA). KPMG Finland is managing Phase II of the implementation through the EEP Coordination Office (ECO) in Pretoria. The implementation of this second phase is due to be completed by July 2017. The EEP geographical scope covers 13 countries, namely Botswana, Burundi, Kenya, Lesotho, Namibia, Mozambique, Rwanda, Seychelles, South Africa, Swaziland, Tanzania, Uganda, and Zambia.

1.2 Purpose and Scope of the Evaluation

The aim of the Mid-Term Evaluation (MTE) is to provide an evidence-based independent assessment of the implementation of the second phase of EEP in Southern and East Africa. As stated in the Terms of Reference (TORs – Annex A), the second phase (2013-2017) is roughly halfway through its implementation at the date of this MTE (July - September 2015). The time span for the MTE covers the period from the beginning of Phase II to the present day (2013-2015). The implementation of the programme under Phase II also includes a number of projects that were initiated under Phase I but which were completed, terminated or are ongoing under Phase II. These projects are supported and monitored by ECO. The MTE therefore incorporated Phase I projects, although the emphasis and more indepth analysis has been on Phase II projects.

The TORs particularly emphasise the recommendations and forward-looking view with the aim of improving the performance of the EEP during the remaining part of Phase II but also with a view to informing the design of Phase III, if a next phase is agreed upon. The TORs also require that the MTE analyses in detail the effectiveness and potential impact of both the programme and its current mechanisms and modalities of implementation.

The emphasis was on providing an evidence-base that is credible, reliable and useful. Toward this end, the MTE undertook field visits to 22 projects (20 project developers) in 5 countries⁵ and had a telephone conversation with an additional

⁵ Three of the countries, Kenya, Tanzania and South Africa were recommended in the TOR.





⁴ Out of the 108 projects that were listed as ongoing in the project portfolio of 30th June 2015

project. Meetings were held with all the donor partners - MFA, DFID, and ADA -ECO, SADC and EAC secretariats, 4 National Coordinators, and 3 external stakeholders.

1.3 Summary of Progress of the EEP Programme

Since the programme's inception in 2010, 1796 projects have been contracted, 68 of which were contracted through the Calls for Proposal (CfP) 6-10 launched under Phase II. A further 10 have been awarded under CfP 11, July 2015 and are undergoing the process of signing contracts, according to information provided by the MFA'. At the start of Phase II, the EEP Coordination Office (ECO) inherited 1138 projects from Phase I and was required to undertake a significant amount of work to ensure all the records were in order and to take over the management and monitoring of those projects. There appears to have been significant pressure to recommence project disbursements due to the interruption in funding between the two management contracts, causing problems for some projects.

In the two years since the start of Phase II, the most significant achievements include the launch of 6 CfPs (CfPs 6-11), which attracted 623 concept notes and resulted in the contracting of 78⁹ projects (CfPs 6-11) with a total budget of over €80.68 million (CfP 6-10 only), 37% of which is provided by EEP grants - the other 63% being provided by own contributions raised by the project developers themselves. The EPC and ECO team put significant effort into developing an extensive results-based framework, which was approved in May 2014, against which the monitoring and evaluation team are working to collect data through site visits on project completion. So far, verified data have been obtained for 61 completed projects (through on-site verifications). The Grant Management Team has established communications with projects and undertaken 22¹⁰ project visits under Phase II.

In addition, the recruitment of the Programme Director in December 2014 has intensified the activities towards implementing the knowledge management and networking components. During the first half of 2015, the EEP programme has been presented at 10 international events and has been marketed through associate websites. As the CfPs are now completed, greater emphasis will now be placed on building the knowledge management component.

The programme has achieved the targets set for this stage of the implementation with respect to achieving access to energy, installed energy capacity, job creation, CO₂ savings and economic benefits.

As per email from ECO on the 27th August 2015





 $^{^{6}}$ Unless otherwise stated, the statistics provided relating to the project portfolio are based on the project overview provided as at 30th June 2015.

 $^{^{7}}$ There are some differences in the numbers provided by MFA, ECO and the minutes of EPC meeting. An updated table with these numbers was requested from ECO. Information was provided in the form of 12 documents - 11 minutes of meetings, and a table from CFP6. The information from the minutes of meetings requires the manual counting of decisions taken. This information should be maintained by ECO in an easily accessible format as a performance measure.

⁸ Provided by ECO during interviews.

⁹ 68 projects contracted under CfPs 6-10 plus an additional 10 under CfP 11 as at 24th July 2015.

1.4 Methodology

The evaluation was carried out in 5 of the 13 project countries (Kenya, Tanzania, South Africa, Botswana and Rwanda), including one regional project, and incorporated the regional policy elements through discussions with SADC, EAC and other external stakeholders.

The evaluation was undertaken across a number of axes: i) the OECD-DAC criteria, and ii) 4 areas of focus, namely the EEP mechanism, programme management, the governance framework, and project performance. The two axes combined inform the recommendations and lessons learned provided in Chapters 4 and 5. By defining the specific areas of focus, it has been possible to ensure that the priorities of the MFA in terms of the lessons to be learnt and the forward-looking improvements could be addressed.

The framework for the evaluation was based on 10 overarching evaluation questions (EQs) (Annex E1) and an evaluation Theory of Change (Annex D) constructed to address the five principal OECD/DAC evaluation criteria 11 but also the various crosscutting issues, which are important elements in any major evaluation. 12 These questions informed the development of the data collection tools, notably the interview guidelines and the online survey questionnaire (Annex E2 & 3).

Data Collection

The MTE team adopted a mix of data collection measures including:

- 1. Desk review of documentation
- 2. Semi-structured interviews with:
 - a. Programme funders MFA, DFID, ADA (6 separate meetings)
 - b. ECO implementation teams (on 7 separate occasions)
 - c. 11 projects from Phase I
 - d. 12 projects from Phase II
 - e. SADC and the EAC
 - f. 4 National Coordinators
 - g. 3 external stakeholders.

See Annex C for a full list of interviews.

3. Online survey distributed to all 143 project developers to which 54 13 responses were received covering 58 projects. 83% of these responses were submitted by projects contracted under CfP 5-10, thus implementing under Phase II.

¹³ Of the 58 projects, 10 covered the 80 projects funded under the first 4 CFPs (12.5% response rate); and 48 responses were received from the 99 projects managed and implemented under Phase II (48 responses out of 99 projects, giving a 48.5% response rate)





Relevance, Efficiency, Effectiveness, Impact, and Sustainability

¹² These additional criteria include participation, rights, gender, inequalities, and climate - as also discussed in the MFA Evaluation Manual.

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The interviews were held over a period of 4 weeks (13th July – 26th August 2015), two of which were carried out in the field (20th – 31st July 2015). The field phase included project visits in Botswana, Kenya, Rwanda, South Africa and Tanzania, as well as meetings with the MFA and DFID, Regional Economic Community (REC) representatives at SADC and the EAC, National Coordinators (NCs), donors that are active in the sector, and ECO (programme management, grant management, and M&E teams). A full list of persons consulted and projects visited is provided in Annex C.

Figure 1 below summarises the approach that was adopted in this MTE.

Figure 1: The evaluation approach

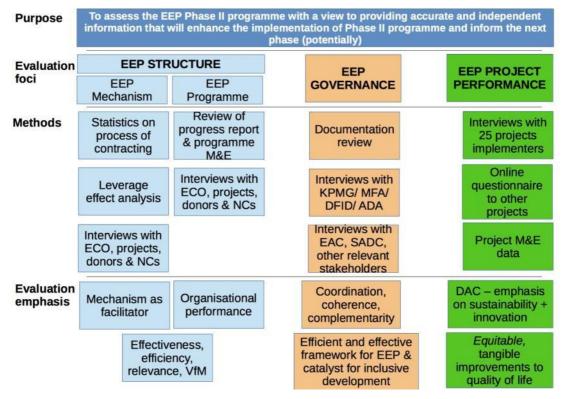


Figure 1 shows the methods used and tools employed within each area of focus, and the corresponding evaluation emphasis. In terms of the EEP structure, the emphasis is placed on effectiveness, efficiency, relevance and value for money.

1.5 Limitations to the Evaluation

The MTE TORs require a focus on outcomes and potential impact. Phase I projects are at a more advanced stage of implementation; however the M&E framework of these projects had not been defined at the outset, and projects were not required to report on programme level indicators. The majority of Phase II projects have recently commenced and therefore data, which are collected at the end of the implementation to inform programme outcome indicators, were not yet available for many of them. The sample of 61 projects for which this data exists was used.

The assessment of the programme attempted to establish patterns and evidence and not to focus on individual cases. However, respondents often focus on specific cases to illustrate a point and the generality of that statement is difficult to gauge. The



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online survey allowed the team to validate some of these statements by providing a more broad indication of the frequency of occurrence.

Further validation was often not possible due to the scarcity of quantitative or other clearly documented evidence. Weaknesses in portfolio analysis and the availability of contract monitoring data (both of projects and the programme management) has led to some potential inaccuracies in the statistics quoted in this report due to the need for the consultant to obtain this data by searching a multitude of documents.

2 Major Findings and Analysis

The following sections provide the analysis of findings. In order to ensure that analysis is coherent and understandable, it is presented according to the DAC criteria, informed by the evaluation questions, but is broken down in accordance with the evaluation foci (the EEP mechanism, the programme management, governance and project performance) presented during the briefing and de-briefing sessions and illustrated in Figure 1. This is to ensure that the different levels of the findings of the mid-term evaluation are clearly reported¹⁴.

2.1 Relevance

The regional and global emphasis on energy access and the role of the private sector in addressing these needs has formed the foundations of the EEP programme. The interviews with the donors active in the energy sector, as well as the EAC and SADC, confirmed that programmes supporting the private sector as the implementing agent are gaining traction, not only in terms of large-scale infrastructure projects but also to secure energy access for the poor through off-grid systems; the latter driven by the cost of investment in national grid extension to customers remote from the grid. The focus on RE/EE is in line with Finnish development policy, DFID's Energy Access campaign, as well as the SE4ALL agenda. The emphasis of the programme on identifying solutions for the bottom-of-the-pyramid addresses vulnerable groups and supports a rights-based approach. The focus on the private sector is important as it is now recognized as a critical driver of economic growth, which contributes significantly to poverty reduction and higher living standards for poor people. In addition, customers are able to make personal choices and prioritise their needs.

In terms of overall energy and development policy, the projects supported align well with policies of partner countries and in the region. All the partner countries of the EEP are signed up to the SE4ALL agenda, with the exception of the Seychelles, and have to varied extents committed to supporting RE/EE in their national policies. The EEP programme is continuing to promote adoption of RE/EE in countries where these topics are not a priority, even though policies may be in place.

A strong ongoing focus in EEP partner countries remains on extending the power grid by conventional means, although the share of renewable energy is increasing through a number of initiatives - PPA, feed-in tariffs and linking renewable energy to the grid. However, the national power utilities throughout the region remain very conservative - which creates barriers for renewable energy. The emphasis for national governments and the Regional Economic Communities (RECs) is on "installing megawatts" and therefore the larger schemes attract greater support and attention. The adoption of renewable energy continues to be countered by resistance due to the recent discoveries of oil and gas in several EEP countries and redeployment of coal in the face of unreliable hydropower.

There is no clear regional mandate of the EEP, apart from supporting some projects that are implemented in more than one country in a specific REC – there is no

14 It should be noted that not all foci are applicable under each DAC criteria section, for

example programme management is not relevant to discuss under impact.



aligned with the development priorities and policies of partner country

governments?

Danish Energy Management & Esbensen
A part of Danish Management Group

current requirement for transboundary cooperation directly linked to EEP, although regional integration and trade is a policy priority for both regional organisations SADC and EAC. Within the regions, there is some effort being made towards regional integration within the energy sector with the East African and Southern African Power Pools (EAPP and SAPP respectively). However, these institutions are developing slowly, establishing their role, and are focusing on institution building.

At a national level, the incorporation of off-grid energy in rural electrification plans is increasing although grid-based solutions are still prioritised by national governments. For the last mile customers, it makes sense to shift focus away from extending the grid in favour of off-grid systems in the light of the related costs, power outages and generating capacity constraints. The focus may need to be on how to address the specific energy needs of non-connected households - also in areas covered by the grid - through energy interventions most appropriate to their living conditions.

The emphasis in energy efficiency policy is on the role of government to introduce the standards and regulations necessary to improve the efficiency of the technology available on the market. These national reforms are likely to take a significant amount of time to be passed, operationalized and have an effect but, more importantly, do not directly address the needs of the poor, in so much as energy efficient equipment is typically more expensive and requires a greater up-front investment, with the exception of improved cookstoves. The policy frameworks do not place any importance on user behaviour, the drivers of consumption at a household level, or necessarily on incorporating energy efficiency in routine planning (transport, town and spatial planning), even though many of the EEP partner countries are experiencing power crises. However, the tangible impact of the inefficient use of biomass has created a drive that supports the reduction of traditional biomass use, bolstered by environmental policy as well.

The current objectives of the EEP programme are relevant although the ways in which they are achieved may benefit from a more nuanced or differentiated approach depending on the stage of development of RE/EE initiatives. This is discussed further on in this document. The setting of targets and the collection of data related to the objectives are discussed in detail in Section 2.7. The unique status that the EEP has is that it manages to differentiate itself from other, comparable initiatives that are trying to achieve a similar objective but the very strong EEP emphasis on development impact. EEP is facilitating the expansion of an approach that encourages solutions for the under-served (bottom-of-the-pyramid) market segment, rather than targeting the quick wins.

It is clear that the EEP partner countries are at different levels of putting into practice their RE/EE policies. There are therefore differences in terms of the readiness of some countries to engage in projects. This may also be linked to the investment climate and enabling policies around renewable energy, for example, duty-free importation of solar products, VAT exemptions, etc. While there is no impetus to differentiate between countries, it may be necessary to distinguish between how start-up projects are supported and other large-scale initiatives, which may encourage some of the less practiced project developers forward. This is discussed in more detail further on in the document.

2.1.1 Relevance of the EEP Mechanism

The consulted project beneficiaries, donors, and the RECs confirmed that the EEP mechanism as a challenge fund is of great value and addresses a continuing need to

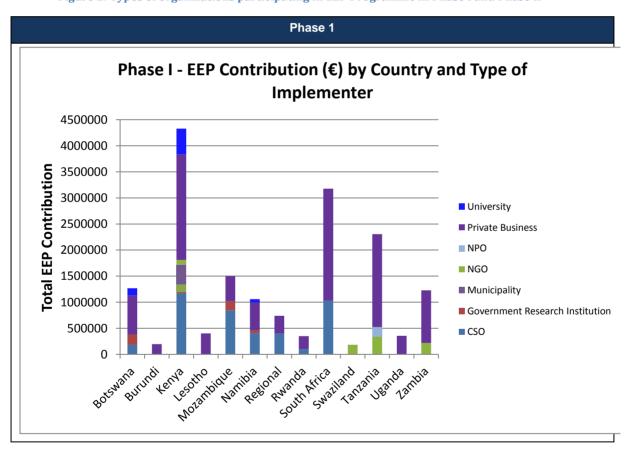




support RE/EE projects that would not have secured commercial funding. Over 90% of on-line survey respondents confirmed that the EEP challenge fund mechanism is appropriate to initiate interventions in the RE/EE sectors. The majority of projects visited confirmed that the EEP funds enabled the project developers to move forward in developing and/ or launching a project concept that would otherwise not have been feasible to fund either through their own funds or through conventional financing mechanisms. One of the major barriers to this is the continued high cost of capital offered by traditional financial institutions. Whilst some projects report that the availability of financing is improving, supporting RE/EE projects is still considered risky by these institutions.

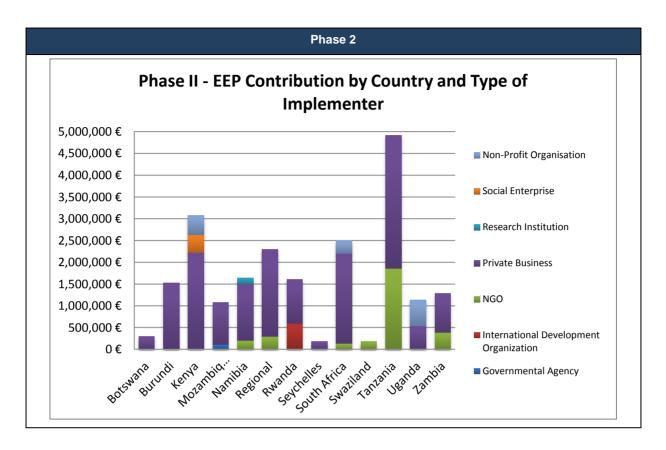
There is evidence that the participation of the private sector has been particularly notable, as indicated by the total project budgets for each type of organizations in each of the EEP countries (Figure 2), which indicates that the intended change in focus has been successful. This has become increasingly apparent across the partner countries from Phase I to II, with only a few NGOs participating in Phase II in Tanzania.

Figure 2: Types of organizations participating in EEP Programme in Phase I and Phase II





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The 58 projects covered by the online survey (83% of which were contracted under CfPs 5-11) confirmed that the EEP programme enabled them to undertake projects that they would not have been able to do without the grant. Principally, the EEP was seen as providing a capital injection not available on the private market (83%), reducing the risk of investment (67%) and improving the project's business case (54%).

A number of respondents did agree (40%) that the project allowed the company to pursue a project in line with the institution's corporate social responsibility (CSR) strategy. Only 15% of survey respondents acknowledged that technical support in project preparation and design provided by EEP ECO improved the project viability. However, it was clarified by ECO that feedback on project proposals was provided by email to all project developers who submitted a full proposal.



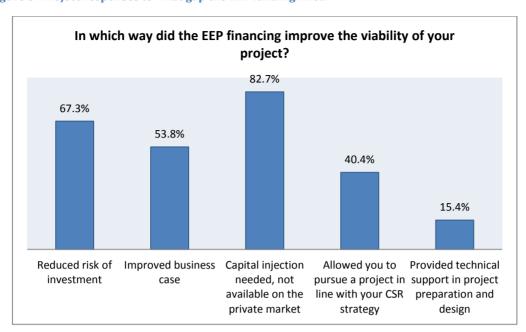


Figure 3: Project responses to what gap the EEP funding filled

The mechanism provides significant support for start-up companies but the policy for scaling up projects is not clearly defined. It was apparent that the financing needs of the project developers varied depending on the nature of the organization, the nature of their services, and the stage at which they were in developing the initiative. The funding windows - market creation and innovation - provided for a distinction between project types. The design of the mechanism made a provision for high-risk support. The DFID business case anticipated significant (60%) project failure implying a greater willingness by DFID to take risks on projects deemed to be promising. Still, the EPC has enforced a stringent project approval process to sift out projects that were not considered by the EPC to be based on a well-defined proposal. This was specifically the case for projects where the business model was not considered to be sound¹⁵ or when co-funders were not secured. Defining the likelihood of failure or the threshold for risk is challenging. This has not been described clearly according to the type of risk, be it financial, technical, strategic or operational, which may have made it possible for the EPC to adopt a more flexible approach and which also resulted in a debate between EPC and ECO on how to define "risk".

Whilst there is a general enthusiasm for the continuation of the seed funds to initiate innovative or development-related projects, some projects reported that there was inadequate support to up-scaling of existing projects that would have a much more significant impact.

In a number of cases the project proposal was rejected when the business model was not considered sound. Some reasons mentioned are: High consumer price / Commercial feasibility not clear; Insufficient potential to scale up; Insufficient understanding of challenges with consumer financing models; Risk not addressed; Lack of feasibility study or market research; or Business model too ambitious or unconvincing. Some projects could not demonstrate support of key stakeholders e.g. feedstock, consumers of energy or co-funders.





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EQ 2
To what
extent have
the renewable
energy/energy
efficiency
interventions
been
designed to
improve the
conditions of
people living

in poverty?

For grid-related projects, it is not easy to attribute the benefits directly to the poor, although such projects increase the share of renewable energy in the energy mix. Off-grid projects, and specifically small-scale solar solutions, are more likely to have a tangible and direct impact on living conditions for the marginalized. It is therefore important to question whether the role of EEP should be to fund renewable energy preparatory projects that could obtain funding from programmes to improve the overall grid infrastructure, such as Power Africa, SE4ALL, African Development Bank, EU-Africa Infrastructure Trust Fund, US-African Clean Energy Finance Initiative, etc. It could also be perceived as positive that the EEP is funding both grid and bottom-of-the-pyramid solutions, provided that there is an innovation or market-creation angle. The emphasis on community benefits, management or ownership would differentiate the grid-based interventions relevant to the aims of the EEP programme.

The need for innovation at the bottom-of-the pyramid is significant for the project developer. The main reason is that the business model needs to be robust enough to optimise on the low profit margins and inability or unwillingness to pay upfront costs by the poor. There are a number of successful business models that reflect this innovation. This includes projects that have removed the requirement for upfront costs and donated equipment, although in other contexts, this has proven to be less sustainable.

The use of PAYG (pay-as-you-go) technology and leasable home energy systems have made interventions at the household level much more accessible to poor people, specifically due to the removal of the up-front investment costs. However, it is apparent that the application of a PAYG system based solely on consumption may not prove to be feasible and has, in a number of cases, required a revision of the business model to a lease-till-you-own principle. The need to ensure a specific minimum turnover means that the initial premise and/or target group on which the businesses were designed are not adhered to, although they are still achieving a significant impact.

The mechanism has not attracted a significant number of innovative energy efficiency interventions, although there are 12 improved cookstove projects. Some applications were rejected on the basis that the action did not benefit households but the applicants private business/ institution. The feedback from interview respondents indicated that this might be due to a lack of capacity in the sub-sector (technical expertise) but also that there is a lack of knowledge of how to establish viable business models that address energy efficiency at the bottom-of-the-pyramid. The support EEP has primarily provided is to cookstove projects of which there are a significant number across the region.

The challenge fund mechanism has been adapted from an approach that has been used for the NGO sector extensively. It has been suggested that the grant application/ reporting requirements applied could be better harmonised to the nature of a private business. There is an emphasis on the traceability of funds and the demonstration of a development impact, which is seen to complicate the use of the mechanism for private sector developers. Development impact is generally not a priority for private sector investment and therefore measuring it is an additional task. Data is currently collected by the M&E team on programme impact.





2.1.2 Relevance - EEP Programme Management

The design of the programme management arrangements in Phase II aimed at addressing some of the issues and challenges highlighted during Phase I related to lack of capacity within the management team and lack of a comprehensive programme monitoring and evaluation framework. Therefore a more results-based and coherent monitoring and evaluation structure has been established and a larger team of experts allocated to the programme's oversight.

The initial contract negotiations between the service provider, KPMG, and the MFA required significant cuts to be made to the initial budget proposed by KPMG. This has been a stumbling block during the implementation as the compromises made were seen to reduce the availability of resources to deliver to the extent anticipated. The implications of this are discussed further in Section 2.6.

The MTE team was requested to look at two elements of the programme management design namely: the current results-based M&E framework, and the results-based contract under which the service provider is operating. These two main issues are considered in Sections 2.6 and 2.7 due to their importance to the overall design and implementation.

2.1.3 Relevance - EEP Governance

The governance of the EEP programme has transitioned significantly from Phase I to Phase II. There is evidence of clear commitment to the programme on the part of each of the contributing donors in line with their respective organisation's priorities. The MFA, DFID and ADA have a collaborative and constructive partnership that is efficient in that the MFA has delegated authority for the oversight of the programme. DFID provides guidance to the selection of projects and the implementation of activities, and is an active partner in decision-making. ADA has fully delegated the running of the EEP to MFA and monitors progress through the reporting provided.

The governance structure is in principle well thought through, with the differing levels of authority and input being demonstrated by the Supervisory Board (SvB), the EEP Partner Committee (EPC) and the EEP Coordination Office (ECO). However, there is awareness of the flaws of the relevance of the current structure in three respects:

- 1. The donor-driven approach.
- 2. The differing organisational cultures, emphases and approaches of the donors and the coordination office.
- 3. The value added to the National Coordinators and RECs.

The donors are the main decision-makers of the programme. The RECs are included in the SvB but appear not to have an active role in decision-making. The role of the NCs has been decreased in Phase II as compared to Phase I and that has also lessened their participation in the EEP. Linked to that is how the EEP programme can add value to RECs and NCs through their participation in the programme. National and regional ownership is lacking, partly explained by the decreasing role of influence of the national and regional partners. It is however also clear that this challenge is recognized and the intention is to improve the policy influencing element of the programme during the remainder of Phase II by engaging the RECs and NCs in the knowledge management activities.

To what extent have the renewable energy/energy efficiency interventions been

EQ2

designed to improve the conditions of people living in poverty?





2.1.4 Relevance - Project Performance

The relevance of the selected projects has been very carefully assessed in the vetting procedures undertaken by the EPC. These procedures are discussed in more detail under "Efficiency" in Section 2.2 however it is apparent that the clear definition of windows of funding and the increase of the grant ceiling opened the programme up to projects that, a) were at a different stage of implementation, i.e. were ready to scale up, and b) would potentially have a greater impact due to the level of ambition. Therefore, the changes made in expanding the scope of the EEP programme has enabled the programme to potentially have a greater impact on the lives of the poor at scale.

The EEP programme mechanism is based on a model that has been successfully applied to the NGO sector. Therefore, the expectations of some of the project respondents appear to be different to those of the donors, who cite the need for the EEP programme to reconsider how it engages with the private sector to respond to the need for efficiency and a continuous cash flow. Maintaining the focus on the development impact is a key element in ensuring that the poor benefit from the supported projects and is necessary to ensure that business concepts are not adjusted during implementation to significantly reduce their development value.



Two projects developed by Lean Energy Solutions aim to link the problem of huge waste disposals from coffee and sugar manufacturers with the need for locally sourced fuel. Lean Energy Solutions therefore received EEP funding to develop Briquette manufacturing based on coffee husk and bagasse. Furthermore, supported the development of BOOT (Build, Own, Operate, Transfer) based boiler furnace conversion from being fired by fossil fuel briquettes. Through the BOOT agreement, local manufacturers, such as Spinners & Spinners Ltd (textile manufacturers), save 25% on their fuel costs. Lean Energy Solutions took responsibility for replacing their old diesel furnace with a new boiler, which Lean then also operates and maintains for 6 years. This improves the environment, avoids import of fuel oil, while at the same time solves the problem of the disposal of coffee husk and sugar bagasse.

Project: KEN4003 and KEN602

2.2 Efficiency

2.2.1 Efficiency - the EEP Mechanism

The EEP Mechanism has attracted 623 project proposals for funds through 6 CfPs (CfP 6-11) since the beginning of Phase II. This was achieved during 18 months, reflecting the dedication of the ECO and donors. The current application process followed is outlined in the diagram below.





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Of the 623 Concept Notes (CNs) received, 78¹⁶ contracts were awarded under CfPs 6-11 (7 are still pending responses to queries). This is an award rate of 12.5%. For each proposal that has been selected, eight CNs had been submitted, indicating that a significant amount of work is required to identify projects that are considered to be sound according to the evaluation criteria used. Prior to evaluation of the CNs, 36-64% (different for each CfP) of the CNs were screened out by ECO before being passed for evaluation by the EPC, mainly due to compliance issues. Of the submitted proposals, 47-75% has been awarded presumably reflecting the significant support for proposal development at that stage¹⁷.

¹⁷ Please note that this data had to be derived from minutes to the EPC as it was not available from ECO. The data may therefore be inaccurate due to changes after the EPC meetings.





¹⁶ There is a contradiction between data from the minutes of EPC meetings and the project list in terms of contracts awarded. The current figure includes the 68 projects on the list (30th June 2015) plus 10 contract awards under CfP11 (confirmed by MFA).

Development of **ECO** CfP documentation Approval of CfP **Donors** Project Launch of CfP Developers Preparation and External submission of **Concept Notes** evaluators Pre-screening Evaluation in four areas (technical, business, development, and business & administration) Memo of recommendation exchange **EPC** Selection of EPC-ECO-**Concept Notes** Invitation to developer submit full proposal (incl. Preparation and feedback) submission of **Draft Full** Feedback and Proposal cross-check of Preparation and draft submission of Final Full Proposal Memos of recommendation Q&A exchange **EPC** questions **EPC-ECO**to proposals developer Verification with **Project** Developer **EPC Selection of**

Figure 4: Project Selection Process - from CfP to Final Selection

Survey respondents confirmed that the two-step process was appropriate and ensured that developers did not spend a significant amount of time on developing a proposal only for it to be rejected. This view was also held by the MFA and DFID, although the volume of work generated for ECO was considered to be more than for a single-step process.

Full Proposals

As shown in Figure 5 below, 88% of the survey respondents from Phase II considered the application process to be adequate or very adequate. Only 3 % of Phase II respondents did not approve of the use of the Concept Note. 32% cited the time taken between stages (CN, proposal and contracting) as being a weakness.

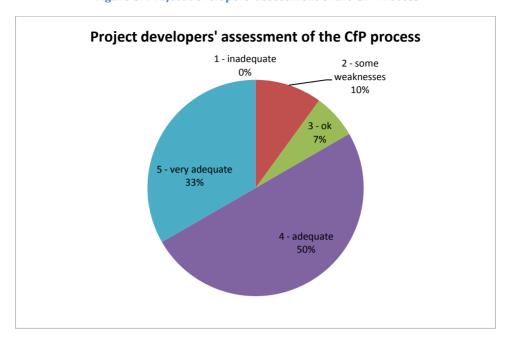


Figure 5: Project developers' assessment of the CfP Process

The two-step process ensures that efficiency and resources are optimized such that only the most relevant and deserving CNs are selected to the next stage of developing a proposal. Clear guidance is provided to applicants through the website and application instructions, as confirmed by project developers in the online survey and through consultations. The process could be improved by making the CN requirements more stringent, although this may disadvantage innovative start-up projects, or by improving the filtering process.

The rate of acceptance of full proposals ¹⁸ (70%) reflects the additional support provided to project developers during the proposal development phase. This is an important issue, as there appears to be a tension between the need to comply and provide security (in terms of co-funding) and the flexibility required to test out innovative concepts. The guarantee of securing co-funding is one of the conditions for securing the grant and this needs to be in place by the first project milestone.

An analysis of the EPC meeting notes from CfP 6-11 shows the reasons for rejection of the full project proposals. The reasons can be grouped into the following categories of issues: Applicant's experience; Formal issues related to application; Non-compliance with EEP requirements; Lack of additionality of EEP funding; Cofunding not assured; Individual donor requirements; Budget issues; Business model; Sustainability; Technology; and Value for money. These categories are explained more in detail below. Of the 164 full proposals discussed at the EPC meetings, 49 projects were rejected, most often based on several reasons.

As shown in Figure 6, quite a high number of rejections were related to issues concerning the quality of the **application** itself or compliance with **EEP requirements**. But there are also concerns related to the proposed project itself, including the **business model** proposed, or the **value for money** (the cost of the

 $^{^{18}}$ 49 of the full proposals submitted were rejected.





project compared to the number of beneficiaries) or the cost of the outputs in general.

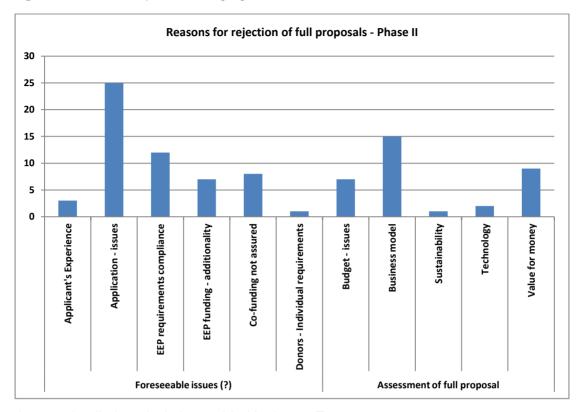


Figure 6: Reasons for rejection of full proposals

A more detailed analysis is provided in Annex F2.

The challenge fund as implemented has seen both the emergence of a number of experienced project developers who have been successful on several bids (the "usual suspects") but has also been criticised for the number of rejections and the accompanying opportunity cost for developers who have invested unrewarded time in the process. One of the most significant complaints received regarding the design of the mechanism is the time lapse between the approval of the CN, full project proposal and contract signature, which the ECO estimates to last 7 to 8 months. A number of survey respondents highlighted this as being a risk to innovation projects, which are generally start-up projects and susceptible to delays in receiving financing. 39% of survey respondents expressed concerns regarding the time lapse between the selection of the project and the signing of the contract. However, for the projects visited the turnaround times were not assessed to be longer than other similar grant facilities¹⁹. So the question is perhaps how to speed up the selection and contracting process for start-up projects.

Finally, the CFP mechanism has varied significantly in the spread of RE/EE projects throughout the (Southern and Eastern African) region covered by the EEP, with the lion's share of projects concentrated on a few countries (South Africa, Kenya, Tanzania). EEP contributes 49% of its funds to the projects in those countries (including Phase I and Phase II) up to 30th June 2015. Projects contracted in Phase II so far are dominated by Tanzania followed by South Africa and Kenya (Figure 7).

¹⁹ Data was not available at project level on the specific contract signing date.





Projects per country and phase

Phase I

Phase II

Phase II

Phase II

A Construct Reports Burnering Region Reports Re

Figure 7: Number of projects per phase and country

The distribution of projects that were still ongoing by country up to 30th June 2015 is presented in Figure 8 below. The same countries, Kenya, South Africa and Tanzania, have the largest number of projects being managed in Phase II.

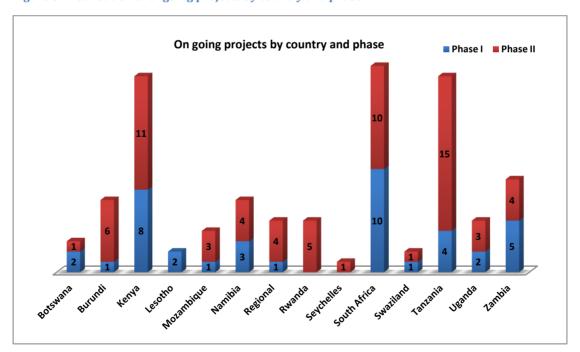


Figure 8: Distribution of ongoing projects by country and phase

These geographical trends may be linked to the readiness of project developers in these countries, or the lack of awareness of the EEP mechanism across the region. It was reported that NCs had been more active during Phase I in mobilizing interest in





the mechanism. During Phase II, the CfPs were promoted at the Botswana RE conference, National Biogas Conference of South Africa, Power & Electricity World Africa, SADC ICP meeting, Vaasa Energy Week and the Team Finland event arranged by the Embassy of Finland in Pretoria. The CfP 11 was also advertised in Botswana and Burundi, and marketed on the Internet through relevant associations. or project/ organization websites. .

However, the primary aim of the EEP mechanism is not to get equal representation across all countries. There may also be inter- or intra-regional expansion of businesses and projects based on successes under the EEP programme, as is the case with, for example, 5-Star Cookstoves, Lean Solutions (briquette manufacturing and boiler furnace conversion), Burn Manufacturing, d.light and Off:Grid Electric.

The challenge fund approach has contributed to sifting out non-viable projects. However, the interpretation regarding what is viable and also what is suitable has, in practice, varied considerably along the decision-making chain. Differences were apparent between ECO and the donors and to a certain extent, at the level of final decision-making - between the lead donor, represented by the Embassy of Finland, and DFID. The third donor, Austria, delegated the management of the programme to Finland and did not actively participate in approving or rejecting projects.

Arguably decision-making could have been improved by demanding a much higher quality at the CN stage and perhaps this is possible for projects that are scaling up. However innovative projects require the flexibility to evolve and develop and therefore may not be as easy to define in great detail. Those responding to the challenge fund, primarily NGOs and the private sector, are used to competing on different planes. However, the private sector is not practiced in the process and procedures for applying for funds as required by EEP. It is vitally important that the applicants receive feedback on why their concept was not successful, which is broadly speaking being done although the type of feedback being given is not known. Some projects received guidance on how to improve their concept for the next CfP.

Apart from the role as a challenge fund, the EEP mechanism is also designed to improve the performance of initiatives (through the assimilation of lessons learned and the dissemination of knowledge) influence national and regional policy and act as a knowledge broker. The efficiency of the implementation of these components is discussed in more detail under EEP Programme Management below. However, in general, these aspects of the EEP mechanism have not been implemented, with the exception of establishing the website and recent participation in conferences.

2.2.2 Efficiency - EEP Programme Management

During the contract negotiation process with KPMG, compromises were made on the budget in order to meet the contract ceiling. This included a reduction of input of the Programme Director to 600 man days (~15 days per month) and a decrease in some of the monitoring days allocated. To compound matters, the appointed Programme Director left on maternity leave shortly after the programme started, requiring a consultant to stand in on a part-time basis until the current Programme Director was recruited in December 2014.

From the outset of Phase II, the ECO was tasked with getting to grips with a portfolio of 113 projects carried over from Phase I with varying levels of information available on each. In addition, CfP5 had been launched but not finalised. Therefore, it is important to recognise that the tasks during the first two years have focused on





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establishing the status of Phase I projects, developing the management systems, including the M&E framework, and launching and administering the 6 CfPs (CfPs 6-11). These factors combined, the reduced input and the initial tasks, have demanded efficient core resource use in terms of administration and oversight on the part of ECO. The ECO team is now keen to re-focus towards knowledge management, now that the CfPs have been completed.

Despite these pressures, the pool of expertise that was designed for under this contract should have allowed for the deployment of expertise as needed. There does not appear to be adequate justification for the fact that the portfolio analysis, knowledge management and business advisory services have so far not received adequate attention. However, these components were not clearly defined. The results-based framework states a 24% target for projects requiring technical support for 2014 (and 30% in 2015). No progress was made on this target but no projects have requested support. Some of the projects interviewed confirmed that they were unaware of the service.

Based on the summary provided as at the 31st March 2015, 30% of the total budget (€896,497) is available for the business development, knowledge management and networking activities specifically (reference A2.1, A3.1, and A3.2). 40% (€382,600) of the M&E and 55% (€1.04m) of the grant management budget lines are unspent. 57% (€2.3m) of the budget is available to provide project support during the second half of Phase II (reference A1.3, A2.1, A3.1, A3.2 and A3.3). Annex H provides a budget reconciliation.

In general, the project developers' perception of ECO was positive. For those projects interviewed that have interacted with ECO staff, the feedback has generally been that the team was helpful and provided good support and advice. A significant amount of feedback from the survey and from some projects during the field visits has pointed to two key hindrance:

- Communications the survey respondents and some of the projects interviewed indicated that making contact with the ECO team is challenging and impersonal.
- Delays between the submission of a CN and the contracting process.
 Projects clearly highlighted the need for a faster process for the private sector
 and specifically innovation projects for whom a fast turnaround time can be
 make or break. To a certain degree, delays in project approval have also
 contributed to delays in implementation, causing other challenges (loss of
 credibility with target groups; retention or withdrawal of co-funding, etc.).

The grant management team appears to be well organised with the portfolio being divided between team members. The team has so far visited 22 projects under Phase II and is in regular contact with project partners. Information on the stage at which the visits were undertaken was not provided but the team confirmed that the site visits are meant to take place at the 1st milestone, although this is not guaranteed. If a visit is being arranged to a specific country, the team tries to visit as many projects as possible. The management systems appear to be inadequate to support the implementation. The absence of an up-to-date list of projects until the Q2 monitoring report was finalised raised concerns about the availablity of basic management information in a useful format. The absence of key statistics, such as the number of CNs, full proposals, etc, and the contract start dates for all projects, required the MTE consultants to source information from minutes and reports. This is





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a strong indication that basic information relating to the portfolio overview/ analysis is not maintained in a readily usable format, making their work more complicated.

"1,308 subscribers were receiving the newsletter in the first quarter in 2014 compared to 1407 subscribers in the last quarter in 2014. The increase in website visitors from quarter one in 2014 (2,479 visitors) to quarter four 2014 was 2,679 visitors (5,158 visitors in the fourth quarter). During the fourth quarter the 5158 persons visited the web site were reviewing 30,098 web site pages. Of the visitors as high as 55 percent were new visitors and 45 returning visitors. The website had 9,189 new users during 2014."

EEP-SEA Annual Report 2014

Despite the positive site statistics, it appears that little use has been made of the existing EEP Africa website as one of the tools to share lessons learnt from the EEP programme and projects part of the knowledge as potential Although management. project developers regularly check the website (website visits reached 113% of the target set for 2014 in the resultsbased framework), this is mainly to follow whether new CfPs have been published as the website has not yet been developed as a knowledge sharing platform (see Figure 9).

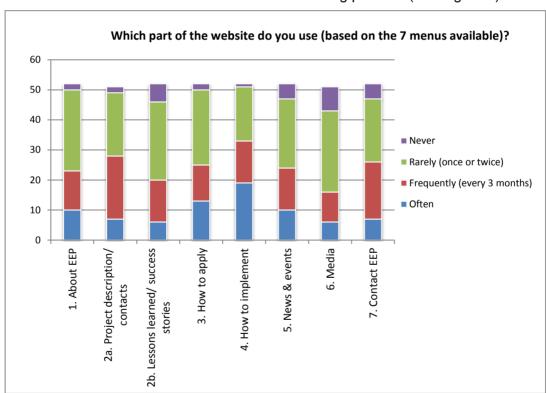


Figure 9 - Survey respondents' EEP Africa website visits

Over 60% of survey respondents report having never or rarely consulted the lessons learning menu.

There are project details (not email addresses) and NC contact details on the website however some of them are out of date, as discovered during the planning of the MTE field phase. The current structure does not alert the user to the directory of information that is available, requiring the user to know what to search for. A more proactive information sharing approach is necessary. A number of projects said that they were not aware that there was a NC and of those who were, they did not know their role.



The knowledge management vision that was presented to the EPC in March 2015 has been put on hold until the portfolio analysis has been completed, at the end of October 2015. This will cause further delays in starting the knowledge management process however the activity plan and due dates for Q4/2015 deliverables are being submitted to the MFA.

2.2.3 Efficiency - EEP Governance

In terms of the governance framework, it is apparent that the active parties are committed to the success of the programme and are engaged. The priorities of DFID and MFA are aligned although their organisational culture is somewhat different. The responsibilities for decision-making are clear and, after an initial problem of communication lines, the modality of working has now been agreed and accepted by all partners.

The top-down and donor driven approach has perhaps facilitated efficiency to some extent, as fewer parties are involved in the decision-making process. However, the approach to risk differs between the donors. Maintaining consistency in terms of decisions made has been challenging and would be even more so if additional donors/ stakeholders were involved in the running of the programme.

The flexibility of the EPC and MFA in particular to accommodate adjustments to the project approach has been cited by a number of projects visited as being very positive for such a challenge fund. This has encouraged adaptation to ensure the achievement of outputs. However, there is evidence from consultations made that the ECO has limited autonomy on achieving EEP results including in the selection of project proposals. This means that the degree of involvement by the EPC limits the efficiency with which the ECO could perform.

As discussed earlier, the NCs role has been reduced meaning that they could have been used more pro-actively as RE/EE "champions", disseminating results (including feasibility studies) and influencing reforming policies and perceptions in their countries. The more that this supports the NCs in their own tasks, the more likely it is that they will engage.

The strategy for knowledge management as it relates to NCs includes some national activities; however, as suggested by ADA, it is important that the EEP Programme provides the NCs with the tools and technical know-how to address specific issues relevant to their contexts rather than general awareness raising. The EAC expressed concerns that the knowledge management and networking activities do not further governments priorities of increasing energy access.

The role of the NCs is important in that there is potential for some projects and local associations to work with NCs to address some of the barriers that affect their outcomes, for example land tenure or fossil fuel subsidies. There is little evidence that this is taking place at present.

2.2.4 Efficiency - Project Performance

Based on information provided by the Grant Management Team, it has been challenging for ECO to establish the status of Phase I projects. This has been a timeconsuming exercise and there are still Phase I projects that have become dormant. Phase II projects are broadly on track and for those for which there are delays, it is still likely that they will completed on time, according to the grant management team.





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The quality of outputs and results appears to be of a good standard. Many of the projects visited have partnered with international organisations (private companies and research institutes) that ensure the quality of the technology and that the products are of good quality. Many of the projects visited continue to improve the design of their projects based on feedback from customers.

In terms of performance (both phases), the majority of projects are on track. Of the 37 projects being implemented in Kenya, 16 have been completed successfully, 2 are experiencing some challenges and 2 have been terminated. The rest (17) are on track or are experiencing slight delays. Botswana had the highest share of projects terminated (3 out of 8) while 5 out of 16 South African projects are facing challenges. After the MTE team project visits, it also became apparent that although some projects are listed as completed, they have not achieved their objectives due to some challenges including technology failure²⁰. It is important to point out however that all Phase II projects (CfP6 to CfP 10) are rated by ECO to be on track as per the portfolio analysis projects as of 30th June, 2015.

More than half of the projects funded (52%) reported in the on-line survey that it was necessary to extend project implementation times due to delays. There is a difference between those who reported being able to implement according to plan and those who required an extension, because the former respondents might have managed to complete within the given project period, although they had challenges in implementation, such as those mentioned above. This can be verified through an in-depth portfolio analysis. Around 53% of Phase II projects reported that they were well on track (in relation to project milestones) - while the rest reported minor problems (22%), or more significant problems but ones that could be overcome (9%), and 16% (7 Phase II projects) reported implementation problems.

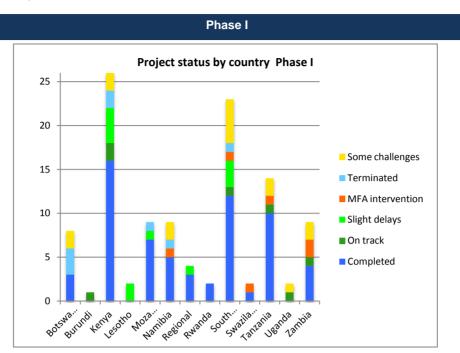
Figure 10 below provides a graphical representation.

²⁰ E.g. biogas and biofuels projects in Botswana

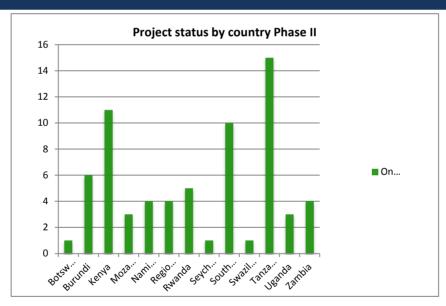




Figure 10: Project status for Phase I and II



Phase II



Biogas Project

This is one of the early projects supported by EEP testing innovative biogas technology at a multispecies abattoir currently slaughtering 60 cattle per day. The project should have been long completed but encountered a number of challenges including illness of project developer and malfunctioning technology. In terms of EEP milestones, the project should be coming to an end but the bio-digester has not been functioning and could not hold biogas generated. Now the project developer realizes that the imported technology is actually a water treatment plant as the water from waste fed into the 'biodigester' comes out clean but no gas could be contained. The project developer could not get a solution from the supplier in South Africa who in turn also got the plant from a manufacturer outside South Africa. The project developer has now improvised to contain the biogas in tractor tyre tubes (seen in the picture) and then plastic bags before channelling the gas to a boiler that generates hot water at 40°C for use in the abattoir. The abattoir owners are keen to have the project work and will support the project to work as it also offers a waste management option. Only 5 % of the abattoir waste can be absorbed by the project at the moment hence there is a huge potential for the project to supply the abattoir with both heat and electricity from biogas. Botswana being a cattle country offers more opportunities for replication of the same plant at other similar abattoirs.



Project: BTS 205

2.2.5 Efficiency - Value for Money

Generally speaking, interventions have been cost effective and have reportedly been carried out within their planned budget. In terms of value for money of the programme, there are two issues on which this assessment is dependent: the status of project completion and the degree to which projects and programmes are being scaled up. As the project gets closer to the completion stage, the results become evident. For many projects, there are no results to report on until the end of the project. As the project is scaled up, the cost per household is likely to decrease, for



EQ3

those projects that are targeting households. The current average EEP cost per beneficiary is about €31 per capita. This is considered to be quite high in comparison to Endev, which aims for €20 per beneficiary and €6.78 for the Results-Based Financing facility sponsored by DFID (Annual Review: Results-Based Financing for Low Carbon Energy Access 2013). The DFID benchmark used in the Annual Report 2013 is £16 per household – equivalent to €21.

Table 1 VfM indicators based on budgets of overall project portfolio (Source: based on EEP Monitoring masterfile – July 2015) $\,$

VfM indicator	Unit	Cost per unit (EEP+CF) Dec 2014	Cost per unit (EEP only) Dec 2014	Cost per unit (EEP+CF) June 2015	Cost per unit (EEP only) June 2015
Cost per household	household	245 €	133 €	273 €	155€
Cost per beneficiary	Beneficiary (5 per household)	49 €	27€	55€	31€
Cost per tCO2 abated	tCO2	485 €	263 €	559 €	317 €

However, as mentioned, not all projects funded by EEP are expected to have results at this stage. The table below illustrates, for those projects that are intended to have an impact on HHs, the EEP cost is only €6 per beneficiary.

Table 2: VfM indicators based on budgets of projects that have direct impact on HHs and tCO₂ emissions (Source: based on EEP Monitoring masterfile – July 2015)

VfM indicator	Unit	Cost per unit (EEP+CF) Dec 2014	Cost per unit (EEP only) Dec 2014	Cost per unit (EEP+CF) June 2015	Cost per unit (EEP only) June 2015
Cost per household	household	71 €	30€	67€	29€
Cost per beneficiary	Beneficiary (5 per household)	14 €	6€	13€	6€
Cost per tCO2 abated	tCO2	155 €	72€	150 €	69 €

The programme administration costs are the equivalent of 7% of the budget of the projects being administered by ECO (i.e. those for which they have been involved in managing - CfP 5-10). In relation to the whole portfolio of projects in the project list as at 30th June 2015, the proportion of costs is 5% (and 8% of active projects). In comparison to similar programmes, this is a low proportion of the overall EEP budget. ESMAP for example spent 13% of costs on programme management and administration²¹. The EUEI-PDF consumed over 30% of its budget on programme management and administration, although this budget did also consist of significant

²¹ http://www.esmap.org/sites/esmap.org/files/ESMAP%202013%20AR%20text%2012-27-13%20web_Optimized.pdf





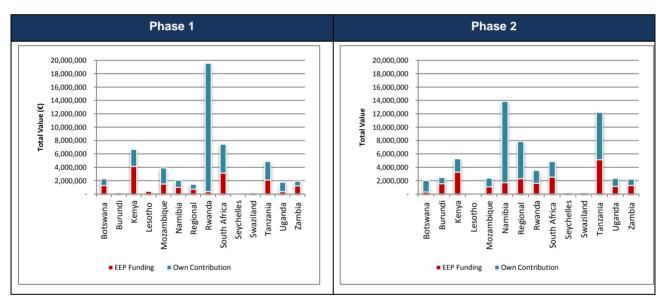
funding to knowledge management events and conferences. There appears in fact to be an economy-of-scale in that the cost of administration does not increase proportionally to the number of projects awarded or the size of the projects.

2.3 Effectiveness

2.3.1 Effectiveness - the EEP Mechanism

The total budget of the projects so far supported by the EEP from the start of Phase I as of 30th June 2015 is €112.4 million with the EEP contribution of € 38.8 million translating to 34.5% of the total budget. The balance of the projects budget (65.5%) was leveraged as project developers' own contribution. The EEP contribution for projects contracted in Phase II was also about 37% out of a total budget of €59 million that was committed up to 30th June 2015 ²². Figure 11 presents the comparison of total budgets and EEP contribution by country for both Phase I and Phase II. The high total budget for Rwanda in Phase I is due to the 8.5MW solar PV plant (~€20 million) and the high total budget for Namibia Phase II takes into consideration the CSP project (~€14 million).

Figure 11: Distribution of total budget and EEP contribution by country for projects procured in Phase I and Phase II



The EEP contribution to projects has ranged from €50,000 to €1 million. The size of the grant is not organization, project or technology dependent. However, the contributions in excess of €500,000 were provided to solar PV/CSP, hybrid, hydropower and cook-stoves projects. As illustrated in Figure 12 below, the contribution of the budget to solar projects is marked. Two large projects were supported in Namibia and Rwanda²³ but there is also a series of 15 solar projects in Tanzania that received a total of €12.8 million and 9 projects (average €1.42 million

However the size of the EEP contribution to that large project is minimal – about 1% of total budget





²² Up to CFP10

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EQ5

To what extent have the renewable energy/energy efficiency interventions achieved their stated immediate and medium term objectives?

per project) in Kenya totalling €3.5 million (average €380,000 per project). There are 12 improved cookstove projects receiving support from the EEP funds with a total budget of €8.9 million. There is some discussion regarding how innovative these projects (two out of four Phase II projects funded under the innovation windows) are on the basis that there are so many similar initiatives being supported; however what is clear is that they *do* target the bottom-of-the-pyramid and have a potentially significant impact on countries that are biomass dependent.

Through the interventions supported, there is evidence that technology quality, capacity and competence have spread within the region, and EEP has contributed to raising the awareness of RE/EE through the international fora and marketing events. However, many projects are struggling to export their concepts across borders, with three of the visited projects striving to break ground in neighbouring countries. Therefore scale-up is multi-dimensional and the cross-border expansion is an element that has not been considered from a regional perspective.



EEP grant of EUR 245,000 helped leveraging EUR 20 million.

GigaWatt Global Coöperatief U.A. used an EEP grant to support the feasibility study for the largest solar PV plant in East Africa, an 8.5 MW plant in Eastern Rwanda. The efficiency offered by EEP was important for GWG due to the of the Rwandan Government requirement that electricity must be supplied 6 months after receiving a Power Purchase Agreement (PPA). Financing institutions are reluctant to finance this most challenging and risky part of the feasibility study. With the completed feasibility study and the PPA, the necessary EUR 20 Mio financing was obtained in the form of equity investment, debt financing and mezzanine debt through public and private funds and investors. The plant was inaugurated in February 2015 and has increased Rwanda's generation capacity by 8%.

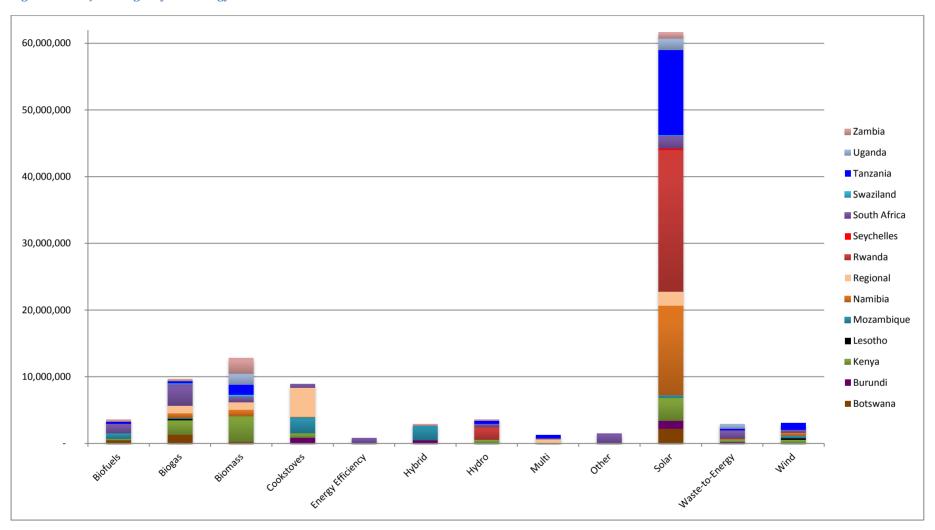
Project: RWA5015





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Figure 12: Project budget by technology







FQ 5

To what extent have the renewable energy/energy efficiency interventions achieved their stated immediate and medium term objectives?

2.3.2 Effectiveness - Project Performance

One of the main achievements of the RE/EE projects that have been implemented has been to show that the approaches that have been funded by EEP, using a commercial model to ensure sustainability, work in a broader context than simply in small-scale isolated situations.

The responses in relation to the achievement of project objectives suggested that some 60% of projects considered that they were not fully on track to achieve their objectives - with similar responses in relation to the likelihood of impacting on the local community. The problems are mostly related to likely delays in reaching the objectives rather than an acknowledgement that the objectives could not be reached.

As described above, it is a concern that 7 projects responded to the survey that they were less than 25% of the way towards achieving their project milestones due to problems implementing. This may have implications for the achievement of programme outcomes, depending on the significance of the projects. The portfolio analysis should identify projects that are experiencing problems such that the grant management team can provide remedial support.

Whilst not all projects have been successful in up-scaling, this has been explained by project developers as being due to a number of factors:

- risk-averse financial institutions,
- problems with rules and regulations inappropriate for RE/EE,
- · institutions preferring to remain with traditional solutions, and
- the lethargy within the traditional state electricity monopolies and their vested interest in continuing "business as usual".

The survey respondents cited the commercialisation process, accessibility of funding, challenges with regulatory change, and the legal framework as barriers to achieving the project results. The issues raised highlight potential areas where the NCs could support projects in addressing, specifically the legal and regulatory framework but also providing links with financing institutions active in the sector.

The limited attention to business development support has meant that the type of project assistance required by projects is not known. However, feedback from projects and the M&E team indicates that the issues faced tend to be related to marketing and commercialisation.

As regards off-grid energy solutions, these tend to be much more focused on bottom-of-the-pyramid households. There are some good examples of how solar homes systems and energy efficient cookstove projects are being implemented and upgraded. The major barrier for making the transition from successful (EEP) project to up-scaling is the availability of finance even for bankable projects, as well as the regulatory and policy environment that favours perpetuation of non-renewable energy sources.

While implementation designs have taken the local employment resource base into consideration, the main outcome for employment has tended to be during the construction stage, particularly with larger projects that focus on sale of energy to the grid. One third of the jobs created to date are temporary jobs. In contrast, those projects that are specifically aimed at the bottom-of-the-pyramid target group tend to make much more use of the local employment base, as they require the





establishment of a marketing and technical support value chain. Many of the projects in the latter category focus strongly on women as members of the value-chain. For those projects feeding into the grid, there is no evidence that the extension of the national grid will impact directly on the poorer households in the way that, for example, solar home systems and energy efficient cookstoves do.

The use of mobile phones and pay-as-you-go technology has also helped bottom-of-the-pyramid households to access such services. The interesting phenomenon with mobile technology is that it is both the driver for demand for access, as well as part of the solution to meet that demand, as described below.



Empower with M-Power

The introduction of 3 simple and robust models of solar home systems that are paid for on a monthly basis has resulted in 50,000 customers in 3 years for the team at M-Power. For the entry level product, the monthly fee of \$6 buys 3 lights and mobile phone charging, which includes all servicing and maintenance. The billing system works through the mobile phone network thereby developing a synergy with mobile technology – charging the

phone, which is used to recharge the panels. A customer informed us that she saves about 150 Tanzanian shilling a day (0.75 US cents), which she invests in a savings scheme because she "is a woman". Project: TAN5011

2.4 Impact

2.4.1 Programme Impact

The overall objective of the programme is "to reduce poverty through inclusive and job-creating green economy and improved energy access and security in the Southern and East Africa regions while mitigating global climate change". There is already a tangible contribution towards job creation and inclusion, evidenced by the projects visited during the field visits. The programme portfolio does also include projects that may bring about longer-term benefits as they are related to the grid, and therefore indirect. However, the most remarkable achievement of the EEP programme is that it is successfully inclusive – a feat not easily achieved when relying on market forces.

Based on the 61 projects that have received monitoring visits from the ECO, the following table reflects the results against the programme outcomes. What is clear is that the annual targets were set too low. This is discussed further in the Section 2.7; however one of the main limitations of this data is that it is based on assumptions and therefore is difficult to verify, e.g. CO₂ emission reductions calculated from sales of cookstoves multiplied by average estimated savings.



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OUTCOMES	Indicator	EoP Target	Totals achieved by June 2015	% of EOP target achieved
Outcome 1: Green economic growth contributed to, through increased; access to sustainable energy services,	OCI 1.1 Economic benefits achieved through uptake of RE/EE services	€16.60 million/ year	5,7 million	34%
significant scale up of proven energy services, increase in installed capacity, reduction in energy expenditure and mitigation of climate change achieved primarily through support to small to medium size organisations.	OCI 1.2 Potential cumulative t CO2 emission reductions achieved over the life time of the installed technology and/or project	300,000 tonnes	174,038 tonnes	58%
Outcome 2: EEP project developers are successful in starting and managing RE/EE energy businesses, raising and leveraging finance, managing project implementation.	OCI 2.1 Project reports increased potential to reach commercial viability as a direct result of business support	45%	-	-
Outcome 3: EEP is an active regional partner in; generating RE / EE knowledge and evidence, sharing of experiences, and informing effective and inclusive regional	OCI 3.1 Level of relevant stakeholder knowledge and awareness of the RE/EE sectors and issues	200	-	-
RE/EE policies	OCI 3.2 Increased level of awareness of EEP within the Region	50%	-	-
	OCI 3.3 Number of policy processes influenced by the project	5	7%	140%

An impact that is not directly mentioned in the EEP results framework, but was mentioned during interviews, is improvement to health. There are reports from projects of the health benefits realised once the improved cookstoves are in use. This is additional to the benefit of cost saving associated with use of more energy efficient technologies.

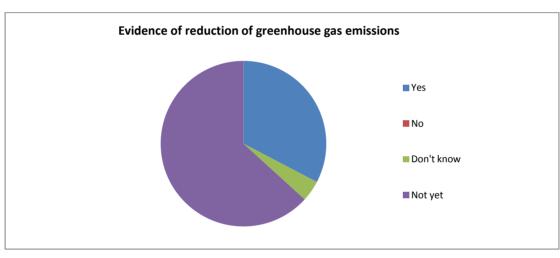
Where renewable energy interventions feed into the main grid or replace stand-alone systems (such as diesel generators) this contributes to emissions reduction at the national level. However neither grid connections nor other forms of "clean energy" will have a noticeable impact on the surrounding eco-system. This requires a change in biomass-intensive cooking practices to using the fuel more efficiently in order to conserve the biomass, which is recognized as the only viable energy source for the majority of the population in Sub-Saharan Africa at present. From the sample of projects visited for which an Environmental Impact Assessment is relevant, these were performed or were planned for. In fact, due to the initial studies undertaken, one of the projects visited decided to change the project site. There have been some project failures, specifically from Phase I, which have perhaps resulted in disappointment on the part of the communities that were intended to benefit from these projects, although this could not be verified.



As regards changing energy patterns, the evidence from the online survey suggests that there is a clear trend to reducing firewood and charcoal for cooking and replacing kerosene for lighting. This is accompanied by indoor air improvements in 60% of the relevant cases (37% of all respondents). There is also a perceived reduction in the use of biomass in 31% of all projects that replied, and 67% of the 28 projects where the question is relevant to the technology used. These results are impressive however they are based on assumptions of savings potentials as projects are not verifying these savings, confirmed by the "don't know" responses.

In terms of GHG emissions savings, the CO_2 emissions are projected at planning stage, but based on the projects visited none of them follow through to keep records of actual CO_2 saved. Sales figures are used to estimate savings based on a formula. There is recognition that projects are making GHG emissions savings, although the actual extent of the savings is not being verified by confirming the way in which appliances are being used. With regards to Phase II, most projects are too early in their implementation to realize savings. Examples of the savings made were provided by projects and are described in Annex F2.

Figure 13: Survey respondents' perception of GHG emissions savings



EQ 7

EQ8

EEP

and knowledge-

sharing

platform

making

relative to

renewable

energy and energy

efficiency?

contributed to regional policy

To what

extent has the

networking

To what extent have the renewable energy & energy efficiency interventions been a factor in addressing environmental concerns in general and emissions reductions in

Influence on policy processes

There is no evidence to suggest that the knowledge-sharing platform and knowledge-sharing activities have had any impact on policy making, whether at the national or at the regional levels so far. Although there is evidence that potential project developers regularly check the website, the platform has mainly been used as a vehicle for the CfPs. The website is not well updated either on projects funded (a number of projects were missing prior to CfP 11) or lessons learnt. The stated emphasis of an increased focus on knowledge sharing during the remaining period of Phase II is supported by all those interviewed, as is the proposed portfolio analysis of EEP projects as a way to contribute to the lessons learning process.

Since the start of 2015, an increased emphasis is being placed by EEP on networking through links with SADC and the EAC, as well as attendance at and participation in international fora. However for this to have a real influence on national and regional policymaking, there has to be a body of knowledge collected that is worth sharing. It will be difficult to impact on policy at the national level without revising the role of national coordinators.





One of the major benefits of programmes like EEP is that the grant funds make inclusive growth feasible. However, there may be a growing reliance on these funds to move pro-poor businesses forward. Investors continue to be risk averse and sceptical of returns on renewable energy investments. While the EEP is a good medium-term solution, there is an opportunity to tackle the major financing barriers preventing projects or businesses from scaling up by working with financing institutions and thereby having a much greater impact.

2.4.2 Impact - Project Performance

A significant number of local jobs have been created as a result of the EEP interventions. According to the results-based monitoring spreadsheet²⁴ 1,903 jobs were created, of which 78% being provided to women and youths²⁵. For the larger-scale projects this tends to be restricted to the construction stage, after which the number of permanent jobs is much more limited (just over 600 to date). By contrast, those projects that also require the development of a marketing and technical support value chain have succeeded in building up employment (including good levels of women's employment) after project completion.

Replacement of kerosene lamps by clean energy, and the replacement of traditional stoves and open fires by improved cook stoves, has without question improved the indoor working environment. There is no real evidence that household time management has changed, anecdotal evidence suggests that a clean power source at home (which can also re-charge cell phones, etc) and less time spent leaving the home to collect biomass for cooking or kerosene for lighting, have had positive effects on household time management and decreased costs. However, an in-depth study will need to be done to verify that.

From the online survey, there is a lack of information due to the stage of implementation of most projects in Phase II.



Lucy Kahuniy used to spend 2500 KES on firewood and 1500 KES on charcoal each month. After Takamoto installed her biogas plant on a lease-to-own basis, she is charged 3000 KES/month for 36 months. She not only saves money. "It is faster", Lucy said, "We save so much time every morning when we have to boil water when we milk the cows." Lucy used a charcoal stove before, but the water boils much faster on the biogas stove. This stove is installed in her house, while

the charcoal stove was outside due to the smoke it emitted. Lucy is pleased with the savings in cost, in time, and the health benefits. Furthermore, she only has to move the dung 1 meter to the digester, instead of having to get rid of it elsewhere. She uses the 'waste' (remaining organic matter) as a very good fertiliser. Project: KEN7009

²⁵ It is interesting to note that the official definition of a youth is Kenya ranges from 16-40 years of age so it is perhaps worth considering whether projects are reporting consistently.





To what extent have EEP SEA interventions affected socio-economic development and the living conditions of people living in poverty?

²⁴ EEP Monitoring masterfile – July 2015



d.lightful – the power of opportunity

The eldest of these two sisters, Esther, started selling sweets on the street while taking care of her baby. The owner of the shop behind where she had her pitch took pity on her and allowed her to sit on his doorstep to sell.

She slowly built her stocks to include mobile phones, energy products, and Mpesa. Her sister Cecilia is working for her and

Esther has taken over the shop premises on whose doorstep she sat and is the regional distributor for d.light lanterns. She is able to afford the rent of \$520 a month.

Project: KEN609

2.5 Sustainability

2.5.1 Sustainability - the EEP Mechanism

The sustainability of the EEP mechanism as a challenge fund is and will remain firmly dependent on donor commitment. However, the composition and membership of the funders could be broadened. There are possibilities to incorporate other funders and developing alliances with specific financing institutions to offer more significant funds for scale-up, and interest has apparently been indicated to the EPC.

No more CfPs are planned for in Phase II and the sustainability of the current phase is secured, despite donor funding not being fixed to the programme end until more recently. Knowledge management and influencing and improving the enabling environment is key to ensuring sustainability and continuing the results of the programme after the programme lifetime. However as a mechanism, the programme needs to become integrated into national and regional systems. The possibility of aligning with activities of the SACREE (Southern Africa Centre for Renewable Energy and Energy Efficiency) and EACREE (East Africa Centre for Renewable Energy and Energy Efficiency) has been mentioned by SADC and donors active in the sector as a way forward to achieving that. This could begin at this stage with EACREE to be hosted by Makerere University.

2.5.2 Sustainability - EEP Governance

The reduced involvement of the RECs and NCs after Phase I, has had a negative effect on the programme in the sense that the EEP has reduced interaction with governments to champion the adoption of RE/EE in the EEP countries. Ownership and commitment is lacking on the part of government partners that are the NCs. There is recognition within the programme that this is not a desirable situation if EEP





is to influence national RE/EE policies hence re-engaging NCs will require attention, although the modalities may vary from the past.

The challenging legal and regulatory framework of some countries and in certain sectors and sub-sectors continues to pose an obstacle. One project suggested engaging to a greater extent with institutions that can influence policy, such as associations, as well as engaging with NCs. There has also been debate as to whether the rural electrification authorities would be appropriate to participate more directly in the programme. As their role is to further energy access for the poor, they generally have the technical expertise and are influencers of national policy.

2.5.3 Sustainability - Project Performance

Drawing conclusions on long-term sustainability is difficult in a situation where many of the projects have just started up or are in the early stages of implementation. Therefore, in order to have a longer-term perspective, the MTE also included a number of projects funded under the first phase.

In terms of project sustainability, 87% of affected survey respondents have put in place maintenance procedures (where applicable). Where the question is applicable, production capacity has been increased to meet demand (70%). Many of the projects in the portfolio involve foreign, technically qualified project developers who are able to assure technical and financial sustainability. Based on the projects visited, where possible, use is being made of local staff but the availability of technical expertise is a plus. It may be worth considering how to measure whether skills transfer is taking place.

Production and marketing chains are also starting to expand to meet demand for 36% of projects. (24% don't know and 36% not applicable). If we consider only projects for which this is applicable, 55% are expanding capacity. Finally, 56% of projects for which it is applicable, demand for their RE/EE technology is expanding in poor households.

There is evidence from the earlier projects, that maintenance procedures are defined, in place and functioning and that local capacity is increasingly available to both maintain the technology, and manage the value chain for spare parts and other inputs. For the successful RE/EE projects, the technology is proven and production capacity exists to accommodate increased demand - even though the production capacity often exists outside the country, and even outside the region. There are challenges related to this however, as a number of regulations also exists which can, for example, slow down imports of equipment or increase the price of the equipment. The evidence suggests that focussing on the regulatory and financial environment can have a positive impact on increasing RE/EE sustainability.

From the projects visited and based on the analysis of the portfolio, there appears to be a low failure rate. There are examples of project developers that have gone from Phase I projects to successfully applying for funding under Phase II, scaling up or commercializing their concept. A market has clearly been established for sustainable project operations, driven by a demand and affordability at the bottom-of-the-pyramid. The participation of the private sector in the RE/EE market provides a basis for the sustainability of projects.

There is also some evidence to indicate that access to provision of finance for expansion of interventions has increased as a result of project achievements - e.g. it is easier to get loans or other financing as a result of project success. 43% of survey respondents are positive, 16% of projects say that this has not happened and 41%

EQ 9

To what extent have renewable energy/energy efficiency interventions contributed to changing energy consumption patterns in a sustainable way?





replying that they don't know. The latter statistic is interesting as it implies that these projects have not been seeking alternative financing.

Evidence from the EEP-supported projects indicates that the finance sector has shown itself to be risk averse when entering into the RE/EE sector - especially the traditional banking system. However increasingly and as a result of high-profile involvement, new funding opportunities are opening up which suggest increased availability of funds for proven approaches.

Certain development financing institutions and commercial banks have become part of project financing in the region, learning to deal with risk management of such projects. This can be built on so that the relevant financing institutions share knowledge and come into contact with project developers so as to dispel concerns regarding risks of RE/EE projects.

A number of projects that have implemented solar home systems show indications of being sustainable in the long term. This is a result of a clear demand at household level to replace kerosene lights, linking with a reliable product and the creation of a dependable marketing chain using local agents, and supported by a payment system using PAYG technology. Some of the more successful energy efficiency/cook stove projects have followed the same example. For both, rules and regulations and certain financial hurdles (e.g. VAT regulations, access to credit) remain as hurdles to more rapid scaling-up.



Nuru Energy has developed a sort of PAYG model. Nuru does not deal directly with customers but work through groups of VLEs (Village Level Entrepreneurs). The VLEs pull funds together to invest in a pedal charger for the Nuru lights, allowing them to earn an income when they recharge the Nuru lights for the customers. Charging Units are sold by Nuru to the VLEs via mobile phone payment. The income source for both Nuru and the VLEs is the recharging activities. Nuru

gives a 1 year warranty on the light, but actually continues to replace the light beyond that year, given that it is in Nuru's interest to earn the fees from the recharging. The viability of the system is based on Nuru and the VLE earning money each time the customer recharges, so both parties continue to have an interest in the customer using it.

As of July 2015 Nuru expects to break even (after one year of implementation) and is sustainable without more grants/funds. However no dividends can yet be paid to shareholders.

Project: RWA605

Households will sustain the alternatives energy sources that replace kerosene and will, in all likelihood, sustain more energy efficient cooking also, not only because this contributes to a better indoor environment and to health improvements, but also because the alternatives are actually cheaper (once the initial outlay has been covered). The challenge remains to ensure that the marketing chain continues to operate; the EEP and other experience show that this can be done.



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EQ 10

To what extent are there mechanisms in place to support the long-term sustainability of the interventions: and to what extent does this varv between the national programmes supported by the EEP SEA?

The long-term sustainability of the renewable energy interventions that feed into the national grid, for example, is dependent on financial conditions set by the national regulator and the relationship between the renewable energy companies and the national power utilities. For these interventions, it is difficult to attribute changing energy consumption patterns at the household level.

What is clear from previous research is that even bottom-of-the-pyramid households connected to the grid will continue to use biomass for cooking, even when installing electric lighting. For these households - not only poor but also middle-class - the only way to sustainably decrease the impact on the biomass resource is to switch to energy efficient cookstoves. However, there is often a rebound effect where households will use a mixture of fuel sources, using the more efficiency cookstove and continuing to use the inefficient traditional method – and instead have two stoves. Again, an in-depth study would need to be done to understand this better.

On a cautionary note, however, there appears to be a tendency to focus more on lighting than on cooking at a national level. There appears to be less policy understanding for the need to not only bring light into where there was previously darkness, but also to tackle the problem of continued and increasing use of biomass for cooking. This is a gap that can be addressed through the knowledge management platform based on the portfolio analysis of the successful energy efficiency projects, particularly those that relate to household energy efficiency.

2.6 Results-based contract

The evaluation team has reviewed the results-based contract ²⁶ as a model for improving on delivery of results. The results-based contract is a hybrid of an input-based and a lump-sum contract model. The input element of the contract is invoiced based on time worked and the results element is assessed based on the quarterly workplan produced by KPMG. The progress made on the activities detailed on the plan is based on a general assessement that is then discussed with the MFA. If the progress made is less than 80%, the MFA can withhold payment.

Both the MFA and KPMG were candid about the challenges of implementing this contract and clearly wish to find a resolution where all parties are content with the implementation. The type of contract has not been applied to EEP before and further clarity is required in certain areas, such as defining clear results over which KPMG has an influence in ensuring the successful implementation, within the main areas of delivery (apart from CfPs, grant management and administration), as well as the use of a budget that is both input based and result based against an activity plan. However, in general, both sides were positive about the merits of the contract in that it ensures that the company is rewarded for input and at the same time, that there is a focus on delivery. At present, the reporting is largely activity driven, focusing on dates to motivate delivery, and does not allow for flexibility to manage the programme in a way that the service provider thinks best, and yet holding accountable when outputs delivery is not achieved as planned.

A common understanding of how the contract was supposed to work was not established at the outset and therefore it is necessary to reopen discussions when there are budget implications. However, based on the summary of spend against budget line as at 31st March 2015 (Annex H), the expenditure is approximately as

 $^{^{26}}$ This was emphasized by the EPC at the kick-off-meeting.





would be expected (50%). 41% of the programme management budget is available primarily for grant management. The budget available for "increasing PD capacity and competence", "increasing networking among actors", and "increased amount of and access to relevant evidence and information" is approximately €896,497. 40% of the M&E budget is available and 55% for grant management (totalling €1,426,600).

Input-based component

The initial process of reducing the budget during the contract negotitation stage has affected the relationship between MFA and KPMG. Despite the budget adjustments, KPMG has been, and continues to be, committed to deliver on results.

The budget was changed on the following budget lines:

Table 3: Budget lines that were changed during contract negotiation (EURO)

Budget line	Original budget	Revised budget	Amount of change	% Change
Programme Director	960,000	600,000	-360,000	-38%
Head of M&E	816,000	749,700	-66,300	-8%
Supervisory Board and Steering Committee meetings	43,200	100,000	56,800	131%
IE housing, reallocation, family costs	412,200	360,639	-51,561	-13%
Monitoring and evaluation (consultants time)	282,100	153,300	-128,800	-46%
Performance reviews and external audits	400,000	0	-400,000	-100%
Regional office coordination costs	608,100	259,000	-349,100	-57%
Knowledge management and communication	135,000	72,000	-63,000	-47%
TOTAL	3,656,600	2,294,639	-1,361,961	-37%

The reduction of the budget for the Programme Director has had the greatest impact on project implementation, reducing it from full to half-time. However, it is now filled full time, a cost borne by KPMG. The Head of M&E and M&E consultants' time was also reduced quite significantly, which required a readjustment of priorities. The ECO seems to have adopted an approach that combines the role of the M&E and support to the proposal development, resulting in more consistent relationships with project implementers. The grant management team is quite separate from the M&E team and collaborates by undertaking project visits together at times.

The division of tasks between the grant management and M&E teams is based on the former monitoring implementation and the latter collecting data on results to inform the programme results framework. The budget available for the grant management team is €1,044,000²⁷ (55% of the allocated amount) and therefore should be able to perform close project follow up.

²⁷ As at 31st March 2015





According to the staffing plan, there is a total of 6,636 man days collectively to deliver the activities described in the contract. Over the 4 years that the staffing plan covers (from March 2014), that equates to more than 7½ Full-Time Employees (FTEs)²⁸ dedicated to delivering results. Recognising that the scope of work was greater than originally anticipated, the budgeted input would still appear (and was during contract negotiations agreed) to be adequate to deliver on the tasks identified in the contract. However, the level of ambition and expectations of what should be delivered, specifically related to the knowledge management and business advisory services, is a source of contention. Agreeing this is a priority to ensure that there is common understanding going forward.

To assess whether there is adequate input left on the contract to accommodate these tasks (assuming that it is clear what is required of ECO) will require that a summary of input against the original budget is provided. The budget can then be converted into a results-based budget and fixed, irrespective how much input is required to achieve that result (assuming no extenuating circumstances). This is similar to the lump-sum contract arrangement.

Results-based component

The benefits of a results-based approach are that there is less administration and oversight required by the contractee. The implementer, who ensures delivery of agreed results that will contribute towards the programme's overall objectives, takes greater responsibility. However, the challenges are that finding out that things are going wrong is retrospective and can only be picked up quarterly. There also need to be clear consequences for non-delivery of a result of suitable *quality*.

The following fundamentals are missing in the current structure that should form the basis for a results-based contract:

- A clear and common understanding of the expectations of all components of the programme. This includes the types of projects that could/ should be funded by the programme (in terms of risk aversity, types of implementers, and stipulations of requirements for qualification, etc). This also needs to be defined for the knowledge management and business advisory services.
- A set of clearly defined results and indicators that KPMG has some influence over, thereby ensuring that there is a sense of accountability.
- A degree of autonomy for KPMG to provide the services and deliver on the results with the flexibility to take decisions regarding how best to achieve that. This is specifically relevant in terms of making staffing decisions and allocating input.
- Trust between the parties, that reduces the need for continuous intervention on the part of the EPC.
- A clear reporting structure that is also results-based rather than based on activity. Tied into this are the consequences of not achieving the results and some flexibility in terms of how results are judged, i.e. that dates of delivery are not given paramount importance and become a demotivating factor but the emphasis is on whether results are being delivered on time.

At this stage, it is important to draw a line under the current status. A suggestion for the way forward is provided in the recommendations.

²⁸ Total man-days 6,636 as per staffing plan dated 1st March 2014 divided by 4 years of implementation and 220 man-days per staff member per year (taking into account holidays, etc).





2.7 Monitoring and evaluation

2.7.1 Background to the M&E Activities

One of the objectives of the ECO is to "ensure professional and results-based monitoring and evaluation of all work conducted under the Programme, including the supported projects", according to the Terms of Reference. M&E activities during Phase I were virtually non-existent. Each of the 113 projects inherited by the ECO from Phase I had different targets to those of Phase II, which did not allow for a uniform M&E approach. This was one of the reasons that the TOR for Phase II requested a stronger emphasis on M&E during contract implementation.

The TOR state that the "SP must put in place a functional, yet economical, solution to carrying out both the project- and Programme-level monitoring, and ensure that the results of the framework are analysed, distributed and effectively communicated in line with development partner reporting requirements, and to the SvB as necessary. The SP must ensure that the results and lessons learned from the Programme effectively and systematically feed into the Programme's design and operations".

The TOR suggest that monitoring activities can be carried out in combination with the expected visits for on-site business advisory services to the project developers during the early stages of implementation.

A footnote on p 12 of the TOR with respect to monitoring activities states that: "The program document proposes a solution whereby; i) a project visit is carried out during the inception phase during which both the business advisory services is provided and the project monitoring template is filled-out, with regards to targeted results, and; ii) a project visit is carried out during the completion phase to verify completeness with contractual terms and fill out the monitoring template with regards to actual/expected results." Thus just two visits, and none during implementation.

However, the Program Document (PD) actually states that: "During the course of project implementation, towards the end of the project implementation and near or in connection with project completion, the projects will be contacted/visited by the M&E team to monitor their progress against the Contract and in particular also the set indicators".

2.7.2 Description of Actual M&E Framework

KPMG submitted an M&E framework in the first half of 2014, taking into account some lessons learnt from Phase I. These included the need to link each supported project directly to the programme's results framework, such that the programme results indicators are also used by each individual project and must be reported upon, but validated through project site visits. This aspect was intended to be given close attention.

In order to receive sufficiently frequent updates on achievements, including on progress towards the indicators from each project, half-yearly reports are requested if there is no milestone report before that. Project implementers will be guided during start-up conversations on how to monitor data for the requested indicators, and how to report on these.

The aim of the monitoring would of course not only be to report on a number of programme indicators, but also to improve programme performance and to share lessons learnt with a wider audience through the knowledge management component of the EEP.





This first version of the M&E framework was subsequently revised based on the results framework approved in May 2014, ensuring the link between the two, such that the programme will be considered successful if it achieved the targets set for each indicator related to programme objective, outcomes and outputs. Feedback from donors, and learnings gathered during the first period of implementation also fed into the revised M&E framework.

The M&E framework did also emphasise Value for Money (VfM) elements of economy, efficiency and effectiveness (3E's), although they are not part of the results framework. This would be done through a combination of quantitative and qualitative VfM analysis at project and programme level.

The figure below outlines the finally agreed-upon M&E framework, qualifying the role of each partner: project developers, ECO team, donors, and NCs and RECs. As shown, project level monitoring will take place during the selection process, during project implementation and at project completion, well in line with the provisions of the Programme Document. Yet, it is only selected long-term projects with substantial challenges that will be subject to intermediate site visits. Day-to-day financial and progress monitoring will be ensured through desk-based assessment of the project reports.

The final site visits will allow for the validation of the results achieved for the programme results framework and to document lessons learnt. This means that there is a major emphasis in the M&E framework on providing input to the results-based framework contract for ECO, rather than to identify issues during implementation, to ensure good project implementation and sharing of best practices. The planned M&E framework is shown in the figure below.

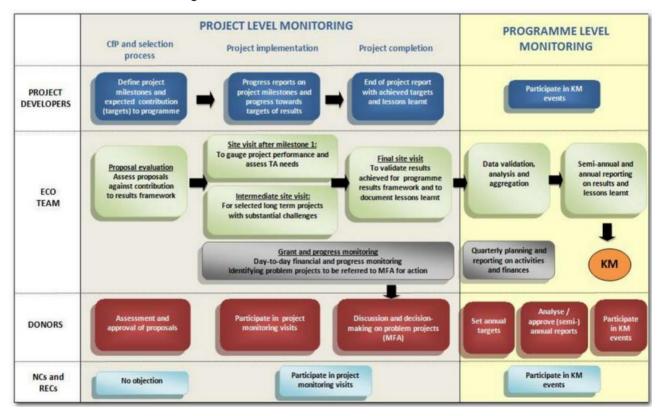


Figure 14: Overall monitoring process for EEP phase II - M&E Framework dated November 2014



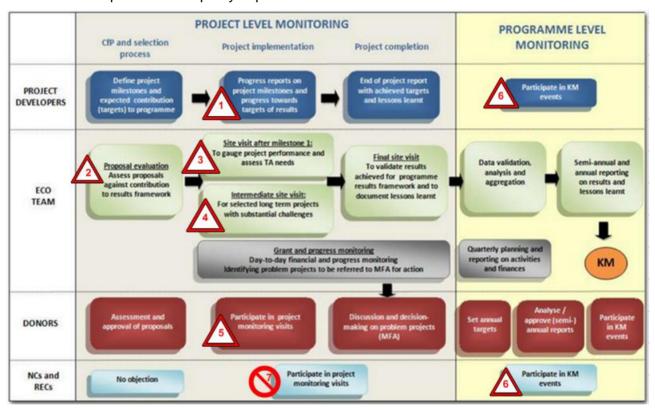
2.7.3 Assessment of the M&E Activities

Compared to M&E activities during Phase I, the plans for the M&E during Phase II were much more ambitious. However, during the course of contract negotiations the budget for M&E activities was reduced considerably, as described in the previous section. This may to some extent limit the possibilities for ECO to ensure sufficient M&E coverage.

ECO, when inheriting the 113 Phase I projects, furthermore had to spend an unforeseen amount of time seeking to retrieve useful information for the M&E purposes, given the lack of a uniform M&E approach, combined with the large amount of unstructured documentation.

On the other hand, M&E is mostly foreseen to be performed by ECO staff, and the internal staffing schedule²⁹ comprises a total allocation of 1,118 man-days for M&E activities if we assume that the regional project coordinators would spend half of their 472 MD available on M&E tasks. This corresponds to 5 full years of input to be spread over the 4 years implementation, which should in principle provide sufficient time, both for desk-based monitoring, as well as for site visits.

The figure below point out some of the intended areas of the M&E framework, which are either not implemented or partly implemented.



The triangles show some areas, where the MTE Team finds it relevant to attach some comments, given that there are some variances from what was foreseen in the M&E Framework.

²⁹ EEP S&EA PHASE II - Staffing Plan of KPMG ECO Core Team from 1st of March 2014.





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Changes to the intended activities

- Project developers are reporting on milestones, but an actual verification of achievements is only carried out by the M&E team at the end of the project implementation.
- 2. The ECO Team is rightly assessing proposals against contribution to results framework, but as is shown in Annex F3, despite this assessment, 8 full proposals have been rejected subsequently by the EPC on the basis that they do not contribute to the results framework, for example that they do not have sufficient development impact.
- 3. A site visit after Milestone 1 is not systematically taking place. It is most often carried out through a combination of analysis of the milestone report and email/phone communication.
- 4. Intermediate site visits, even for projects that were identified as having substantial challenges³⁰ have not systematically taken place.
- 5. Donors are not participating in site visits.
- 6. Only one Knowledge Exchange Forum has taken place; NCs and Project Developers have not participated as a group but on an individual basis. The Knowledge Exchange Fora events can provide an opportunity to share experiences on projects.



Not implemented

7. The NC's tasks are described in a set of TORs. These were recently changed, and it has become apparent that NCs are no longer keen to participate in monitoring visits.

Thus, the M&E Framework that was agreed in November 2014 is not being implemented to the extent foreseen. There is less follow-up and verification on progress in implementation than foreseen.

There is an obligation for grant recipients to report on the achievement of the project in the regular progress reports, Projects are primarily assessed on progress against the agreed milestones - which are most often outputs - and on the quality and timeliness of their progress and financial reporting. The desk-based judgements include an Orange (bad), Yellow, and light Green (good) grading of the projects regarding challenges in intervention. Only thereafter a decision is made to carry out a site visit.

The project progress reports and/ or milestones reports for the Phase II projects include information on the requested set of indicators. Project developers are informed about how to complete the tables with reliable and up-to-date information. However, the M&E system still requests that data be verified through a site visit. The site visits are only carried out at project completion. The data provided is not verified

Furthermore, 16% of the project developers responding to the survey had problems during implementation. The problems often relate to co-financing, procurement, availability of materials, legal or institutional framework, or partner contribution.





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until then. Therefore this data is not used in the EEP progress reports. There is no verification of the CO_2 savings, for instance. 61 projects have been monitored so far, with verification of the indicators but with no real assessment of the impact of the projects. The M&E team has focused on reporting efforts on the results against the results framework and has until now not engaged sufficiently in the project M&E to be able to identify actual impacts.

According to ECO, **resource constraints** have been a reason for the limited site visits. It should be noted, that ECO has actually assigned project follow-up and lessons learnt during implementation to the grant management team, with the M&E team to ensure collecting and reporting on results and lessons learnt against the result framework. We can thus assume that the site visits would be carried out using both Grant Management time as well as M&E time.

As of 31 March 2015, 42% into implementation, 60% of the M&E budget and 46% of the Grant Management budget had been spent. The time and resources available for M&E alone, corresponding to 5 full years of input, should allow contributing to the originally planned 2 site visits to all projects as expected in the figure above. A gross calculation shows that approximately 664 MD would be spent on the needed site visits in total, thus 49% of the time allocated to M&E ³¹.

To sum up, ECO's tracking and verification of progress is too widely spaced and sometimes comes in too late.

2.7.4 Results Based Framework

The Results Based Framework is established to ensure that not only a set of activities are implemented by ECO, leading to a related set of outputs, such as 8 workshops, 800 brochures etc., but that relevant results are achieved by the Service Provider, related to the expected programme outcome(s).

An impressive M&E framework has been set up, in the form of an Excel® spreadsheet, containing each project, and all indicators with annual data for each of the projects. Each of these feed into a sheet with the overall programme achievements.

Indicators

A total of 28 Indicators have been established for the three expected Outcomes and their respective Outputs. Where possible, they are disaggregated, e.g. on gender/youth (job creation) or rural/urban (households with access to clean energy).

The table below points out some issues related to some of the indicators. A full assessment of all indicators is provided in Annex G.

There were 179 projects as of 30th June 2015 projects in total; if each of these receives at least 2 site visits, of 1½ day day each, including reporting, it would add up to **537** MD. Estimating that 20%, thus 36 projects, would have problems in implementation, they would receive a third visit, requiring additional 36 * 1.5 MD = **54** MD. Travel time would be approximately **72** travelling days to each of the 12 other countries three times (2 return x 12 countries x 3 times). Totaling **663 MD**, which can be spent of the 1,118 MD available for M&E and of the remaining 236 MD for the Regional Coordinators (to support timely development and implementation of projects). This equals 49%, but it is considered that a part of the Grant Management time as well as the Business Development Support time would be appropriately spent on these site visits.





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Table 4 – Assessment of selected indicators

Indicator	Comment
OCI 1.2: Potential cumulative tCO ₂ emission reductions achieved over the life time of the installed technology and/or project	Methane emission reductions would need to be included. Methane is produced in biogas production and is 20 times more potent as a greenhouse gas than carbon dioxide. Looking at the whole chain of biogas production from supply source to the energy produced, some biomass sources can actually lead to increased emissions of GHG. Using dung in biogas production (like in the EEP products) leads to secure CO2 reductions, but it is important to ensure that methane leakage is kept to a very low level.
OPI 1.1.b: Number of projects with high probability of replication and/or scale-up	This is based on information provided by the project developer, and is intended to be judged by the monitoring expert with feedback from the beneficiaries. Still, it is rather subjectively assessed. Maybe it would be better measured e.g. through examples of spontaneous replication and diffusion of innovations.
OPI 1.3.c: Number of direct jobs created for women, men and youth.	This indicator does indeed show the contribution of the EEP projects to the dissemination and appreciation of the energy products. The M&E reporting covers permanent jobs and temporary jobs that were established as part of project implementation. The target combines both, so all jobs could be in principle be temporary, and targets would be achieved. However, this would not be an appropriate objective for the EEP programme.
OCI 2.1: Project reports increased potential to reach commercial viability as a direct result of business support	How can 'increased potential' be measured? Actually this indicator has not been possible to measure yet. Would it be measured as the percentage of projects with a 'green' status according to the internal grading of the projects? This would not be correct, as this grading would look at milestone completion as well as challenges in implementation however it is viability that counts for this indicator. A more ambitious M&E of the projects may allow ECO to capture the achievements towards this target. There is no reference to innovative solutions to energy access for the poor in this indicator, which is a key differentiating factor between this programme and others.
OPI 2.1b: Percentage of projects requiring technical assistance receiving support	The indicator does not correctly reflect the extent to which ECO should be providing Technical Assistance, and it is not clear whether this also comprises business development support. If only 1 project is requiring and receiving support, the percentage would be 100%. The target is 90%. Currently the percentage is 0% as apparently no projects have requested technical assistance, perhaps because they are not aware that it is available (based on the interviews); it is not yet measured. The degree of provision of Business Development Support should be included as an indicator.



In general, it is a challenge to collect useful data for some indicators. Therefore a trade-off must be sought between meaningful indicators, and what is possible to collect. The best indicator of success would be spontaneous replication.

Although the framework overall does reflect well the ambitions of the programme and the services to be provided by ECO, it is a weakness that for this programme there are no indicators on innovation, one of the windows, whereas the scale-up and replication potential is covered through indicator OPI 1.1.a and OPI 1.1.b.

Targets

Targets have been set for each of the indicators, and each year ECO reports on this year's targets. The reporting is subsequently related to ECO's payment request.

Some 'End of Programme Targets' (EOP target) seem to have been set too low, leaving little room for ambitions to improve. The table below shows those indicators where the EOP targets were already reached by over 150% by June 2015, 2 years before the end of the programme.

Indicator	Unit	EoP target	2014 target	2015 target	Actual June 2015	% of 2015 target	% of EoP target
OPI 1.1a: Number of projects replicated and / or scaled up	%	15.00%	6.00%	36.00%	45.45%	126%	303%
OPI 1.1c: Number of projects receiving private sector investment	%	20.00%	7.00%	20.00%	31.82%	159%	159%
OPI 1.4b: Amount of energy generated disaggregated by heat and electricity	MWh	6,000	2,237	23,272.22	18,661.45	80%	311%
OPI 1.4c: Absolute amount of energy saved through installation of energy efficient technologies / projects.	MWh	6,000	2,237	31,931.94	26,803.99	84%	447%
OPI 1.5b: Total potential installed and generation capacity	MW	40.00	15.00	91.94	118.22	129%	296%
OPI 3.1c: Percentage of EEP projects engaged in relevant networks	%	30%	5%	53%	72%	135%	239%

Because the original annual targets set were too low they were revised up in 2014, based on where they were in 2014. Both 2014 targets and 2015 targets are shown in the table above. This simple extrapolation used may not be the most effective method, as it is still not taking into consideration where granted projects are actually heading towards in terms of reaching the programme targets. Of those sampled 6 indicators, 4 of the targets are again clearly exceeded by mid-2015. All will be largely over-achieved by end of 2015.



It is valuable that the annual targets have been revised. However, they remain too low to what can be achieved. It would clearly be more ambitious and correct to take account of the projects granted, their indicators of achievement, and their targets set, and revise the LogFrame and the results based framework. Comments to the current targets are provided in full in Annex G.

2.8 Cross-cutting issues

The programme addresses many important cross-cutting issues by providing significant support to projects that are at the bottom-of-the-pyramid. Through the implementation of these initiatives, and specifically those that are private sector implemented, the programme encourages sustainable jobs and capacity building, and the provision of opportunities to access modern energy services for vulnerable groups, specifically women.

According to the monitoring of projects undertaken by ECO, 78% of the 1,078 jobs created have been given to women and youths, which is a significant achievement. On the basis of the request from DFID, the team investigated the possibility of obtaining data disaggregated by gender and age cohort. Obtaining that degree of detail would require additional funding from the donor to ensure consistency and quality. Whilst all project implementers asked were happy to facilitate the collection of the data if a budget was provided for it, it was generally felt that collecting this data would distract the companies from their core functions.



Jabulile Sakube. 5-Star stoves. the Managing Director for the Pot is on the Fire, in front of the local 5 Star Stoves sales and repair facility in Leandra, South Africa, explains that energy consumption patterns in the households where the cookstoves are being used have changed after switching to energy efficient technologies and monthly energy costs have decreased. Moreover emission reductions have been achieved through switch to energy efficient stoves and solar-powered LED lights instead of kerosene.

Many cross-cutting issues were the drivers for the design of the EEP programme: gender, participation, inequality and climate. The objective makes mention of inclusion and the green economy, and reducing harmful emissions. The projects funded are required to embody this in their approach. The degree to which this is or can be borne out in practice is uncertain. As was evidenced in several of the projects visited, where the market reality differed from the original design, compromises had to be made to maintain the viability of the business. However, an in-depth study would need to be done to understand this better.

2.9 Coordination, complementarity and coherence

The objectives of the programme are based on mainstream donor policy in addressing access to energy, poverty alleviation and climate change. There are a number of initiatives that are similar in Africa, most of which are American funded,



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such as the U.S.-Africa Clean Energy Finance Initiative (ACEF) – REACT window, the Renewable Energy and Energy Efficiency Partnership, Power Africa, the US African Development Fund, etc. From a European perspective, the ACP-EU Energy Facility provides grants, although it is less of a challenge fund, and SE4ALL, although this is attempting to address the macro-economic barriers. There tend to be larger scale funds provided through the European and African investment and development banks towards infrastructure projects.

To some extent, the requirement for coordination in a challenge fund focused on the private sector is not as fundamental as initiatives that require collaboration with national governments. The support to innovation can happen in isolation, although there are often barriers to progress that require government engagement. However, as was evident from consultations with projects, there are many gains to be made in coordinating, not least in terms of knowledge sharing. There is clearly a multitude of similar initiatives between which valuable lessons could be shared. The lead needs to be taken by the EEP donors to encourage coordination *across* development initiatives. However, this does not occur with the frequency that it should.

The engagement of SADC and the EAC is seen as ensuring regional coordination, although their mandate is to facilitate transboundary collaboration. However, through the SADC Energy Thematic Group (ETG) and the EAC Energy Technical Working Group, there is scope to encourage regional coordination within the energy sector. The suggestion was made by SADC that EEP should participate in the ETG meeting, similar to REEEP, to share experiences. This will be additional to the current practice where EEP provides occasional presentations to the ETG.

The EEP Southern and East Africa is aligned to other programmes in the region but there was little evidence of joint working until the beginning of 2015. Efforts have been made to market the EEP through other internal fora; however a concerted effort will need to be made to develop a joint working approach. There is potential to do so with national governments, other donor funded programmes, associations and partnerships. One of the key partners to work with would be financing institutions that take up projects completed under EEP to full implementation.

Conclusions 3

The EEP programme has made some significant achievements during the past two years. The efficiency of the CfP process and the administration of an extensive portfolio of diverse projects are commendable. All who are participating in the EEP recognize its value in boosting opportunities for projects that target the poor specifically by providing innovative and affordable solutions.

The EEP programme is very relevant in relation to national and regional policy. Whilst national and regional governments are focusing on energy access, national initiatives are still generally aiming to implement large-scale electrification for maximum impact and this is not necessarily inclusive, as the governments cannot afford to meet the needs of the last mile customer. Energy efficiency is addressed through top-down policy reform, which primarily affects those that are on the grid and using appliances.

The Mechanism

The challenge fund mechanism works. The projects funded have tended to be successful and Phase II projects are so far on track. The mechanism has achieved its objective of triggering innovation and the expansion of renewable energy technologies. The two-stage CfP process has been rated to be constructive although processes and procedures could be revised to reduce the number of full proposals that are rejected at EPC meetings on the basis of non-compliance or inadequate information. The increase in the grant ceiling has improved the level of impact of the EEP programme and opened up funding for large-scale impact as witnessed by some large investment projects being implemented under Phase II.

The projects supported by the EEP Programme have in general been selected for their innovative value. There are a number of projects that are using tried-and-tested models, for example improved stoves production. However there are also those that have developed business models combining energy and mobile phone technology, a technology that has grown in importance in Africa since Phase I was implemented. With the pace of change in the private sector, for a number of projects, the EEP mechanism was considered to be slow to turn around decisions and provide feedback. The requirements to report on impact are not the priority for the private sector as they respond to market forces.

The sustainability of the mechanism is heavily dependent on donor commitment, which was not secured for the full period of the EEP Phase II until 2014. The need for challenge funds remains on the basis that traditional financing institutions are still risk averse and financing options make bottom-of-the-pyramid approaches unfeasible until approaches proposed by project developers have been shown to be successful. Therefore, there needs to be a more flexible solution to the funding pool with the inclusion of a diversity of supporters, and which opens up for a mixture of financing instruments.

Project developers in Kenya, South Africa and Tanzania are the main applicants in terms of volume and number of the EEP grants, reflecting the level of awareness and readiness to develop innovative and scale-up projects. However, increasing awareness has led to a growing number of applications from other countries, and projects have now been supported in all the 13 participating countries.



Programme Management

The ECO team was confronted with a significant challenge due to the 113 projects that were carried over from Phase I to Phase II. There was a need to get to grips with these projects, most importantly to begin disbursements due to the significant hiatus in funding. At the same time, the management systems to monitor and manage the grants were established, and the next CfPs needed to be launched.

There is no doubt that ECO has worked very hard to be efficient. It should be recognized that launching and completing 6 CfPs within 18 months is a considerable achievement. It is however not clear why the CfPs could not be condensed into fewer calls to reduce this pressure. The processes appear to generally have been effective although the number of rejected full proposals was still significant despite the support received from ECO. This was for several reasons but over 60% of the instances of reasons for rejection could have been anticipated as they were related to noncompliance or inadequate information.

The emphasis so far has been focused on contracting projects and very little has been done to initiate the knowledge management and business advisory elements of the programme, except for the inclusion of a number of lessons learned on the programme website.

The projects that have communicated with the ECO team have confirmed their supportive approach. Communications have been primarily through email, although the grant management team phones the project developers and 22 projects have been visited under Phase II so far.

The management systems include a complex results-based framework, which guides the programme implementation. The budget for M&E doesn't include performing indepth impact studies that would be greatly beneficial to the programme to understand better whether the mechanism is having the effects that the M&E system is assuming it does. The annual targets in the results based framework have been adjusted upwards using a simple extrapolation based on 2014 levels, but, in the opinion of the MTE, these targets remain unambitious. In general the indicators used are appropriate and reflect well the priorities of the EEP programme, but indicators related to the quantitative and qualitative outcomes of business advisory support, and innovation are missing.

The programme management is directed at the activity level and there is a general focus on administering the programme as opposed to technical content and project outcomes - the quarterly workplans include a very detailed list of activities rather than results. This is in part due to the nature of the results-based contract and the way it is being implemented but also the lack of trust in the ECO team, necessitating close management by MFA. As a result of the budget reductions during contract negotiations there is a debate about the adequacy of the budget for the knowledge management and business advisory activities. Now that the CfPs have been completed, the ECO team is committed to picking up on the other components of the programme.

Knowledge management is limited by the fact that an up-to-date and comprehensive overview of the project portfolio is not readily available. In order to facilitate management, this data should be updated within 2 working days so that it can be used as a management tool, rather than for quarterly reports. This further limits the extent to which it is possible to easily carry out a portfolio analysis, which will consequently be a once-off exercise. In order to be able to learn from the projects





implementation on an ongoing basis, and to regularly make the necessary adjustments, routine analysis is required. This would be more easily done by establishing a comprehensive and routinely updated project database based on a more comprehensive M&E system, that examines projects according to the DAC criteria and/ or a project results framework, not just programme indicators.

The current programme management arrangements are not considered to be sustainable on the basis that the programme is not at the epicentre of energy debate and knowledge exchange in the region. The appointment of the Programme Director has greatly improved this; however the placement of some of the components of the EEP programme management may benefit from being regionally owned. A possible suggestion is described in more detail under the recommendations for Phase III.

EEP Governance

The current governance structure has facilitated the efficiency of the implementation significantly since Phase I. The SvB includes the donors as well as a representative from each of the RECs - SADC and EAC. However the latter are considered to be observers to the SvB and their role and legitimacy is not clear, as they perceive the programme to be largely donor driven.

The EPC is committed to ensuring good results and takes an active part in ensuring the quality of proposals that are finally approved. There is constructive engagement between the donors and recognition that MFA is overall responsible for the delivery of the programme. There are challenges associated with the different organisational cultures, emphases and approaches of the donors and of the coordination unit.

Due to issues of transparency and engagement, the role of the NCs was reduced in Phase II, which appears to have had a negative effect on their engagement in the programme. As with the RECs, the NCs role is almost perfunctory although the intention was to work with them to influence policy through the knowledge exchange platform and activities. Since the appointment of the current Programme Director, there has been an effort to engage the NCs but clarity needs to be provided on what value the EEP can add to the NCs' national policies. It appeared that the projects visited by the MTE team did not have a relationship with the NC, and in many cases did not know of their existence. For projects that have a strong reliance on the legal and regulatory framework, this was perhaps again, a lost opportunity.

The governance structure is appropriate but it requires some revision to make it more relevant to the government stakeholders in the EEP countries. In order to make the most of the time dedicated by government staff, it is critical that any knowledge sharing activities are catered to their national context and is relevant for them. The results-based results framework targets a number of policy briefs that could be used as a tool to achieve this. In addition, their engagement with projects should be direct. The national context and barriers to RE/EE should drive the knowledge management agenda, particularly for the bottom-of-the-pyramid.

Project Performance

The projects selected under the CfPs 6-10 during Phase II are reportedly on track to deliver on the agreed milestones (68 on the project list as at 30th June 2015). 18 projects from Phase I are on track or experiencing slight delays, presumably after having received an extension. 22 projects are experiencing challenges, although only 6 of these are considered to be significant challenges. 63 projects have been





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completed since the start of the EEP Programme and 8 terminated. These projects are contributing to the increase of access to renewable energy and energy efficient solutions. It is evident that the mechanism has triggered the implementation of innovative projects, as well as the scale-up of commercially viable projects. From the online survey, over half of the projects that responded were able to deliver on time although challenges are common in terms of the procurement process and securing partner contribution.

Whilst all Phase II projects are on track to deliver their expected outputs, this was not without its challenges. Based on the responses to the on-line survey covering both Phase I and Phase II, of those responding, more than half the projects funded (52%) reported that they were extended due to delays. While around 55% of projects reported that they were well on track (**in relation to project milestones**), the rest reported slight delays (22%), significant delays that could be overcome (8%) and 16% reported implementation problems.

The most significant barrier to projects that wish to scale up is access to attractive financing that is not risk averse and can support RE/EE projects as they expand.

One of the greatest successes of the mechanism is the use of principles from other sectors, such as the Pay-as-You-Go (PAYG) principle to make energy accessible to the poor, through solar home systems for example. The market approach was tested and adjusted and now solar home systems serve those that previously used kerosene and enables charging of mobile phones, while remaining within the household's current limits of affordability. However, there continues to be an unserved market – those whose current consumption is not high enough, and therefore whose ability to pay is too low, to make a commercially viable business out of providing an alternative.

The impact of the EEP programme has not been possible to assess with any reliability. The data used in the M&E framework is based on assumed CO₂ savings and benefits (jobs, savings and income) and has not been verified. Data is not collected by projects on impact. In-depth studies are required to establish the impact of the interventions that have been implemented so far.

There is a need to clearly differentiate the EEP approach to preparatory, innovation and scale-up projects. The degree of financing, engagement during implementation, and support to take projects forward differs. The greatest challenge for sustainability of the programme interventions is securing financing on attractive terms in order to scale-up projects and therefore this requires much more focus for projects with the potential to scale-up. In general, the inclusion of the private sector is a more sustainable approach, as long as the business case remains attractive to the project developers.

4 Findings and Recommendations

The recommendations below have been defined based on the findings that have been described in this report. They have been split between recommendations for the remaining duration of Phase II and suggestions for Phase III.

As the MTE team was informed that no further CfPs would be launched under Phase II, recommendations for future CfPs are included under suggestions for Phase III.





4.1 Findings and Recommendations - Second half of Phase II

Overall Recommendation: It is recommended that the remainder of Phase II is focused on providing business development support to improve project sustainability, producing knowledge that is catered for and relevant to specific national contexts, and influencing RE/EE policy EEP partner countries by sharing these knowledge products and engaging NCs.

The EEP Mechanism

It is recommended that: during the remainder of Phase II, the programme transitions from the focus on Calls for Proposals to a focus on the enabling environment, developing new partnerships with similar programmes, focusing on commercial viability and financing, and prioritising business advisory support. This change in focus can be guided by the portfolio analysis and may have implications for the skills set mobilised in ECO to address this change in focus.

No Findings **Recommended actions** The EEP mechanism supports a diversity Develop a project risk matrix (perhaps based on the DAC criteria) to identify vulnerable of projects in terms of experience, projects and prioritise business advisory support on that basis. This could be done through a combination of the evaluation of the full proposal (along the 4 criteria) and an assessment capacity, technical skill of project based on the milestone reports (where one has been produced). developers, and stage of development of the business concept. Some projects appear to be in greater need of business development support than others. **M2** The EEP support is very finite and there is Focus on project potential to reach commercial viability: Invite project developers to discuss inadequate attention paid to post-EEP grant, thereby affecting sustainability. implementation to ensure sustainability.

While there have been improvements in access to financing, "traditional" lenders continue to be risk averse and reluctant to invest in renewable energy and energy efficient projects, specifically where the solutions are based on small, mobile and define a post-EEP funding strategy during the final 3-6 months of the project

Establish a network of financing institutions in the partner countries, include them in knowledge sharing activities, and establish a referral process for projects that are in need of additional/ future financing. Establishing a link with an organisation such as CTI Private Financing Advisory Network may be an interesting and viable option.

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technologies.

M3 Networking with other similar initiatives has begun since the beginning of 2015. However, coordination could be improved to maximise on the learning across similar programmes and to engage in a more significant way.

Develop a "partnership" with other programmes in the region that are operating on a similar principle, such as REACT, REEP, Power Africa, etc where programme players are brought together **across** these initiatives would provide a very valuable knowledge-sharing prospect.

Develop a referral system between programmes that are providing support and assistance if the support cannot be provided by EEP

M4 Apart from cookstoves initiatives, there are two energy efficiency projects, showing a lack of demand for funding for energy efficiency interventions and perhaps a more significant issue that energy efficiency is not prioritised for the poor, despite its importance in ensuring resource optimisation.

As part of the knowledge management activities, undertake a study to understand energy efficiency issues and challenges in addressing energy efficiency for the bottom-of-the-pyramid and how initiatives could be developed.

M5 Knowledge management has been very limited and at this stage of the programme, this is critical. This is a core component of the EEP programme aimed to improve the achievement of outcomes.

In order to ensure that the knowledge shared in the remaining two years is constructive and useful to all stakeholders involved in the EEP partnership, a prioritisation of topics to be covered should be undertaken. This could be driven by the portfolio analysis due to be undertaken to target it to project needs, combined with discussions with NCs and RECs on their priority areas.

The EEP knowledge management component should consider issues that will contribute to the impact indicators of the results-based framework so that there is a link. For example, the policy initiative on cookstoves both nationally and regionally has an impact on the tCO₂ savings within the context of both (indoor) health and non-sustainable use of the biomass resource. This is an example of a knowledge product that could be launched pre-COP21.

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EEP Programme Management.

<u>It is recommended that</u>: the programme management system maximises the potential inter-linkages and synergies between its activities, establishing efficiencies by combining activities and ensuring that M&E feedback is both widely shared and rapidly available to impact both on knowledge sharing as well as on programme management.

No	Findings	Recommended actions
PM1	The initial budget proposed by KPMG was reduced by over €1.3 million, equivalent to 18% of the budget. In addition, ECO inherited 113 projects that were contracted during Phase 1. Despite these unexpected challenges, within the current contract there is provision for the equivalent of 8.7 full-time employees from March 2014 to the project end in 2017. There is therefore adequate time available in the contract to implement the services requested in the TORs. However, as the results of the services have not been explicitly defined, a stalemate situation has arisen between the MFA and ECO.	It is recommended that the current status of expenditure against the budget of input (agreed during contract negotiations) is drawn up. The MFA and ECO shall agree on the scope and expectations that can be accommodated within the budget lines for the remaining activities. On this basis, concrete results should be defined and future payments based on these results, similar to a lumpsum contract.
PM2	There are some budget inefficiencies in undertaking site visits for specific purposes, e.g. a monitoring visit or a grant management visit. This does not facilitate joined up working.	activities and attempt to establish efficiencies by combining activities. For example, where possible, combining business advisory services with monitoring visits would ensure that
РМ3	The ECO team has been extremely efficient in processing the CfPs, establishing an M&E framework, among other things but the knowledge	operationalize it to avoid any further delays in implementing this important component of



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No	Findings	Recommended actions
	as yet, and business advisory services mentioned in the TORs have not been defined concretely-both important components of the programme. So far a proposal for a knowledge management strategy has been outlined and put	CfPs.
		ECO to establish a support system for project developers/ implementers that can be available throughout project implementation so that project failure is not only discovered at the end of a project.
		The expertise of the EEP ECO needs to be adjusted to move away from the administrative activities and respond to the projects' technical, financial and business needs.
PM4	The M&E function is completely separate from the grant management function although information could be shared between these two functions. The external consultants who perform M&E visits also provide business advisory services where this is requested and their skills are suitable for that role as well.	A more integrated approach is taken to provide the support necessary to projects in order to boost the achievement of results. For example, the results from M&E visits feed into both feedback to the grant management team and also production of knowledge management materials.
PM5	management, analysis and overview of the project portfolio evidenced by the difficulties in obtaining data and having to	Whilst the fundamental management systems are in place, a central database of relevant documents should be established which is accessible to the EPC and ECO, and a set of routinely available reports and overviews should be defined by MFA and ECO that not only review administrative information but also the quality of the implementation.
	produce an analysis of the throughput of proposals based on meeting minutes and the time taken to produce an up-to-date	The portfolio analysis should include an overview of some of the key variables of the projects funded. For example, the split of rural vs peri-urban projects as a means to



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No	Findings	Recommended actions
	project list. A portfolio analysis is planned to take place in October 2015 however much of this information should be collected routinely by ECO and reports should be readily available.	understanding how the business models differ to take into consideration the dispersed population and lack of economies-of-scale. In addition, the analysis should feed into brief country profiles (including issues, challenges and barriers) that can be provided to the NCs.
РМ6	The knowledge management component needs to be catered to the users to ensure maximum relevance.	To facilitate this, it is recommended that a communications matrix is developed, an example of which is included in Annex I, which will ensure that there is a clear understanding across the programme regarding the role of the various stakeholders and the target audiences for the various knowledge management products.
РМ7	Coordination between programmes could be improved significantly. A commitment to sharing learnings in earnest is required.	It is recommended that consideration is given to introducing a side-event or conference for challenge fund schemes to come bring together the multitude of programmes and stakeholders in the sector to share lessons, knowledge, and network.

EEP Governance

<u>It is recommended that</u>: the EEP valorise the role of the National Coordinators and its own role vis-à-vis the National Coordinators so that EEP outputs (projects, knowledge management, etc.) support the NCs in engaging in RE/EE policy.

N	o Findings	Recommended actions
G	been limited during Phase II. It has been challenging for the MFA/ DFID/ ECO to establish the link between the programme and the national and regional projects	It is recommended that the role of the NCs and the RECs is revised (during the remainder of Phase II) so that they play a more central role on a national and regional level in engaging and to some extent leading on knowledge sharing and lessons learnt within their context (and other RE/EE programmes) as policy input, particularly pre-COP21. The topics to be covered during national events that have been proposed so far, for example, should be related to the barriers for local project developers and national priorities to further RE/EE.



		In addition, NCs should be routinely invited to participate in M&E visits at their own cost.						
	NCs.	In line with recommendation M5: Discussions with NCs and RECs on their priority areas would be useful, and highlight the importance of their participation.						
G2	A number of projects mentioned the lack of a "champion" within national government that was able to engage with projects directly regarding their specific barriers, and provide the missing link in the national network between implementers, policy makers, investors and financial institutions.	It is recommended that this forms part of the role of NCs and the ECO can proactively engage NCs to be involved in that regard						

EEP Project Performance.

<u>It is recommended that</u>: the EEP focuses on supporting on-going projects attempts to scale-up through business advisory services, through encouraging the banking/finance sector to support RE/EE and through linking developers with financing institutions/investment funding.

No	Findings	Recommended actions
PP1	As mentioned above, access to finance is still one of the most significant barriers to scaling up successful projects.	While the EEP programme reduces the exposure to risk for conventional financiers, it is necessary to consider a longer-term approach to explore how donors and the governments can support/ encourage the banking sector to invest in small-scale RE/EE projects. This differs from the use of micro-financing institutions to support loans – significant investment is required to roll out successful projects on a significant scale to take them to "the next level". Linkages should be established where possible with financial institutions.
PP2	The varied success of some of the more innovative approaches has required that business models undergo adaptation along the way. It would be useful to learn from this.	Projects that have adopted innovative solutions, such as the PAYG model, should be monitored as part of the recommended on-going portfolio analysis (and into Phase III to understand how such solutions evolve) and that knowledge shared regarding their success.



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PP3 A more forward-thinking approach needs to be taken in relation to project results and future growth. Many projects visited voiced their interest to receive support, specifically in terms of marketing, commercialisation of the approach and accessing finance.

Business advisory services should be provided throughout the process of implementation and a project helpline setup to ensure that projects can seek advice (technical as well as administrative) during implementation.

ECO should link developers with financing institutions (e.g. through national workshops or seminars) to provide for direct interaction. The EEP should consider publishing brief updates to financiers when a feasibility study has been produced, for example as there are many investment funds looking for investment opportunities.

EEP Results-Based contracting.

<u>It is recommended that:</u> The targets set for the indicators should be reviewed to take into account actual achievements and potential achievements, in order to make those more realistic.

No Findings Recommended actions

RB1 As mentioned above, the initial challenges in terms of the contract negotiations have led to an discussion. This has been compounded by the lack of clarity between the MFA and KPMG regarding their expectations with respect to specific activities mentioned within the TORs.

It is important to establish an agreement in order that the focus can be placed on results and delivery. Assessing whether remaining funds in the contract are adequate to accommodate the results to be achieved up to the end of the contract will require that a summary of input against the original budget is provided. This will provide a financial status quo. The decisions around expected programme results and the depth of the role of KPMG's in achieving them would need to be agreed. Based on this, the budget can be reviewed to establish if there are adequate funds remaining, whether it would be necessary to identify additional funds, or whether the activities should have been covered by the funds already consumed. It is important to consult the proposal for services submitted by KPMG as a reference point in terms of expectations. The budget can then be converted into a **results-based budget** and fixed, irrespective how much input is required to achieve that result (assuming no extenuating circumstances). In principle, the model would from then on work as a lumpsum contract whereby the payment for delivery of services is geared to the satisfactory achievement of results with an agreed timeline.



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RB2 The results-based contract is managed as a standard contract. The lack of autonomy for KPMG to take decisions on how to deliver results in the best way possible has contributed to the focus being placed on activities, as their scope of influence is limited. Activity plans are produced that are very detailed and maintain the focus on quantity rather than quality.

If a results-based approach is to be taken, it will be necessary for all parties to be clear on the results to be achieved, to trust that this will be done until the quarterly reports are provided, and to have a clear set of consequences if this is not achieved.

RB3 The current monitoring of delivery is performed at activity level, primarily as the activity plans are developed by KPMG at this level. The level of assessment needs to be adjusted.

In order to ensure that the assessment of results is as objective and robust as possible, clear indicators need to be defined. Where possible the indicators should incorporate: i) a clear link with the overall results-based framework; ii) should be at a level where KPMG have an influence over the achievement of the results; and iii) remove the focus on throughput and administration.

Results in this context do not refer to the programme results but the results achieved by KPMG. Examples of possible indicators are:

- participation of NCs or substitute NCs in national knowledge sharing events.
- "the proportion of projects that successfully achieve their milestone 2 deadline without an extension". This would reflect the element of business advisory services that are supposed to be provided in the early phase of implementation according to the TORs, as well as the advice provided during the finalisation of the proposal, allowing project applicants to establish a more realistic timeline with associated milestones.
- each project has a "next step" plan developed 6 months before its end date and any actions that the EEP, including the national coordinators, can take to facilitate that should be defined, e.g. networking with financing institutions.



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EEP Monitoring and Evaluation.

<u>It is recommended that:</u> the M&E activities combine elements of problem solving at individual project level with a lessons-learning approach which impacts on future RE/EE strategies, including whether RE/EE interventions funded remain on course to achieve their development objectives and the bottom-of-the-pyramid focus.

No	Findings	Recommended actions					
M&E1	The number of field visits to projects during implementation is limited. The emphasis is solely on collecting data for the purposes of reporting back to the results-based framework and there is no value added offered to the project. In terms of achieving outcomes, this also means that issues with progress or quality are picked up on too late.	 Site visits should be carried out on a more regular basis, to allow for continued mentoring and M&E of project developers, with an emphasis on problem projects, but keeping in mind the need to learn from successful approaches as well. Reintroduce the original idea to carry out 3 visits to each project: Milestone 1 visit to check progress and identify BDS needs; 2nd visit during implementation to check progress towards achievement of expected results and outcomes and identify challenges; and A final visit at contract completion to verify achieved targets, and to gather best practices and lessons learnt. Visits could be conducted during one day per project. These meetings would be of a sufficient length to ensure a good overview of the progress, challenges and achievements. Furthermore they allow establishing contact with the project team, facilitating the desk-based M&E and distance follow-up with the projects. Balance the focus on results framework indicators with a focus on project implementation, and monitoring of the progress towards achievements of results. This also means that the site visits should contain an element of support to and understanding of business development – in line with the provisions of the TOR. 					

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M&E2	In order to generate knowledge management materials, more in-depth assessments of project impact are required. A reflection of qualitative impact as well as quantitative. As the current M&E framework is based on
	forecasts of achievement that are not verified, this is critical.

M&E and knowledge management

- In-depth studies are required to get a real assessment of impact (qualitative and quantitative). This should be integrated into the knowledge management aspect.
- The M&E results and analysis can contribute to designing strategies as well as the future of the programme. This is not happening now.

M&E3 As described in PM4, there are inefficiencies in resource use and information sharing across ECO functions due to the separations of roles.

Staffing

 Greater integration and information sharing across Grant Management, Business Development Support, and M&E will improve on value for money and budget efficiencies, while ensuring an efficient time use.

M&E4 The main concerns regarding indicators in the results framework are that:

- 1. There is currently no data collection as to actual impact.
- The degree of disaggregation of the data required for M&E purposes by the donors necessitates a specific budget to be allocated either to the project developer or ECO.
- 3. Asking project developers to collect this data will potentially a) distract them from their core business, b) cause concerns in terms of consistency and quality of the data collected, as it will most likely be outsourced.

Results framework

- Difficulties obtaining the development impact data from the private sector should be assessed, considering whether ECO should be gathering this data.
- Incorporate an element of quality measurement into the results framework, for example grantee satisfaction, customer satisfaction (e.g. returns of faulty equipment/ complaints).
- Targets set need to be revised as a number of these have already been met and below potential achievements.
- Some issues have been pointed out with respect to the selected LogFrame indicators and targets, which should be discussed between the donor and ECO, and possibly lead to an update of the LogFrame.

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4.2 Findings and Recommendations for Phase III

4.2.1 Phase III - An Overview

Based on the findings above, the design of Phase III is suggested to be similar to Phase II, maintaining a challenge fund mechanism but with some key differences in terms of the structure of the mechanism, the management arrangements, sources of financing, and the M&E arrangements.

The EEP has a niche in terms of the combination of the pro-poor agenda with private sector development. Many other programmes focus on market forces as the equalizer; however what is evident is that some initiatives fail to address their initial target market. There is a need for a challenge fund that is grounded in ensuring a development impact and retaining a pro-poor approach. The approach of encouraging innovation and scale-up is considered to be valuable to maintain; however there needs to be a more coherent development path for initiatives that begin as start-up/ pilot projects in order to take them to scale-up. Therefore, the potential for scale-up will need to be an important selection criterion.

A business incubation approach is required for innovation projects, with much more hands on coaching provided to ensure that the technology, its operationalisation and the business model are effective. As the project approaches the completion of the pilot phase, the EEP would have a role in facilitating connections to potential financiers for scale-up, incorporating the lessons learned into the next phase. It is important that the EEP does not simply replicate many of the other mechanisms available. There are already a number of initiatives (specifically EU funded) that support large-scale projects.

In terms of future financing, the EEP programme could consider expanding the pool of partners to include not only the traditional development partners but also other investors, such as development banks, pensions funds, or commercial banks. These institutions will be able to participate on the basis of reduced risk as the donor funds can provide guarantees or capital investment. For larger-scale interventions, mechanisms similar to the EU-Africa Infrastructure Trust Fund could be looked at as an example of how funds can be blended.

The arrangements for the management of the EEP Phase III will need to be appraised closer to the time. However, several stakeholders have recommended using a regional think-tank/knowledge sharing institution such as SACREE and EACREE (when they are fully operational) as the coordinators of the knowledge component. SACREE may in fact incorporate a challenge fund according to its strategic plan and therefore it may make sense to use this as a conduit. What is clear is that the initiative should be more grounded in the regional policy and energy framework. However, administration and management of funds would need to be overseen by a similar contractual arrangement as exists under the present EEP. The capacity of the partner institution would need to be adequate to ensure that the momentum of the programme is maintained.

The management of the programme elements need to be much more coherent. There should be a between the M&E, grant management, business development/ incubation and knowledge management teams to ensure information is shared. M&E should also take place more regularly during the implementation and consideration given to designing a project monitoring plan that allows and requires developers to report on some development indicators.



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4.2.2 Detailed Findings and Recommendations

<u>Overall Recommendation:</u> It is recommended that EEP goes into a third phase, building on the current model by adopting a more differentiated implementation approach between start-up and scale-up projects. Further, that EEP maintains the development impact emphasis, diversifying the sources of funds to include financing institutions and other investors.

The following findings provide an overview of suggestions for a subsequent phase of EEP. However, the process for designing the next phase will require further investigation and additional information.

EEP Mechanism

<u>It is recommended that:</u> the EEP continue as a grant-funding mechanism, retaining its development impact focus and with an expanded funding pool (which could include additional donors but also financial institutions) opening up for a funding blend of grants and loans to support scaling-up of interventions.

No	Findings	Recommended actions
M1	The EEP mechanism furthers regional, national and donor development objectives. The value added by the mechanism over and above other similar initiatives is that it encourages innovation for the poor, specifically targeting development impact at the bottom-of-the-pyramid. The mechanism is so far very successful in meeting its objectives.	employing innovative approaches. The mechanism should maintain the development impact element in order to meet the needs of a

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M2 Funding

The sustainability of the EEP Programme is in the commitment of the funders. The inclusion of DFID has enabled significantly higher grant contributions.

Tied to this is the lack of access to financing for project developers that require significant investment to take the project to scale.

The EEP funding pool could be expanded to include additional donors by show casing the successes of Phases I and II. A brochure should be developed to explain the concept and principles, and more importantly the impact of the programme so far. This would require an in-depth study to be carried out. The management model should be based on the delegation of implementation to the MFA with all donor interests spelled out in an agreed policy framework to avoid challenges of each donor pushing their own agenda and priorities during EEP the implementation.

The funding could also be expanded to provide loans for both cofinancing and scale-up investments working with financing institutions. By supporting the pilot or demonstration phases of a project, and by committing to a partnership through which loans could be provided, this would improve the projects' chances of obtaining financing of a more significant value for the scale-up, potentially through the same financial institutions. In addition, project developers may be more committed to ensuring results if a loan repayment needs to be made. The role of the donor's funds would be to finance the risk (usually covered through developers collateral as well as interest rate), in case there is default on the loan. This may require a more lengthy commitment to the intervention, e.g. 5-6 years to allow it to turn around.

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M3 Projects supported

The types of projects supported are appropriate to meet the EEP objectives in terms and the majority of those supported during Phase II seem to be performing well, although it is perhaps too early to say. However, the approach to supporting the projects may need to be differentiated to reflect the degree of project experience, capacity and technical skill.

The current priorities for selecting innovative and scale-up projects that are well formulated shall be maintained – they do in general ensure that good and viable solutions are selected.

It is recommended that the model for implementation be significantly differentiated depending on the stage of development of a project. The key is to reflect that start-up businesses require more of an incubation approach, with technical expertise on hand to support the process, and a fast turn around in terms of disbursement. Large-scale interventions will typically be more resilient and independent but will require alliances with financing institutions for project scale-up. Therefore, it is suggested that the Phase III strategy recognizes these differences and accommodates them.

M4 Calls for proposal

The CfP process is effective, for the most part but time consuming. There is a need to make the selection process more stringent so that non-compliant or inadequately formulated proposals do not slip through to reduce the resource implications. It has not been constructive to launch so many CfPs in succession and perhaps more time spent could have been spent marketing the CfPs. The CfP windows did differentiate between innovative start-ups and demonstration/ scale-up projects.

The approach to launching CfPs in Phase III could benefit from being focused and targeted and should be more contextually linked to the marketing of the calls. For example, in a country like Zambia where biomass makes up 90% of the energy mix, the marketing of calls can emphasise that this should be where the solutions are aimed.

In addition, the CfPs for start-up initiatives should involve lower levels of investment and greater technical support and assistance than for established applicants.

The definition of risk and acceptable degrees of risk-taking should be clearly defined in terms of financial, technical, strategic and operational terms. This will particularly become relevant if financing institutions participate in the mechanism.

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M5 Energy efficiency

The absence of energy efficiency in the project portfolio is marked. It was not possible to establish why although it was suggested by the EAC that this was due to a lack of national capacity. There is also a lack of understanding of how energy efficiency can be applied for the poor with the exception of improved cookstoves and efficient technologies for small standalone systems.

A study is undertaken as to how energy efficiency could be incorporated in a meaningful way into all projects in Phase III (should be a requirement) and as a separate intervention (such as innovative ESCO approaches – link to R4D project funded by DFID).

A separate CfP window is launched to encourage energy efficiency projects.

M6 Coordination, complementarity and coherence

During Phase III, there is an opportunity to encourage greater information. cross-initiative collaboration and knowledge sharing.

Unfortunately, the pooling of knowledge and experience across Establish a network of initiatives and incorporate regional events that interventions does not happen as much as it could or should. draw on the membership of all these initiatives in sharing

EEP Programme Management

It is recommended that: programme management for EEP Phase III combines a grant management facility with sufficient internal RE/EE subject-matter capacity to influence the national and regional policy debate, to maintain a development and bottom-of-the pyramid focus through involvement of the private sector, and mobilising financial institutions to provide funds to the RE/EE sector.

No **Findings Recommended actions**

PM1 Future programme management

national and regional ownership. Mention was made of regional organisations, such as East African Centre for Renewable Energy and Energy Efficiency (EACREEE) and now Southern African Centre for Renewable Energy and Energy Efficiency (SAREEE) as being potential project implementation partners. SACREEE makes mention of a challenge fund in their strategic

The feedback provided during interviews highlighted the need for The possibilities should be investigated for the EEP to be managed by a regional body such as EACREEE or SACREEE in order to make the most of the recognition of these bodies in the region. specifically by SADC and the EAC. The potential partners should be knowledge centres/ think tanks for RE/EE who are recognised in the region by government and private sector implementers.



	plan.	EACREE and SACREE could also be more relevant candidates as REC representatives in the EEP SvB as they are better placed to add value to the programme.
		However, it would be recommended that technical assistance is provided to build the capacity of the selected institution(s) to make meaningful contribution to the EEP implementation, both in relation to the strategic management, administration and financing through the challenge fund.
PM2	The process of launching 6 CfPs within 18 months has been extremely time-consuming and taxing.	It is recommended that fewer CfPs are launched and that greater effort is put into marketing them in partner countries.

EEP Governance

<u>It is recommended that</u>: knowledge sharing becomes a priority for Phase III. This includes knowledge sharing on EEP RE/EE achievements with the wider community (through energy thematic & technical working groups, etc.) as well as transparent internal knowledge sharing on management issues (between the development partners, ECO and the NCs).

No	Findings	Recommended actions
G1	Regional and national integration is challenging, specifically when there are so many similar initiatives being implemented in the sector. While integration is important, the independence of the EEP programme has led to an efficient implementation to date.	As suggested above, it is key that the EEP becomes a member of the energy thematic/ technical working groups e.g. for SADC, in a similar way that REEP is. It is important that RECs also embrace EEP in their regional programmes discussed in REC Energy Ministers' forum.
G2	The model of having one single donor partner with the mandate to oversee the implementation of the programme has worked well and ensured that communication is coordinated, leaving the ECO to get on with the work. However, it has been challenging for ECO to ensure communications are streamlined. Significant time is spent on requesting detailed information, detracting from other tasks.	A set of management reports are defined and agreed between the MFA and ECO to be submitted monthly (short brief) or quarterly (detailed report). This should include information on specific themes, as well as reporting on grant progress. Where possible, additional requests for information should be avoided unless requested as part of the quarterly reporting.
	tasks.	ECO should be more transparent and up-to-date with project data



and allow access to MFA and DFID to specific files using joint file sharing. The project list should be kept current and include more information, such as contracting dates, targets, status (which milestone was last achieved, etc). This could be part of an interactive database that can generate information as required.

G3 On a national level, local ownership needs to be encouraged through more significant engagement with NCs. Currently NCs have little opportunity to come together and discuss common projects and challenges or to engage with project developers at country level part from endorsing their concept notes.

A strategy for the active involvement of NCs and RECs needs to be developed assessing the potential benefits for the national governments through EEPs knowledge management activities (e.g. knowledge about projects' scale-up potential, financing opportunities, and legal/ institutional bottlenecks and possible options to resolve these). The possibility of establishing a formal agreement with national governments and regional institutions should be investigated, spelling out obligations for EEP and the NCs and RECs. The partner governments should be required to contribute by appointing an NC and allocating associated resources.

Knowledge sharing in Phase III needs to be much more at the epicentre. National seminars should be arranged (where there are a minimum number of projects) and NCs should be able to to suggest topics for policy briefs or studies and papers on specific issues that they require additional information/ analysis about.

NCs should have the opportunity to attend a bi-annual seminar where they will present and discuss national challenges along certain themes, e.g. land tenure, disincentives to renewable energy, etc.

EEP Project Performance

<u>It is recommended that</u>: support to innovative and scale-up projects be continued, while ensuring that there is a strong focus on development impact, and on women and girls, as part of the selection criteria; and that business development support is provided both during implementation as well during scale-up



No	Findings	Recommended actions
PP1	The EEP Programme at present provides financial and administrative assistance to projects, rather than focusing on supporting projects to achieve their outcomes.	The business development element of the programme should be much more considerable, providing a helpline to projects, and facilitating technical expertise on request.
PP2	As the challenge fund is attracting greater interest from the private sector, the design of the challenge fund needs to evolve to take into consideration the way in which the private sector operates. There are a number of issues currently experienced in relation to requirements for information from project developers, inclusion of certain monitoring requirements, e.g. gender disaggregated data, and following up on projects during implementation. In addition, innovative and pilot projects require that there is a clear understanding of the risks that can be accepted in testing new concepts.	These issues will require attention when designing Phase III. Lessons can perhaps be learned by challenge funds that are established by the private sector for the private sector, such as the Shell Foundation. Where possible requirements should be streamlined and efficiencies optimized to ensure that the funding mechanism can respond to the types of project being supported, as well as that project developers are able to satisfy donor requirements.



5 Lessons learned

Mechanism

1. The model of implementation Phase II was a significant improvement on Phase I.

Lesson learnt: Flexibility in MFA approach and willingness to adapt following the lessons learned during Phase I was key to a significant improvement in Phase II implementation.

2. There is a continuing need for financing of energy projects, but it remains too costly to use conventional loans. Effectively many private sector developers confirmed their willingness to use loans as seed money, provided the conditions (interest rate and collateral required) would still make the investment feasible.

Lesson learnt: The funding mechanism may include concessional loans given that most applicants are private sector companies, wishing to establish a viable business. If a project applicant knows they can't afford to pay the money back, then it may be a bad project. These soft loans may replace the grants, with the donor recognizing that some loan recipients may fail to pay back.

Programme management

3. 11 full proposals were rejected during EPC meetings due to reasons that relate to the assessment of the Value for Money of the proposed project, or the technology proposed. The assessment of proposals may have been affected by the risk rate mentioned in DFID's business case. Despite assessment of proposals by external experts along specific criteria, these issues were not picked up.

Lesson learnt: Despite a complex and multi-step process, proposals that were not sound were put forward by ECO, perhaps to ensure a throughput. However, the risk rate applies to well designed interventions that fail due to unanticipated factors rather than a poor basis to start from.

4. Funds disbursement is related to milestones completion. Other programmes, for example EU financed, release the next disbursement according to a percentage of the budget spent. This may well reflect the need to receive the next disbursement, but not necessarily whether the funds already spent have gone towards reaching the expected results.

Lesson learnt: The EEP payment procedure ensures that the project is delivering the expected outputs, not simply on funds spent. This reduces the need to verify progress to the same extent as a fund-based disbursement. To implement results-based contracts would however require closer monitoring as the results need to be verified, rather than taking an audit report as proof. Results need to be clearly defined and maintained to ensure clarity for all parties.





Governance

5. The two active donors MFA and DfID have different approaches to the implementation of the EEP, as exemplified by the discussions on the full proposals' development impact, the use of the budget, differences in need to monitor on specific indicators, and each their own evaluation practices (the present MTE took place in the same period as the DFID annual review).

Lesson learnt: A multi-donor programme would benefit from full agreements from the beginning on modalities, priorities/requirements, budget use, decision procedures, and documentary requirements, incl. the M&E practices, which should be streamlined

6. Establishing a role for government in a programme that is not directly linked and contributing to national planning and programmes is a challenge in terms of ensuring ownership but also in terms of identifying how the programme can add value, rather than an additional burden, to government staff. Similar challenges exist at the regional level, with the relevant regional organisations.

Lesson learnt: The involvement of government is important in ensuring that the programmes supported contribute to national strategy. However, the input from government should not directly be related to grant/ project management (selection and monitoring) but in terms of developing the enabling environment for the purposes of RE/EE. This is a two-way process, in that government has a role in developing the legal and regulatory framework, and projects and the programme has a role in sharing the knowledge regarding project progress, barriers and actions that could address these.

Project Performance

7. Some projects implemented were innovative because they managed to successfully use solutions that had been developed and deployed in other sectors, such as PAYG or using mobile payment facilities.

Lesson learnt: Learning from other sectors can provide valuable insights. This could be obtained by providing innovative projects from other sectors to participate in knowledge sharing, for example through the Knowledge Exchange Fora.

8. Some feasibility studies that were financed through EEP have not been able to secure financing for the next step although they clearly demonstrated that the project was feasible and necessary documentations and approvals were realised.

Lesson learnt: In order to ensure that the results funded by EEP lead to greater impact, the plans for scale-up should form an integral part of the implementation, and should include technical support from EEP as part of the process. This will also ensure that the Programme is able to assist the project in identifying potential financiers. One possibility would be to make it a requirement for the next phase to demonstrate the potential leads for financing and a scale-up plan during the final 6 months of the implementation.





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9. Commercial viability is a driver for the private sector, contributing to sustainability.

Lesson learnt: This is well documented elsewhere; however the EEP programme incorporates an obligation to address development issues. While this has perhaps made for more work on the part of project developers, it has proven an effective approach to support social enterprises and initiatives that are targeting the poorer market segments, ensuring that the potential development impact remains a core priority.

10. Job creation is one of the most critical aspects of ensuring a development impact. The monitoring framework measures this by aggregating temporary and permanent jobs.

Lesson learnt: There needs to be a differentiation between temporary and permanent jobs created. Perhaps an element of the selection criteria should include the number of permanent jobs created for sustainability and impact purposes.

Annexes

Annex A: Terms of Reference

(see attached PDF)



Annex B: Work Plan

		29th	6th	13th	20th	27th	3rd	10th	17th	24th	31st	7th	14th	21st	28th	5th	12th
	Weeks	June	July	July	July	July	Aug	Aug	Aug	Aug	Aug	Sept	Sept	Sept	Sept	Oct	Oct
Nr	Activity																
1	Project Inception																
1.1	Kick off meeting	D1.															
	Review of background																
1.2	materials																
	Development of evaluation																
1.3	Ű,																
	Preparation of inception																
1.4	report																
	Submission of inception			_													
1.5	report			<u>П</u> 13													
2	Online Survey																
	Develop online																
	questionnaire & send data																
2.1	request																
2.2	Completion by projects							D13									
	On-going help and follow up																
2.3	for responses																
2.4	Data cleaning																
3	Field Work and Follow -Up																
	Briefing & interviews with							12-									
3.1	EEP		L 6		□20			14	17								



		29th	6th	13th	20th	27th	3rd	10th	17th	24th	31st	7th	14th	21st	28th	5th	12th
	Weeks	June	July	July	July	July	Aug	Aug	Aug	Aug	Aug	Sept	Sept	Sept	Sept	Oct	Oct
Nr	Activity					27											
	Interviewing external					27- 28,											
3.2	stakeholders				20-24	30-31											
5.2	Field work in Kenya (2				20-24	30-31											
3.3					22-24			12									
	Field work in Rwanda (1																
3.4	expert for 4 days)					27-30											
	Field work in Tanzania (1																
3.5	expert for 3 days)					27-29		10	20								
	Field work in South Africa (2																
3.6	, ,				20-24		4										
	Field work in Botswana (1																
3.7	expert for 4 days)					27-30											
2.0	Debriefing presentation in					Db4											
3.8	Pretoria					B 1											
А	Data processing and																
4	analysis												_				
4.1	Data processing																1
4.2	Data analysis																<u> </u>
4.3	Team workshop								118								
5	Reporting																
5.1	Draft final reporting										D1.						
5.2	Comments and feedback												D16				1
5.3	Submission of final report															לם	



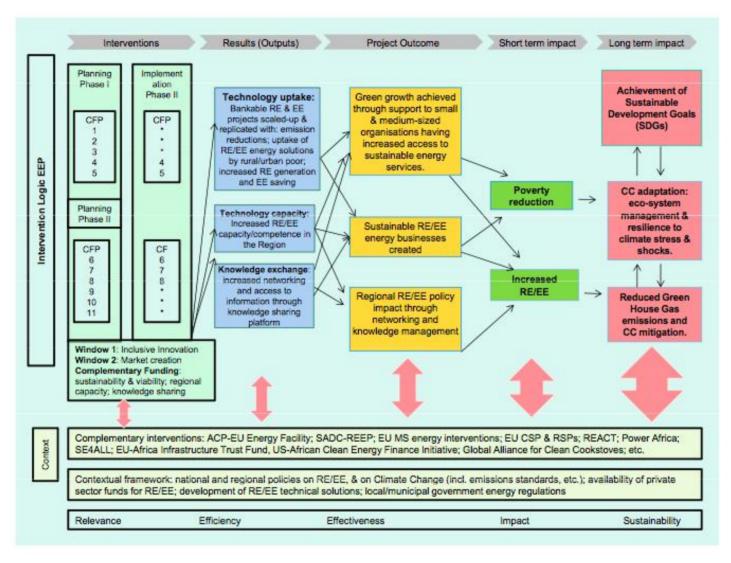
Annex C: List of persons interviewed and fieldwork schedule (see attached PDF)

Annex D: Revised Theory of Change

(see next page)







Annex E: Data collection instruments





E1: Evaluation Matrix

RELEVANCE - The extent to which a development intervention conforms to the needs and priorities of target groups and the policies of recipient countries and donors.

Evaluation Question 1

To what extent are the interventions aligned with the development priorities and policies of partner country governments?

Judgement Criteria	Indicators	Data and research actions
1.1. The EEP interventions are consistent with the partner countries' energy policies and strategies	 Energy policy; renewable energy policy; included in PRSP Environmental sustainability integrated in the design of the interventions. 	 Check National Energy Policies e.g. White Paper on Renewable Energy (2003) - Check with EEP National Coordinators; Check whether environmental sustainability was included in project design.
1.2. The EEP interventions are consistent with the region's energy policies and strategies (i.e. SADC and EAC Energy Policy)	 SADC and EAC energy policy documents Evidence from semi-structured interviews with regional organisations Evidence from semi-structured interviews with development partners supporting regional energy policy 	 Programme documents Qualitative interviews with stakeholders (was it relevant then; and is it still relevant now?); Interviews with local government EEP M&E results Baseline Studies
		The criteria of participation and partnership can be studied under relevance - particularly as regards the planning of interventions.
		Gender : It is also analysed under "relevance" but that mostly confirms what is written and not what has actually happened.



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1.3. The EEP interventions were
harmonised with those of other
development partners both
nationally/regionally as well as
within the (RE/EE) sector

- Development partner national and regional policy documents, looking at Energy Sectors "divisions of labour" (as defined by OECD/Paris Declaration);
- Role of lead donor vis-à-vis other donors
- Matching of EEP objectives with Finland's (and UK's) development policy (incl. regional and countryspecific priorities, sectoral and thematic priorities such as the Human Rights Based Approach)?
- Analysis of selection and number of the partner countries and their on-going relevance.
- Analysis of value-added of the regional approach visà-vis national RE/EE interventions

Desk work:

Programme documents

Field study:

- Discussions with sector partners at national and regional level
- Qualitative interviews with national level stakeholders;
- Discussions with stakeholders regarding regional approach, changes in regional integration in terms of renewable energy

Evaluation Question 2

To what extent have the RE/EE interventions been designed to improve the conditions of people living in poverty?

Judgment Criteria	Indicators	Data and research actions
2.1. RE technology options, mode of implementation and financial/business model have been chosen with a focus on improving the lives of poor rural and urban people	 A governance, gender and poverty analysis; Technology scenarios that include a focus on the choices that poor household have; Technology scenarios that place poor household within a context of what is feasible for the business model to supply - and the place of poor household in that context. Institutional capacity for long-term support analysed Financial/business model developed based on situation of the (bottom-of-the-pyramid) target group; Social impact studies and issues around HIV/AIDS (which is a major problem in Eastern and Southern Africa, particularly around infrastructure projects) 	(NB: RE and EE have been split over two JC's to ensure that both approaches are adequately covered. Both 2.1 and 2.2 would also look at, for example, how PAYG technology has been utilised and whether willingness/ability to pay studies were carried out) (NB: both within the home but also improving public sector improvements supporting poor households, and employment creation scenarios incorporating short and long-term employment spinoffs)



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2.2 EE technology options chosen with a focus on improving the lives of poor rural and urban people	 A governance, gender and poverty analysis; Technology scenarios that include a focus on the choices that poor household have; Technology scenarios that place poor household within a context of what is feasible for the business model to supply - and the place of poor household in that context. Institutional capacity for long-term support analysed Financial/business model developed based on situation of the (bottom-of-the-pyramid) target group; Social impact studies and issues around HIV/AIDS (which is a major problem in Eastern and Southern Africa, particularly around infrastructure projects) 	(NB: both within the home but also improving public sector improvements supporting poor households, and employment creation scenarios incorporating short and long-term employment spinoffs)
2.3. EEP RE/EE interventions are consistent with Regional and National poverty reduction strategies and relevant to the target group (of people living in poverty).	 SADC and EAC energy policy documents and poverty reduction strategies Evidence from semi-structured interviews with regional organisations Evidence from semi-structured interviews with development partners supporting regional energy/poverty alleviation nexus 	(This also takes into account the various contextual and national factors)



EFFICIENCY - The extent to which the costs of a development intervention can be justified by its results, taking alternatives into account.

Evaluation Question 3:

To what extent have RE/EE interventions been cost-effective, i.e. what has been the relation between costs and the results achieved?

Judgment Criteria	Indicators	Data and research actions
3.1. The interventions are carried out within their planned budget and schedule.	 Monitoring reports reflect disbursements. Disbursement timing against schedule Can the costs of the Programme be justified by the results? Can the administration costs of the Programme be justified and are they in balanced with the implementation costs? Is the project portfolio management timely and efficient? How is the contracting process managed? How transparent and efficient has it been? How could it be improved? CfP process timing (receipt of concept note through to contracting) Have the management resources been adequately allocated to different components? How does the Results-Based consultancy contract work and is it being effectively managed? What could be improved? 	 Progress reports (results and financial) Monitoring reports (actual reporting compared to ideal report cf. stated framework) Monitoring systems: what kind of data do they produce?; and do they do this on a regular basis? Financial reports



3.2. The costs of the investment required for the interventions is within the range predicted for the pilot and demonstration phase.	 Investment plans included in feasibility studies Investment plans monitored and adjusted during implementation following reviews. Mechanism within the project capable of measuring costs per unit 	 Feasibility studies Progress reports (results and financial) EEP CFP beneficiary records and planning documents
3.3. Financial scenarios and business plans have been developed based on experience from the interventions, and have provided bankable scenarios for scaling-up from the initial project intervention.	 Semi-structured interviews with beneficiaries on choice of funding mechanism. Investment plans for scaling up from EEP funded intervention - and choice of funding modality. 	 Analysis of project documents Analysis of scaling up strategies
3.4. The intervention modalities, through the CfP mechanism, are an appropriate mechanism for initiating RE/EE interventions.	Semi-structured interviews with beneficiaries on choice of funding mechanism	(In comparison with, for example, bank loans with preferential interest rates, or other funding modalities. This would include also issues around procurement delays, etc.)
3.5. The knowledge management platform is used as a facilitative mechanism to ensure that lessons learnt from RE/EE interventions are channelled back into the project preparation process.	 Knowledge management platform is accessed by beneficiaries Evidence that new project requests under CFP have used website to integrate lessons-learned and best practices on website. 	(This looks at whether the knowledge management process helps build capacity and that lessons learnt are re-circulated into the EEP target group of potential funding beneficiaries in order to avoid a reinvention of the wheel approach, and that cumulative knowledge within the sector is used and built on)

Evaluation Question 4:

How have programme designs and implementation modalities contributed to achieving efficiency?

Judgment Criteria	Indicators	Data and research actions
4.1. Interventions have been implemented as expected.	 Project completion reports Monitoring reports Additional studies or follow-up interviews focussing on problems encountered and solutions found. 	(This will include looking at whether the design met practical obstacles that did not allow interventions to move forward - e.g. related to Human Resources, procurement, receipt of contributions from various partners, etc. Particularly important given the number of projects that had to be terminated).
4.2. The implementation designs have taken into consideration the local employment resource base (including gender disaggregated capacity) and are making use of that base.	 Willingness and ability to pay studies (with disaggregated statistics); Needs identification studies; Gender analysis and analysis of who is responsible for decision-making; Technology choice based on socio-economic and poverty analysis i.e. use of PAYG technology, etc. Choices made balance appropriate technical solutions for the identified load - including connections to public and business consumers; as well as domestic connections (including poor households and their potential to connect). 	 Analysis of selected projects during fieldwork Survey monkey of non-visited Phase II projects

4.3. Intervention designs have been scaled-up	 Design and financing business models prepared and funded Expansion of production and installation and expansion of interventions after finalisation of EEP funding Approach to scaling-up problem solving analysed and recorded (i.e. problems with zoning, permits, etc.) 	(Relates to local production capacity, national norms and standards, other technology necessary for scaling up - such as PAYG technology)
4.4. The project approach (use of a challenge fund, the focus of the Two Windows and the use of the complementary funding mechanism) has resulted in bankable projects and sifting out of non-viable projects.	 Evidence of successful project results used to design a bankable scaling-up business proposal which is funded, and which results in expanded RE and EE interventions. Evidence that project scaling up continues to maintain a bottom-of-the-pyramid a gender focus. Evidence that the project facility (EEP ECO and the CFP mechanism) has provided a value-added component to project design not available elsewhere (within the banking system, for example) 	(i.e. focuses on management of the programme - including the Two Windows and the Complementary Funding; the use of CFP; and the appropriateness of supporting businesses in improving access to RE/EE through the CFP mechanism)

EFFECTIVENESS - The extent to which a development intervention has achieved its objectives, taking their relative importance into account.

Evaluation Question 5:

To what extent have the RE/EE interventions achieved their stated immediate and medium term objectives?

Judgment Criteria	Indicators	Data and research actions
5.1. Projects achieve their stated outcomes, continue to keep a poverty/bottom-of-the -pyramid focus, and remain viable after project support is withdrawn.	 Project visits and semi-structured interviews and focus group meetings Project records and reports reporting on outcomes, difficulties faced and scaling-up EEP monitoring reports on outcomes and viability The results based results framework indicators for the objectives and results shows that the intended changes are starting to take place The quality and quantity of the produced results are in accordance with the plans, 	(This will include how energy access/cleaner energy/more efficient energy is being put to use — including productive uses — that will then lead to the desired impact. For example, are the EE stoves serving as stove 2 or have replaced stove 1? Is the access to a light in each home being used for cottage industry? Has the access to energy services (not just clean energy) increased) Includes how the beneficiaries and other intended stakeholders apply the results?
5.2. Projects have made the transition from pilots/demos to scaled-up models	 Inventory of projects funded under EEP Identification of project initiators and interviews with them on use of EEP results to expand their interventions beyond the initial support Documentation linking EEP projects with "new" projects. 	Information retrieved both from projects visited; but also from on-line surveys and discussions with knowledge management platform of EEP.



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5.3. Markets for RE/EE technology (tested and implemented under the EEP) sustained and expanded.	 Inventory of funded projects and links to upscaled projects EEP programme indicators Inventory of production capacity and value chain for RE/EE equipment and technology 	 Discussions and interviews with external stakeholders. Comparative studies of RE/EE market within the region
5.4. Technology capacity and competence has expanded nationally and in the region	 Maintenance capacity in place to support existing interventions and new interventions Increased production lines of RE and EE equipment. 	Discussions and interviews with external stakeholders (especially academic institutions and similar programmes).
5.5. Finance available for bankable RE/EE projects increasingly available based on success of the EEP pilot/demo projects developing financing scenarios	Proven willingness by different financing institutions to increase funding to RE and EE interventions	 NB: both in particular (focussing on projects funded under EEP) and in general (looking at the wider market. Also - will look at the national differences with the SEA region.

IMPACT - The totality of the effects of a development intervention, positive or negative, intended and unintended.

Evaluation Question 6:

To what extent have EEP SEA interventions affected socio-economic development and the living conditions of people living in poverty?

Judgment Criteria	Indicators	Data and research actions
6.1. Household energy consumption patterns have changed.	 More household using RE and EE appliances - and evolution in use of appliances - and change in the balance between "fuels". This could be for both connected and non-connected household. Small-scale production at household level (cottage industry) using RE or EE. Changes in household energy costs and the percentage of household income that families spend on energy. 	(Impacts on household budgets and time management).
6.2. Household time management has changed.	Lights in evening (where: in the kitchen/living room/bedroom); watching TV; fetching water easier; less firewood used; less time spent cooking; school in evenings; hanging out in bars, etc.)	 Semi-structured interviews during project visits EEP project monitoring End-of-project reports by projects.

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6.3. Impact on the surrounding ecosystem has changed and in-door working environment has changed.	 Household use of wood and charcoal; and kerosene have changed - and replaced by cleaner sources of energy (which will have impacts on the surrounding eco-system and on indoor environmental health situation). Changes in household time use - especially in relation to role of women/girls in the kitchen, gathering firewood, fetching water, etc.,) Evidence that EIAs carried out for the projects funded; and follow-up on environmental impacts documented 	 (This is difficult to measure directly but trends can be drawn based on changes in household and small-business energy use, and on perceived changes in prevalence of (indoor air) pollution related diseases.) Potentially, if available, forest department statistics on fuelwood value chain Price evolution in household on funds spent on different energy sources; and on use of available time.
6.4. Local jobs have been created.	 Evidence from projects visited in respect of job creation Evidence that EEP has promoted sustainable development and created jobs in cottage industries, small-scale businesses and in supporting economic diversification 	 Monitoring reports and interviews Relevant studies
6.5. Nature and quality of public services has improved	 Quantitative and qualitative indicators (schools open in the evenings; clinics open at night for emergencies; 24/7 water supply; street lights give feelings of safety, etc. Evidence from focus group and other interviews on appreciation of public service improvements. 	(This has a household focus both rural and urban and relates to the potential target group covered by the interventions - the project's monitoring data should be able to cover this)



Evaluation Question 7:

To what extent have the RE&EE interventions been a factor in addressing environmental concerns in general and emissions reductions in particular?

Judgment Criteria	Indicators	Data and research actions
7.1. Reduction in emissions measured in project interventions	 Evidence of reduction of GHGs as a result of better access to cleaner energy. Evidence of value for money in clean electrical energy and biofuels that are being produced - also in terms of MWh or tons of CO2 emission reduction per Euro invested? 	Direct or indirect - refers to impact on surrounding forest resources, switching from kerosene to clean energy, use of improved cook stoves, etc
7.2. Energy consumption patterns have changed favouring the use of RE and EE technologies.	 More household and businesses using RE/EE - and evolution in use of appliances - and change in the balance between "fuels". Small scale production at household level (cottage industry). Connection and consumption costs resulting from RE/EE have increased (or reduced) the percentage of household income that families spend on energy. 	(Includes substitution of biomass - cook stoves - and kerosene - SHS, as well as estimates of emission reduction; but will also look at whether more energy is being consumed due to additional appliances (e.g. 2 stoves instead of 1) or increased energy use.)

Evaluation Question 8:

To what extent has the networking and knowledge-sharing platform contributed to regional policy making relative to RE/EE?

Judgment Criteria	Indicators	Data and research actions
8.1. Knowledge-sharing of project successes in addressing environmental concerns and emissions reductions spread through the knowledge management platform and impacting on national and regional policy to support RE and EE	 How have other Programmes and cooperation in the area of renewable energy been taken into account in planning and implementation, including finding synergies and experiences of joint work with other actors? Does the Programme improve complementarity amongst the different donors? Are there policies in place that inhibit or prevent implementation and the achievement of the Programme's overall objectives? 	Looks at coordination, complementarity and coherence with other development partners
8.2. Evidence that pro-active knowledge sharing and policy lobbying by the EEP with policy makers has resulted in increased support for RE and EE in policy statements and in implementation support.	 EEP's contribution in the information sharing and Knowledge Management concerning RE/EE. Is there an effective plan for Knowledge Management in place? Public awareness on renewable energy increased in the target countries? Management of EEP PR and communication activities in the Programme. Is there a need for additional information or different kinds of channels? How useful is the website of the Programme? Evidence that EEP has been able to build capacity of project developers to manage energy projects and businesses? 	Semi-structured interviews and on-line questionnaire - with regional organisations and national coordinators



SUSTAINABILITY - The continuation or longevity of benefits from a development intervention after the cessation of development assistance

Evaluation Question 9:

To what extent have RE/EE interventions contributed to changing energy consumption patterns in a sustainable way?

Judgment Criteria	Indicators	Data and research actions
9.1. Households show trend towards replacing firewood/charcoal cooking and kerosene/paraffin lighting with cleaner fuels.	Evidence of change in energy use at household level - including cottage industries but also SMEs	Focus groups and semi-structured interviews during project site visits
9.2. Environmental health improvements from reduction in indoor air pollution (i.e. less smoke from cooking and heating with fuel wood; and less smoke from kerosene lamps for lighting) are being reduced and maintained.	 Morbidity and mortality statistics - e.g. related to illness attributed to use of "dirty fuels" - woodsmoke, kerosene ingestion, etc. household and community perceptions regarding environmental health improvements. 	Health department statistics Perceived changes reported during field visits - through semi-structured interviews



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9.3. Use of biomass within the Households is decreasing and there is a reduction in the non-sustainable utilization of forest biomass for cooking and heating.	•	Consumption of firewood and charcoal; and kerosene/paraffin (including seasonal changes). Fuel-wood prices are seasonal so need to take that into account also - and overall fuel-wood prices can have gone up as a result of loss of the timber resource (or non-management of the resource). Use of fuel can also reduce through using fuel-efficient stoves; also influence of price structure (fuel wood; el tariffs; lighting fuel and gas	shou	Probably qualitative as unlikely to be reliable quantitative data. MTE taking place during the winter months, which uld give a reasonably good idea in respect of heating uirements.
9.4. The public sector - schools, health centres, etc and the service sector - including hotels, guesthouses, and bars - tend to increase the share of cleaner fuels in their energy use.	•	Evidence from site visit (quantitative/qualitative) focused on present energy use and changes in energy use over time.	•	Interviews with service sector focussing on changes over time.

Evaluation Question 10:

To what extent are there mechanisms in place to support the long-term sustainability of the interventions; and to what extent does this vary between the national programmes supported by the EEP SEA?

Judgment Criteria	Indicators	Data and research actions			
10.1. Maintenance procedures are defined, are in place and functioning, and local technical capacity is available and will continue to be available.	 Mechanisms exist for ensuring that bills are paid and what happens when bills are not paid? Who pays the bills and who doesn't? Existence of maintenance procedures. And are there gaps in service provision because the provider cannot repair breakdowns or ensure product supply? Evidence that projects have included institutional capacity building components for both the supply line and for on-going maintenance. 	Institutional capacity components, including: Customer outreach Customer grievance mechanism in place Strategic communication with other stakeholders in place/or taken into account (municipality, ministry, large-scale industries, production facilities and supply value chain) Anti-corruption measures in place			



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10.2. Sufficient production capacity exists to accommodate increased demand	 Evidence that RE/EE technology supplied is being produced nationally or within the region which can meet existing demand, and which is being scaled up to meet future demand Evidence that market surveys are being carried out which feed into production increase scenarios. Analysis of future trends has taken place and system has capacity to increase connections and has the institutional procedures to manage them (supply capacity exceeds demand capacity). 	Interviews with project developers			
10.3. The finance sector in increasingly providing funds to support RE/EE both with pilot projects and with up-scaling.	Evidence that project success and bankability is being used as collateral for accessing funds from other sources to up-scale projects	Interviews with project developers			
10.4. The production and marketing chains for RE/EE technology is expanding to satisfy increased demand with the bottom-of-the-pyramid target group.	Future RE/EE development takes into account demographic and economic forecasts and incorporates these into design and payment modalities to accommodate the willingness and ability of the bottom-of-the-pyramid to pay for and use RE/EE sustainably	This includes assessing the possible factors that enhance or inhibit sustainability, including ownership/ commitment, economic/ financial, institutional, technical, socio-cultural and environmental sustainability aspects, including climate change?			



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E2: Online Questionnaire

(see attached PDF document)



E2: Interview Questions

Part 1: Project identification and details.

Project number:

(NB - # also includes the country code).

CFP under which Project Funded: .

Type of Organisation:

(Categories are: CSO; Government Research Institution, Limited (???); Municipality; NGO; NPO; Private Business; University.

Sector:

Biofuels - liquid; Biogas; Cook stoves; EE (not cook stoves); Energy Efficiency; Hydropower; Multi-energy solutions; Solar PV; Solar thermal; Solid biomass; Waste-to-Energy; Wind power.

Project Type:

Demonstration; Demonstration Project; Feasibility; Feasibility Study; Non EEP scale-up; Pilot; Pre-feasibility Study; Scale-up.

Total Budget:

EEP Budget Financing:

Country of Lead Application:

i.e. this is not the same as the project location or country.

Part 2: Project analysis and responses (Structured by EQ).

Follows the EQ logic. Note that a lot of information is available in written form as well in project documentation and should serve as the basis for the interviews. No need to ask the same question again if it is already available in the documentation. Basically our "questions" are the judgement criteria.

Relevance

EQ 1: To what extent are the interventions aligned with the development priorities and policies of partner country governments?

(This would include both poverty focus as well as national and regional (i.e. SADC & EAC) CC policies and programmes)

- JC 1.1 The EEP interventions are consistent with the partner countries Energy Policies and Strategies
- JC 1.2 The EEP interventions are consistent with the Region's Energy Policies and Strategies (i.e SADC and EAC Energy Policy)
- JC 1.3 The EEP interventions were harmonised with those of other development partners both nationally/regionally as well as within the (RE/EE) sector





At project level, I don't think we need to delve into this - as they should have been given a "no objection" by the NCs. For JC 1.3 - it is directed at the development partners

- EQ 2: To what extent have the RE/EE interventions been designed to improve the conditions of people living in poverty?
 - JC 2.1 RE technology options, mode of implementation and financial/business model have been chosen with a focus on improving the lives of poor rural and urban people (NB: both within the home but also improving public sector improvements supporting poor households, and employment creation scenarios incorporating short and long-term employment spinoffs)
 - JC 2.2 EE technology options, mode of implementation and financial/business model have been chosen with a focus on improving the lives of poor rural and urban people (NB: both within the home but also improving public sector improvements supporting poor households, and employment creation scenarios incorporating short and long-term employment spinoffs)
 - JC 2.3 EEP RE/EE interventions are consistent with Regional and National poverty reduction strategies and relevant to the target group (of people living in poverty).

(This also takes into account the various contextual and national factors. (NB: both 2.1 and 2.2 would also look at, for example, how PAYG technology has been utilised and whether willingness/ability to pay studies were carried out)

Main information can be taken from the project document.

Efficiency

EQ3: To what extent have RE/EE interventions been cost-effective, i.e. what has been the relation between costs and the results achieved?

- JC 3.1. The interventions are carried out within their planned budget and schedule & acceptable quality.
- JC 3.2. The costs of the investment required for the interventions are within the range predicted for the pilot and demonstration phase.
- JC 3.3. Financial scenarios and business plans have been developed based on experience from the interventions, and have provided bankable scenarios for scaling-up from the initial project intervention.
- JC 3.4. The intervention modalities, through the CfP mechanism, are an appropriate mechanism for initiating RE/EE interventions.

(In comparison with, for example, bank loans with preferential interest rates, or other funding modalities. This would include also issues around procurement delays, etc.)

JC 3.5. The knowledge management platform is used as a facilitative mechanism to ensure that lessons learnt from RE/EE interventions are channelled back into the project preparation process.

(This looks at whether the knowledge management process helps build capacity and that lessons learnt are re-circulated into the EEP target group of potential funding beneficiaries in





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order to avoid a reinvention of the wheel approach, and that cumulative knowledge within the sector is used and built on. As regards JC 3.5, we could focus on whether they have used the website for other than the CFP, and whether they have learnt anything from the website - through the lessons learnt section, for example; and ask if they have other ideas on how to improve knowledge management and sharing)

Here we focus on the CFP mechanism and how the projects feel that this has worked

EQ 4: How have programme designs and implementation modalities contributed to achieving efficiency?

JC 4.1. Interventions have been implemented as expected.

(This will include looking at whether the design met practical obstacles that did not allow interventions to move forward - e.g. related to Human Resources, procurement, receipt of contributions from various partners, etc. Particularly important given the number of projects that had to be terminated)

- JC 4.2. The implementation designs have taken into consideration the local employment resource base (including gender disaggregated capacity) and are making use of that base.
- JC 4.3. Intervention designs have been scaled-up.

(Relates to local production capacity, national norms and standards, other technology necessary for scaling up - such as PAYG technology)

JC 4.4. The project approach (use of Challenge Fund, the focus of the Two Windows and the use of the complementary funding mechanism) has resulted in bankable projects and sifting out of non-viable projects.

(i.e. focuses on management of the programme - including the Two Windows and the Complementary Funding; and the use of CFP)

Effectiveness

EQ 5: To what extent have the RE/EE interventions achieved their stated immediate and medium term objectives?

(Specific focus on "small and medium scale organisations access to sustainable energy services - green growth.)

JC 5.1. Projects achieve their stated outcomes, continue to keep a poverty/bottom-of-the -pyramid focus, and remain viable after project support is withdrawn.

(This will include how energy access/cleaner energy/more efficient energy is being put to use – including productive uses – that will then lead to the desired impact. For example, are the EE stoves serving as stove 2 or have replaced stove 1? Is the access to a light in each home being used for cottage industry? Has the access to energy services (not just clean energy) increased)

- JC 5.2. Projects have made the transition from pilots/demos to scaled-up models
- JC 5.3. Markets for RE/EE technology (tested and implemented under the EEP) sustained and expanded.
- JC 5.4. Technology quality, capacity and competence have expanded nationally and in the region.





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JC 5.5. Finance available for bankable RE/EE projects increasingly available based on success of the EEP pilot/demo projects developing financing scenarios.

Impact

- EQ 6: To what extent have EEP SEA interventions affected socio-economic development and the living conditions of people living in poverty?
 - JC 6.1. Household energy use patterns have changed.

(Impacts on household budgets and time management).

- JC 6.2. Household time management has changed.
- JC 6.3. Impact on in-door working environment has changed.

(This is difficult to measure directly but trends can be drawn based on changes in household and small-business energy use, and on perceived changes in prevalence of (indoor air) pollution related diseases.)

- JC 6.4. Local jobs have been created.
- JC 6.5. Nature and quality of public services has improved

(This has a household focus both rural and urban and relates to the potential target group covered by the interventions - the project's monitoring data should be able to cover this)

- EQ 7: To what extent have the RE&EE interventions been a factor in addressing environmental concerns in general and emissions reductions in particular?
 - JC 7.1. Reduction in emissions measured in project interventions and impact on surrounding eco-system changed.

Direct or indirect - refers to impact on surrounding forest resources, switching from kerosene to clean energy, use of improved cook stoves, etc.

JC 7.2. Energy consumption patterns have changed favouring the use of RE and EE technologies.

(Includes substitution of biomass - cook stoves - and kerosene - SHS, as well as estimates of emission reduction; but will also look at whether more energy is being consumed due to additional appliances (e.g. 2 stoves instead of 1) or increased energy use.)

- EQ 8: To what extent has the EEP networking and knowledge-sharing platform contributed to regional policy making relative to RE/EE?
 - JC 8.1. Knowledge-sharing of project successes in addressing environmental concerns and emissions reductions spread through the knowledge management platform and impacting on national and regional policy to support RE and EE.
 - JC 8.2. Evidence that pro-active knowledge sharing and policy lobbying by the EEP with policy makers has resulted in increased support for RE and EE in policy statements and in implementation support.

(N/A as far as the projects are concerned)





Sustainability

- EQ 9: To what extent have RE/EE interventions contributed to changing energy consumption patterns in a sustainable way?
 - JC 9.1. Households show trend towards replacing firewood/charcoal cooking and kerosene/paraffin lighting with cleaner fuels - electricity (or gas).
 - JC 9.2. Environmental health improvements from reduction in indoor air pollution (i.e. less smoke from cooking and heating with fuel wood; and less smoke from kerosene lamps for lighting) are being reduced and maintained.
 - JC 9.3. Use of biomass within the Households is decreasing and there is a reduction in the non-sustainable utilization of forest biomass for cooking and heating.
 - JC 9.4. The public sector schools, health centres, etc. and the service sector - including hotels, guesthouses, and bars - tend to increase the share of cleaner fuels in their energy use.
- EQ 10: To what extent are there mechanisms in place to support the long-term sustainability of the interventions; and to what extent does this vary between the national programmes supported by the EEP SEA?
 - JC 10.1. Maintenance procedures are defined, are in place and functioning, and local technical capacity is available and will continue to be available...
 - JC 10.2. Sufficient production capacity exists to accommodate increased demand
 - JC 10.3. The finance sector is increasingly providing funds to support RE/EE both with pilot projects and with up-scaling.
 - JC 10.4. The production and marketing chains for RE/EE technology is expanding to satisfy increased demand with the bottom-of-the-pyramid target group.



Annex F: Data

F1: Online survey analysis

An online survey questionnaire was sent to all 143 projects funded under the EEP covering both Phase I and Phase II. In total 54 responses were received covering 58 projects (including three responses represented organisations that had received funding for more than one project). The majority of responses came from South Africa (15), Kenya (13), and Tanzania (6) - with the remaining responses spread over the other EEP programme countries. This spread also reflects quite closely the overall spread of projects funded under the EEP and can thus be considered as being a rather representative sample.

BUR	BTS	KEN	LES	NAM	MOZ	RWA	SA	SWA	TZ	ZAM	REG
4	2	13	1	2	5	3	15	1	6	4	2

The on-line survey was structured around the evaluation question and judgement criteria matrix. Hence the analysis of the responses follows the same logic and this annex is structured according to the DAC evaluation criteria, using the 10 evaluation questions as headings. The survey questionnaire is included as a separate annex. Annex E.

This annex contains a summary of the responses received to the on-line questionnaire.

Relevance

Evaluation Questions 1

To what extent are the interventions aligned with the development priorities and policies of partner country governments?

Evaluation Questions 2

To what extent have the RE/EE interventions been designed to improve the conditions of people living in poverty?

The on-line survey did not directly ask questions related to **relevance**. Issues of relevance were dealt with during the interviews with the projects visited.

Efficiency

Evaluation Questions 3

To what extent have RE/EE interventions been cost-effective, i.e. what has been the relation between costs and the results achieved?

Over 90% of response considered the Calls for Proposals to be an appropriate mechanism for initiating interventions (in the RE/EE) sector. Specifically regarding the assessment of the CFP mechanism: respondents were positive about the mechanics of the CFP process, notably the Instructions provided to applicants; the Clarity of information about EEP strategy (available during the application process); and the Concept Note requirement as an entry point. These were seen as working well and gave very positive responses.





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By contrast, responses were much less positive as regards the process between concept note and project approval. A major issue as regards <u>weakness</u> was seen as being the time taken between acceptance of Concept Note, Project Approval and Contract Signature. Opinions were divided on the support provided during proposal development and responses were reasonably positive as regards feedback on proposals submitted.

Summing up, it was clear that projects were positive about the use of the CFP process as a an access-to-funding mechanism, but were much less satisfied with the management of the process after the initial acceptance of the project idea as conveyed in the Concept Note.

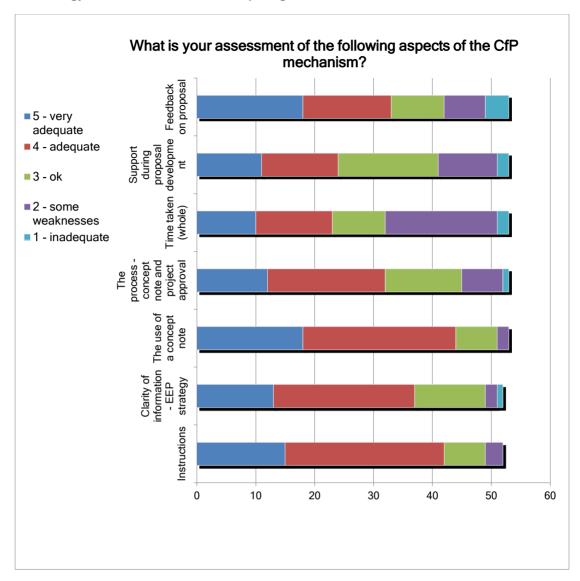
As regards the knowledge management platform, on the positive side, everyone is aware of the EEP website and the web platform. As expected, the most frequent use of the website relates to how to apply (for the Calls-For-Proposals) and information support (how to implement the CFP process). However the website is much less frequently used for content related information (such as lessons learning and success stories).

The responses also show that little reliance is placed on the EEP to provide technical assistance - the responses tend to be that projects have "never" or "rarely" relied on the EEP programme to provide technical assistance or support during the application process.

On the positive side, in those cases where assistance was provided, three-quarters of those responding did find the assistance useful.

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The responses from the on-line survey indicated that while respondents were generally very much in favour with the Call For Proposal approach, they were critical of the lack of opportunity to dialogue with the programme, were unhappy about the length of time that decision-making took and were concerned that delays in decision-making impacted on both planning and implementation. This is illustrated by the following selection of responses:

Lack of verbal guidance on proposal feedback. Email communication is effective, but proposal and approval in my case.

The process (e.g. information about timelines) could be more clear. I also refer to another application we did for CFP9, where we had to wait for over 6 months to get the results of the concept note stage. In general, the communication with the coordination office could be improved. It is hard to communicate through email when you do not know the name of the person who replies. Also it is difficult to reach the team through phone. It would help to get a specific contact person (as was the case during the first phase), who is easily reachable, for example through Skype, email or phone when necessary. Sometimes answers can take long, and it is hard to follow up when you do not know the person who should answer it.





Time taken to approve concept note was very long. Communication at this time was poor. The same questions were asked repeatedly which were already answered in the proposal. The cost of this process to the applicant is high and not appropriate for an innovation grant where applicants may have very limited resources

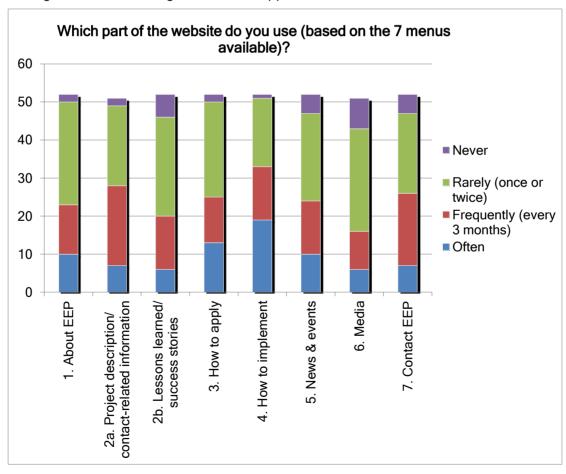
I believe the time period between concept note to contract signature (in our case) could be improved. For planning it is better to have a clear decision quicker (even though we are glad it was eventually positive in our case).

It would be an improvement if there was a specific person that each project was assigned to as a primary contact person rather than a general EEP email address.

Time taken between after concept note approval, project approval and contract signing is too long... need to be shortened. Same for time taken to reimburse payment from invoicing to actual bank transfer is also too long.

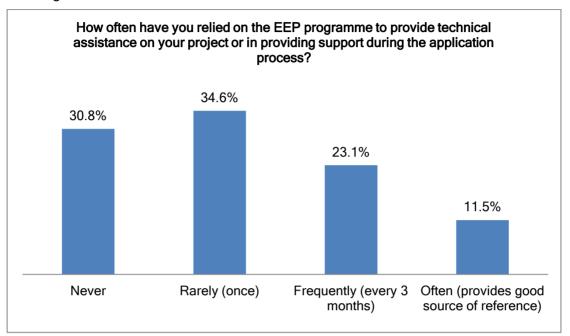
The time taken between concept note, project approval and contract signing took a long time. We did not receive (or know of any support) which was or may have been available during proposal development phase. We did not receive feedback on our proposal.

The knowledge management platform was mainly used for information linked to the CFP process - very little use was made of the platform with respect to actual management of knowledge, technical support or lessons learnt.





Projects did from time to time request support from the EEP - but this was rather infrequent and was maybe also not really encouraged by the Programme. The bar chart below illustrates the frequency that projects developers attempted to contact the Programme for technical assistance.



As regards **technical support**, it is clear from the responses that projects would have been grateful for a dedicated technical support facility and a direct line of communications. The following responses illustrate some of these concerns:

We requested information for budget modification. As no direct contact is available for enquiries, the response process takes longer, which affect the effectiveness of the project developer in its implementation.

Did not know any technical assistance was available.

Further detail on Call Specific purpose and type of project that was being sought. Technical glitches with submission.

Clarification of the procedures, working out the project strategy, suggestions on embedding of the project locally, some technical issues.

Submission of Milestone reports specifically relating to getting it to the format required. Requests for extension of deadlines or informing if removal of project manager. Requests relating to validating whether certain expenses are covered.

Required amount of promoters contribution, are in kind costs acceptable etc.

Not during application, but during implementation in terms of deliverables, expectations, invoicing, etc.

Advice on project components selection, to meet EEP criteria. Problems with project execution and how to address.

We needed to modify the milestones of our proposal, and the EEP staff was quite understanding about this.





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Guidelines for implementation, shifting of budget between items, requirements for advance payment.

Respondents also suggested a number of **improvements**. Basically this amounted to faster and better communication between projects and programme. This is illustrated by the following selection of responses.

The application is not user friendly, please made application simpler. The call for proposal should be advertised on local newspapers from participating countries. In fact I just heard about the 11th call for applications. Also to be a bit flexible on timelines sometimes when a certain milestone is not achievable as contracted due to unforeseen circumstances.

Make available direct contact with the project manager at EEP.

A contact person for each project would be very useful. Open communication would help ease frustrations and extended delays in response to requests by grantees.

I think having a call to discuss after the concept note would be useful for the applicants.

The platform should be updated frequently, and it takes too long to get an answer.

Faster feedback, our deadlines are strict so we cannot wait for answers for a week.

According to the consultant, the EEP team in charge of payment is not responding and does not even acknowledge receipt of mail reception. Especially in case of advance payment requests.

Helpful to have the dual team of EEP and KPMG Energy perspective in person.

Make EEP people available by telephone and meetings with project developers. Email alone as communication is simply insufficient.

It would be helpful to know the specific technical knowledge / areas of experience EEP support staff has in order to request input.

Maybe let project developers know that there is technical assistance available if they may need it. We could have benefited from such but did not know that it was available at the time of our implementation.

Evaluation Questions 4

How have programme designs and implementation modalities contributed to achieving efficiency?

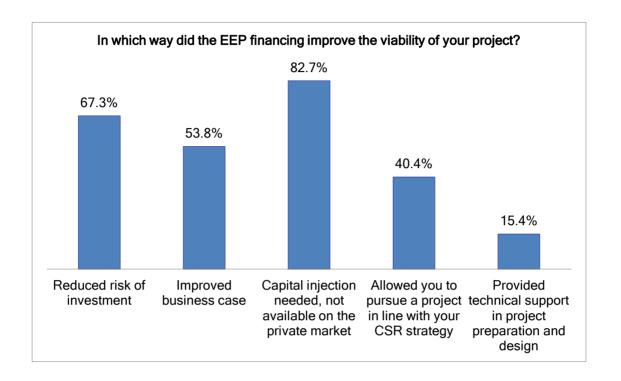
Over 95% of respondents felt that the EEP facility had provided then with an opportunity to implement a project that they would not have been able to do without grant financing.

Principally, the EEP was seen as providing a capital injection not available on the private market (83%), reducing the risk of investment (67%) and improving the project's business case (54%).





While a number of respondents did agree (40%) that the project allowed the company to pursue a project in line with the institution's corporate social responsibility strategy - there was a general consensus that the EEP provided little technical support in project preparation and design - with only 15% acknowledging that technical support from EEP was a factor in project preparation and design.



Financial viability is seen as being one of the key stumbling blocks for RE/EE projects. The EEP support was seen as vital as a vehicle to improve project viability.

Responses noted that:-

EEP funding covers the preparatory work to build a business case acceptable for private investors.

Enabled us to increase our outreach to young / rural entrepreneurs and support them in a good way.

No capitalist financiers can accept to finance the feasibility study, and yet this last is key to the negotiation of needed financing.

As an NGO the funding was vital for the project.

However projects were faced with a number of challenges contributing to delays in implementation. The result was that just under half the respondents reported that they have had to overcome delays of anything between 2 months up to 24 months with an average delay of some 8 months.

Reasons for the delays were varied, ranging from political instability to technical issues, to community commitment to the project and procurement restrictions, and the legal framework for the project to operate. A selection of the responses is provided below:

Unfortunately as the contract for this project was signed, the political stability and





security in Burundi has been severely deteriorating. Therefore, our local partner had trouble implementing all sub-activities related with fieldwork in the selected villages such as, demand assessment studies and site analysis. Our local partner is currently finishing these tasks. While the fieldwork is impossible due to the unsettled political situation, both partners have decided to advance work on the following activities: Legal Framework Analysis and Identify key Roles and Responsibilities.

We have done all the technical studies going from the hydropower resources assessment, plant design, business planning and environmental impact assessment (EIA), negotiated all the required licenses except that ones that are binding like the power purchase agreement and regulator's license are still pending in order to avoid penalties as there are not yet funding available for the construction.

The technical and financial feasibility of the project were confirmed. The final leg was to implement a small-scale production and marketing capability within the local communities. This aspect was not successful due to failure to obtain the commitment to the project from local communities. We are endeavouring to investigate alternative approaches to resolve this issue as part of our post project work.

We had a delay from the start regarding implementation because of technical issues with our product. These are now being solved, so we hope to scale up quickly and still meet our targets. However, the EEP grant helps us to overcome these delays.

Technical delays and problems requiring more finance

Co-funding slow to be approved so project is on hold

We are still at a relatively early stage of development, and have suffered delays due to regulatory change. We anticipate completing all milestones with a 12-month delay.

The biggest challenge has been the legal framework in the country in which the project is being implemented and apparent lack of political will to support the project.

Delays of material caused by the important company have been explained to the beneficiaries and did not affect final impact.

The core activities have not been completed; Wind data collection and analysis, EIA and financial analysis.

Procurement done on the extension and completed, apart from the fraud to be resolved by the Financial Ombudsman, need to complete the final report and claim.

Delays due to contract signing and loss of co-funding needing to be overcome.

Effectiveness

Evaluation Questions 5

To what extent have the RE/EE interventions achieved their stated immediate and medium term objectives?

Generally speaking about half the projects funded under the EEP (55%) reported that they managed to implement the project as planned - the remaining 45% had difficulties sticking to the planning.

The main reasons given for delays covered the partner contribution (39%), the procurement process (39%) and lack of, or delays with materials and other inputs



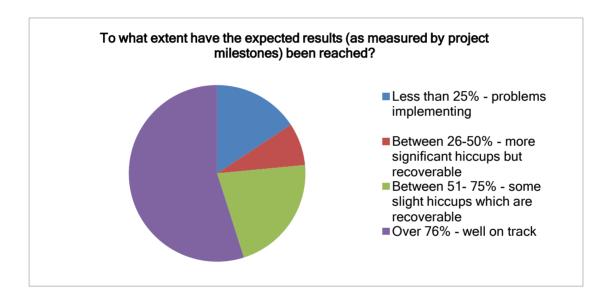


(35%). Other factors contributing to delays were: lack of co-financing (22%), and the legal and institutional framework (22%) as well as political instability (17%)

More than half the projects funded (52%) were extended due to delays. Around 55% of projects reported that they were well on track (**in relation to project milestones**) - while the rest reported slight delays (22%), significant delays but ones that could be overcome (8%) and 16% reported serious implementation problems.

The responses in relation to the achievement of project **objectives** suggested that some 55% of projects considered that they were less than well on track to achieve their objectives - with similar responses in relation to the likelihood of impacting on the local community. Mostly the problems related to likely **delays in reaching the objectives** - rather than an acknowledgement that the objectives could not be reached.

The results of the survey do need to take into account that quite a number of projects have only recently started full implementation - nevertheless it is a cause for concern that a significant number of projects have difficulties implementing their interventions within the planned time frame.



The text responses from the respondents reveal a number of challenges had to be met - all of which resulted in delays. The responses also reveal **challenges faced** with scaling up.

Objectives were for getting enough tools for attracting bank financing, but even if this financing should be obtained, we have missed a grant financing that was required to reduce some financial risks while implementing the project i.e. to make the project financially viable.

The expectation was that the feasibility project would lead to a wider commercialisation of the project. We continue to seek ways and new partners to proceed with the commercialisation phase.

We still have 2,000 stoves to distribute until December to complete our proposed goal of 13,000 stoves by the end of the project.

We had guite some problems implementing the project, but we are still on track to





achieve all objectives by the end of the project, although be it with major delays.

Though challenges existed but we have operation running in rural locations, creating jobs and reaching out to teachers and local communities.

Further funding has been delayed for implementation of the Biodigestion Demonstration Centre. We applied for funding from the Green Fund in 2012 and are still waiting on their short list in 2015 for a decision.

We are still at a relatively early stage of development, and have suffered delays due to regulatory change. We anticipate completing all milestones with a 12-month delay.

Due to delays in materials delivery, long procurement and to partner contribution, we have achieved the rate of 51- 75% in first milestone, but in this second we are about to recover.

The biggest challenge has been the legal framework in the country in which the project is being implemented and apparent lack of political will to support the project.

Project implemented and solar PV output monitored to determine the payback period which was as expected - 10 years.

As regards impacts on the local community - which links to the poverty alleviation objectives of the EEP's development partners - the responses suggest that although there are activities which focus on community buy-in and community impact, that there is still a long way to go and numerous difficulties will need to be overcome on the way, including how to manage implementation delays and community buy-in. At this stage of the projects, i.e. during implementation, impact on local community may be more limited to the short-term employment benefits related to construction activities than having a longer-term impact on poverty alleviation.

No significant impact yet as sales numbers still are low.

We failed to achieve the required level of "buy-in" from the local community and we would not have been able to fulfil our payroll commitments to the now over 60 people working for us without EEP assistance which greatly benefitted their socio economic conditions.

The communities are very positive about the project even though they suffered from the delays in the project. We had challenges with the community, but were always able to do our work after explanation was provided.

Once started, our project will be able to achieve a higher impact to the local community

Further funding has been delayed for implementation of the Biodigestion Demonstration Centre. We applied for funding from the Green Fund in 2012 and are still waiting on their short list in 2015 for a decision. Community and Municipality are waiting.

102 jobs for community-technicians, local promoters have been created as planned, and expected social impacts are being observed to users as expected.

The plant is under fed thereby affected the overall expected objectives. This means that more firewood than previously expected is still used to cook at school.

Impact on local community shall be well visible in our last milestone since that is





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when we shall connect customers.

Several women bakers have been trained on baking bread with the solar ovens, and the bakery was operational until May 2015. We believe that for the next milestone we can get the bakery operational again and the women back to work. However, we need to be sure that it is safe for staff to travel to Burundi.

Purchase of Charcoal from local community has had a positive impact. Employment provided to 27 young Tanzanians at the production unit.

Impact

Evaluation Questions 6

To what extent have EEP SEA interventions affected socio-economic development and the living conditions of people living in poverty?

This question relates to **expected benefits**, as no real monitoring data of actual achievements is available. According to the projects' self-evaluations, 86% believe that their project will have an impact on local employment with 71% suggesting that the project will have an impact on the surrounding eco-system. Moreover 59% consider that household energy patterns have changed. Only one quarter of project responses suggested that household time management had changed (26%) or that public services had been improved.

Regarding reduction of greenhouse gas emissions, 33% suggested that there was evidence that their project was having a positive impact. The majority however (63%) reported that they did not yet have evidence of emission reductions.

As regards value-for-money in production of clean energy, the main response was "don't know" (47%), with 35% suggesting that there was evidence.

Figures provided: 45 and 47 respondents reported the figure on value for money in clean electrical energy and biofuels that are being produced by MWH/EUR and tCO2/EUR respectively. For MWH/EUR, the project KEN5023³² answered 45,455 MWH/EUR, which is relatively quite high value than the others. While the overall average is 1031 MWH/EUR, the average value excluding this project (22 MWH/EUR) provides us with a more meaningful view of value for money.

In terms of tCO2/EUR, RWA 9005³³ provided a comparatively quite high 4,103 tCO2/EUR as well as again the project KEN5023 1,700 tCO2/EUR. For the same reason, the average value excluding these two projects (16.5 tCO2/EUR) is considered more useful.

There is also evidence to suggest that more households and businesses are using RE/EE (35%) although the main response remains "not yet" - 54%. Consequently, there is also little evidence that there is increased use of RE/EE in small-scale production at household level (such as cottage industries). Although 18% of projects

³³ Application of Pay-As-You Go(PAYG) Payment Scheme to Solar Home Systems deployment in Northern province of Rwanda with the budget 313,680€

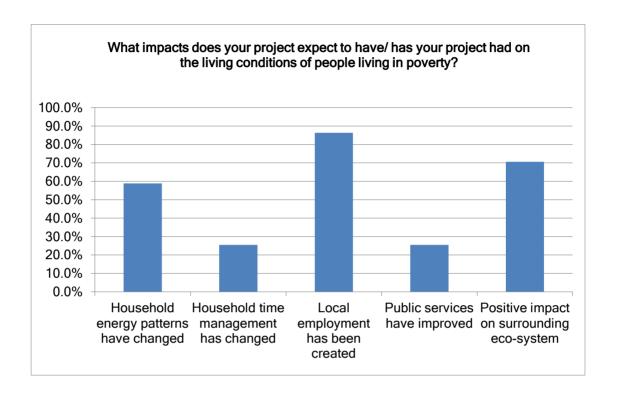




³² Scaling Up Pilot Plant to Commercialization by Installation of Efficient Processing Equipment and Feedstock Expansion" with the budget 132,290€

claim to see an increased use, the largest response is "not yet" (47%) with "no" and "don't know" also on 18% and 16% respectively.

There is a similar pattern regarding whether there is evidence that households have reduced the percentage of their income on energy. While 31% do see some evidence, 57% are in the "not yet" category.



While respondents do expect that there will be **impacts on people living in poverty** - generally speaking this is seen as happening in the long term.

The above are the expected impacts. We have not as yet realised them to date.

These are expected impacts when the project is completed.

Our solar vehicle will impact all those items.

Studying time expended to students using the SHS services, daily hours extended up-to-nigh for businesses using SHS, existing businesses are being upgraded by access to SHS electricity when new ones are coming on.

The project is in the process of being implemented but is still on track to have the development impact that was originally planned.

We have employed local casual workers during our milestone 1 and we shall hire more in milestone two that we are in. More employments will be created as a result of successful implementation of the project. This will be at the end of Milestone 3.

Apart from the cost savings from the renewable energy and the reduced carbon emissions, other donors want to be associated with a success story and contribute to the Home's sustainability.

Women now have jobs in their communities, rather than travelling to find work.

I cannot give a definite answer on this, as the implementation of the commercial part





is still ongoing.

This project was not expected to have much impact by itself since it is only a study.

Evaluation Question 7

To what extent have the RE&EE interventions been a factor in addressing environmental concerns in general and emissions reductions in particular?

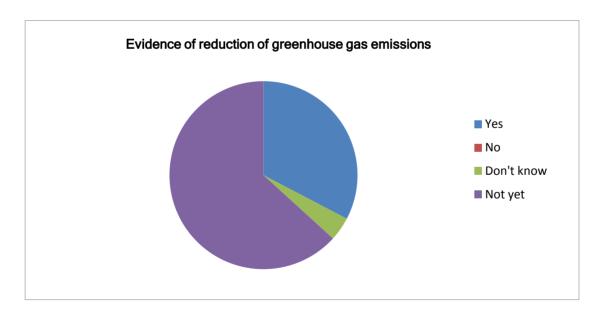
As regards changing energy patterns, the evidence suggests that there is a clear trend to replacing firewood and charcoal for cooking and kerosene for lighting. 35% show a positive trend - while for 41% the technology of the project is "not applicable" to the question.

This is accompanied by indoor air improvements - 37% (with 39% not applicable and 20% don't know).

There is also a perceived reduction in the use of bio-mass 29% - although again 43% see this as "not applicable" and 25% don't know,

However there is very little evidence that the public sector has increased its share of cleaner fuels in the energy mix as a result of the EEP.

What most typifies the overall response to this question is the very high percentage of Don't Know or Not Yet responses, which serves to underline the fact that projects are still under implementation but also that project monitoring was not designed to provide precise responses to these indicators.



On **emission reduction**, in the cases where evidence already existed, details were provided in the responses to the questionnaire; there were, however, also many cases where it was "too early" or where this was not being measured.

When switching to a biodigester, our customers significantly reduce the use of firewood and/or charcoal.



We are distributing envirofit stoves in Maputo. A Kitchen Performance Test before and after improved stoves was conducted and a reduction of 68% in charcoal consumption compared to the baseline was achieved. The stoves were also tested in the Laboratory and each reduces the emissions of 4 ton CO2 compared to the traditional metallic stoves.

10 tonnes per diesel pump replaced

As part of our EIA compliance a company called Airshed compiled a report entitled "EMISSIONS INVENTORY FOR VUTHISA TECHNOLOGIES' CHARCOAL AND BIOCHAR PRODUCTION ACTIVITIES ON THE DIAMOND VLEI FARM BETWEEN KOKSTAD AND SWARTBERG IN KWAZULU-NATAL" This report can be made available but generally speaking a 50% reduction in CH4, CO2, N2O, CO, NO, NOx, PM. PAH and VOC was achieved versus conventional charcoal burning (same kiln but without retorts).

The pilot plant that is operating in South Africa is exceeding our original expectations so there is a strong possibility that the full-scale project in Namibia will easily realise the CO2 savings.

The project aims 40 tonnes during its implementation and 1,125 in full year production

Less use of firewood by over 50% to cook for a population of 1000 students.

The renewable energy generated reduces the consumption from the coal-supplied grid.

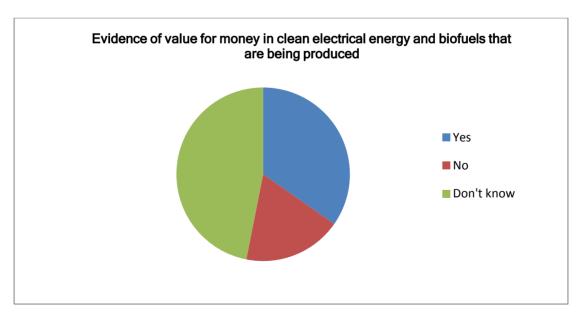
The project is a feasibility study and has no impact on CO2 emissions yet

We still need to do complete analysis of energy, water and chemical use decreases, but from preliminary observations, these have definitely been exceeded from what we had targeted in the project proposal.

We have not connected customers.

Have not measured this.

Limited outcomes by this stage.



As regards value-for-money, most of the responses fell in the Don't Know category; nevertheless the Yes responses also provided details on achievements.

Our customers save a lot of money with our biodigesters. CO2 rights are being sold and the revenue is used as discount for our customers.

MSL is generating 45kW clean hydroelectric power and selling it to a client for ZAR 0.90 per kWh.

There is a significant cost saving in the cost of kerosene versus the cost of solar system

The tariff per kWh is competitive against solar PV. The PPA is still being concluded.

Cost of firewood to school reduced by half.

Annual cost savings of about R100 000 resulting in more funding available for operations at the Home such as using the pumps to water the vegetable garden that feed the residents.

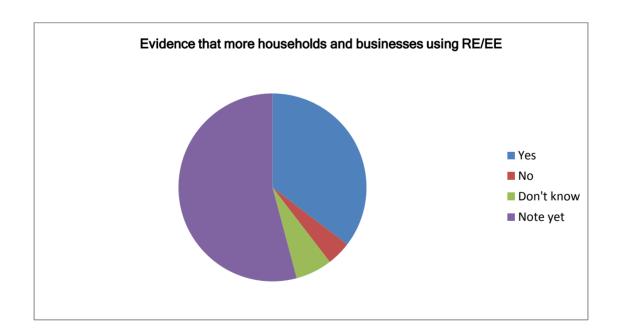
We have a draft business plan for the bakery, but due to the political instability, (our) staff has not been able to complete a full data-collection effort. We still need to study the numbers and profits of the bakery, and to develop the final business plan.

Can provide a solid fuel cooking solution at "at-cost" competitive price against all other energy options. So a cost competitive cost to cook per day.

As stated we are only starting now. No measurable impacts yet.

We expect so! But it is as yet unproven

Not known as we are in the initial stages.



As regards evidence of households and businesses using RE/EE, again the principal response is that this is not yet happening and that we don't know. For those that have replied that they do know, the response is positive.





Every new customer is a household that switches from traditional fuels to renewables.

Stoves were distributed and monitoring platform was placed. In ***, 3000 households are using improved stoves, 5000 more in other areas of (the City). The records are kept in the project database.

There is increased penetration

As stated we are only starting now. No measurable impacts yet.

Project still being implemented

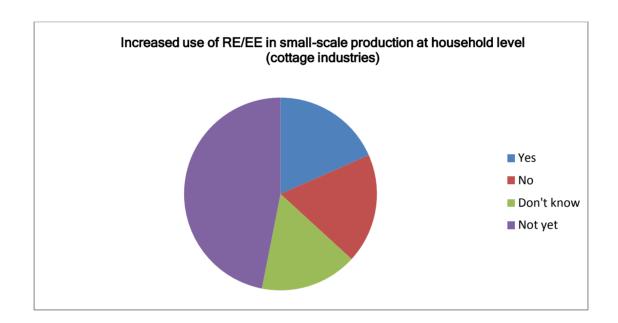
After successful commissioning and project marketing.

1200 household using small solar home kits

The number of customers is growing every month

Fully documented customer list to prove roll-out, customer base and activity.

Project reports quantify shift to RE.



Very limited outcomes regarding increased use of RE/EE in small-scale production at this stage, with some projects - for example those with grid connections or industrial applications - not focussed at either small-scale or household level.

Limited outcomes by this stage.

As stated we are only starting now. No measurable impacts yet.

Our project has an industrial application.

We also train other to manufacture charcoal briquettes.

1 plate cook-stove local assembly units in the townships.

Our project is a solar bakery, so the idea is to have a fully functional small business,

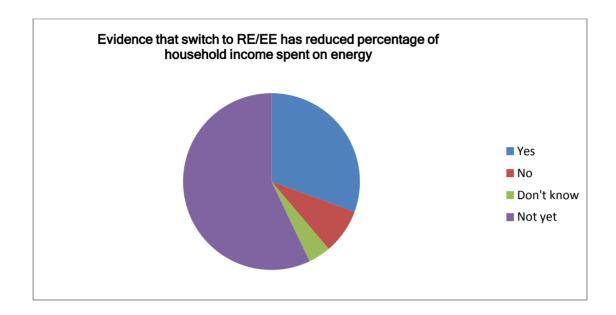




where the bread is baked by solar energy.

In 68 businesses assisted, 7 barber shops, 11 phone-charging stations, 1 cottage workshop.

This is a grid-connected project.



Again, the main response is that it is simply too early in the project cycle to be able to provide evidence on whether the percentage of **household income spent on energy** has been reduced. However there are also positive responses, presumably from projects from Phase I where results are starting to become more visible.

Biogas is for free after the investment. All households switching to biogas reduce their energy expenses for cooking energy.

Performance tests were conducted and fuel savings were observed (68%) compared to baseline stoves. It shows reduction in fuel expenditure of more than 50%.

There is a significant cost saving in the cost of kerosene versus the cost of solar system.

As users are still paying on a Pay as you go Scheme, and that the project is there for only 5 months people are still paying higher with hope of paying less and even "0" once the system total costs are recovered. No evidence at this time.

We provide a cost to cook solution at R8 per day, which is a saving from any other energy form available for cooking and space heating. A 50% saving on kerosene.

A comparison shows that electricity is worth using for cooking instead of firewood and charcoal.

Too early in the project period.

As stated we are only starting now. No measurable impacts yet.

Limited outcomes by this stage

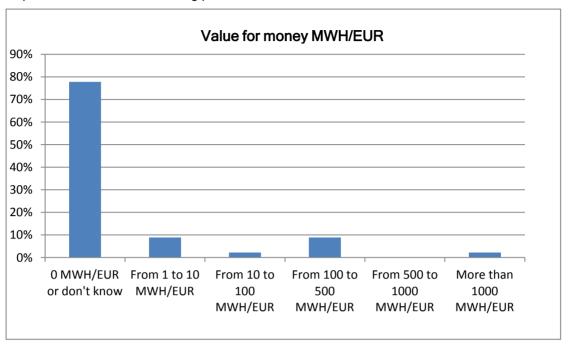
Industrial application.

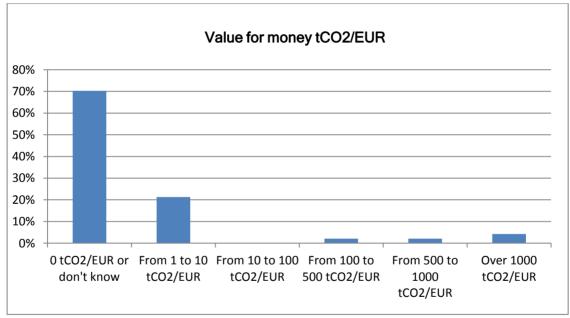




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The question on value for money did not produce much in the way of useful results. The reason for this is presumably that the metric is not used by projects. However, for the few that responded, the MWH/EUR being provided is under 500 MWH/EUR or under 10tCO2/ EUR.





Evaluation Questions 8

To what extent has the EEP networking and knowledge-sharing platform contributed to regional policy making relative to RE/EE?

This issue was not explored by the on-line survey of projects as it falls outside their ambit. However it is pertinent to note here that, as far as the projects were



concerned, the website was used most for the CFP process and hardly at all as a knowledge management platform.

Sustainability

Evaluation Questions 9

To what extent have RE/EE interventions contributed to changing energy consumption patterns in a sustainable way?

Evaluation Questions 10

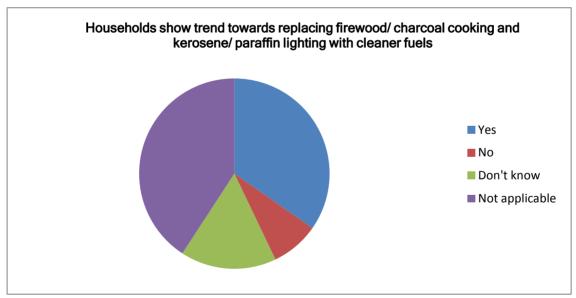
To what extent are there mechanisms in place to support the long-term sustainability of the interventions; and to what extent does this vary between the national programmes supported by the EEP SEA?

As regards sustainability, almost two-thirds of responses (63%) confirm that maintenance procedures are in place (with 27% not applicable). Production capacity has been increased to meet demand (47%) - not applicable 33%.

There is also some evidence to indicate that access to provision of finance has increased - with 43% being positive, 16% of projects saying that this has not happened - and 41% replying that they don't know.

Production and marketing chains are also starting to expand to meet demand - 35%. (22% don't know; and 37% not applicable).

Finally, 37% of projects report that the demand for their RE/EE technology is expanding in poor households (bottom-of-the-pyramid). (22% don't know; 35% not applicable).



The response is generally positive on replacement with cleaner fuels; at the same time, for many projects it seems to be too early to say - while some projects are only indirectly focussed on households, for example grid-connected projects.

Still to be implemented at local community level.

Households cooking on biogas will use less or no firewood or alternative energy





sources.

Not yet, we anticipate this will be the case once our project increases availability of clean electricity.

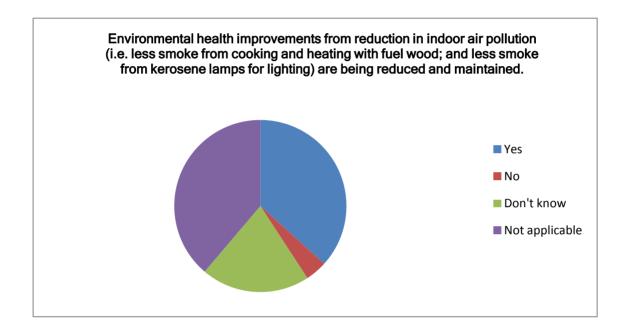
This is a solar grid connected project.

Project is commercial.

80% of Burundi household are using kerosene lamps for lighting.

Fuel switch from Coal, charcoal and wood to pellets as a improved fuel which is made from waste or renewable biomass.

Definite trends have been noticed in replacement of kerosene.



Again, as regards **environmental health improvements**, the responses are generally confirming that there are positive impacts on health through **reduction in indoor air pollution** balanced with responses that it is too early to say or that, because the projects are grid connections, improvements would be indirect at best.

Too early to say.

This is a solar grid connected project

Project is commercial.

As stated we are only starting now. No measurable impacts yet.

Biogas is a very clean energy source. Only those households that currently use electricity for cooking will not experience a reduction in indoor air pollution.

Not yet, we anticipate this will be the case once our project increases availability of clean electricity.

No more coughing.

Achieved by cooking with Biogas



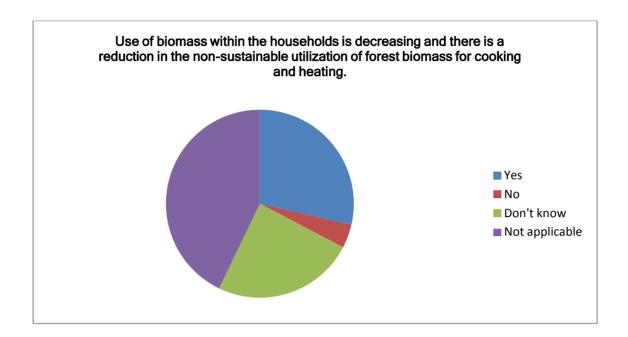


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Substitution of kerosene lamps with small solar home systems.

The stoves as 99% combustion efficient and considered the APEX of biomass cookstoves by the SeTAR Laboratory. We offer free LED lighting as part of the package, to save on kerosene and candles and you can charge your mobile phone at no extra cost.



As regards impact on the **forest biomass**, this can only be assumed as there are no direct links between the EEP projects outputs and the bio-mass resource. Nevertheless any documented reduction in the use of biomass in households can be assumed to have a link to the volume of forest biomass that the household requires to produce the energy required for cooking and heating.

Performance tests are evidence that Use of biomass within the households is decreasing by 68% compared to the baseline scenario.

Use of biomass will definitely be reduced. I am not sure about the sustainability of current usage.

Due to notable clean energy solutions.

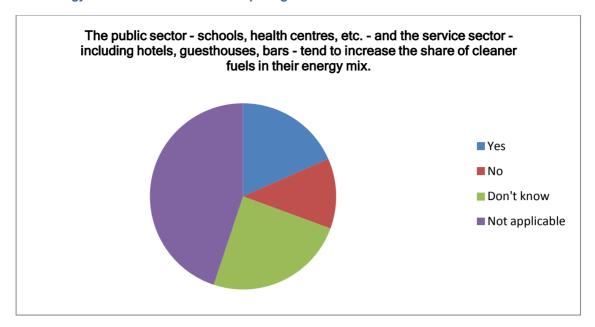
The natural resource consumption is reduced to the use of beneficiated waste or renewable biomass. No forest biomass is used in the value chain, other than waste.

Use of biomass is decreasing but no direct evidence of link to forest biomass

As stated we are only starting now. No measurable impacts yet.

This is a solar grid connected project.

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As regards both **the public sector and the private sector**, and the increase of the share of cleaner fuels in the energy mix, there appear to be only indirect links between them and the EEP programme. The projects that link the provision of cleaner fuels direct to the grid will have an indirect impact on both the public and the private sector, and there also appears to be some evidence of direct links (changing cooking practices in schools, provision of solar systems to schools, improved stoves in taverns, etc.). Nonetheless most projects retain a household focus.

Most of our customers are households, but it could be that some of the systems are installed with public or service sector customers. This is also a development that we are now looking at.

Provision of electricity vouchers to local community orphanage.

We are selling to schools in Uganda

Not yet, we anticipate this will be the case once our project increases availability of clean electricity.

A tavern and caterer is using the stove to provide meals in their establishments.

Only indirect links between project and the public sector.

Due to political instability, we have not been able to gather any data from the surrounding communities.

A number of **additional spinoffs** were also observed.

Increased renewables on national grid.

The project will displace electricity produced from coal and liquid fuel combustion.

Kerosene lamps and lamps using batteries are to be less utilized in favour of solar lamps.

The trend expected to change with many uptakers preferring biogas.

The use of fossil fuel based source of lighting will go down.





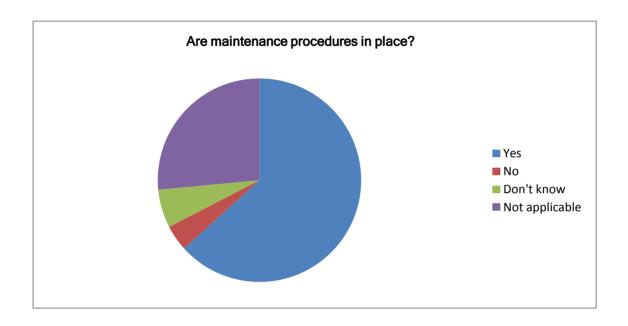
As mentioned, we are still in the feasibility study phase, but we see great potential for changes in current energy consumption patterns. The products considered currently may have an impact on a local and international scale to replace coal in power plants. We also expect to make use of our waste heat and steam in the process to produce the pellets. More information can be provided upon request.

Also installed heat pumps and energy saving lights to reduce consumption.

Free lighting and fee mobile phone charging.

Extended working time during dark hours.

Lights in evening have helped children with their homework.



Long-term sustainability of interventions is linked to putting in place **maintenance procedures**. Based on the responses, ensuring that maintenance procedures are in place has been shown to be a priority and has been taken seriously.

We provide service to our customers and are in close contact with them, to help them maximise the output of their systems. Worth of mouth is one of the most important sales channels, so it is important to keep our customers satisfied. Because we can sell carbon credits for over 21 years, this is an extra motivation for us to help our customers to keep the systems running.

The project is intended to be a 20-year project with planned maintenance budgeted.

The project is being registered as a Voluntary Gold Standard project

We will sign a Operations and Maintenance Agreement to ensure that the plant is well maintained

The kilns will continue to operate and components showing most wear and tear will be replaced prior to burn season

The OEM is providing the maintenance services to the project as well as training to local people through the Namibian Institute of Mining and Technology

The partner is to train solar lamps assembly and repair. Used lamps will be resent to





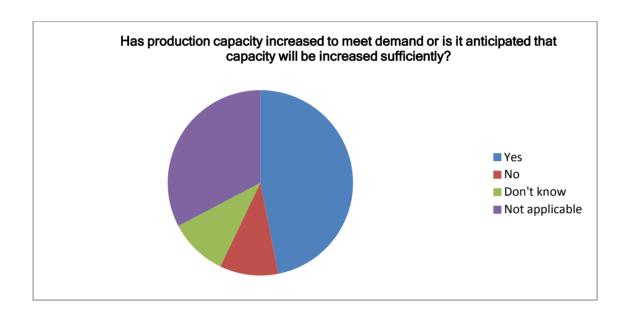
Germany for recycling.

Monitoring as per project proposal is in place.

Not yet, although the entire objective of this phase is determining the sustainability of the entire value chain, process and product.

The last milestone of our project seeks to ensure that a long-term maintenance plan and full-time technician is in place to manage the bakery. This is the responsibility of the local partner. At the moment, we have not reached this milestone

We provide a serviced solution.



Participating projects are also aware of the importance of anticipating the necessity of increasing production capacity.

At the moment the production capacity is sufficient to meet demand. For the future we plan to expand to additional countries and invest in additional production capacity.

Our company is partnering with local stove producers to increase production capacity. A standardization process of production is in place with other partners in the project. Beside *** Works Mozambique, our company is partnering with two more stove producers to increase capacity. Under negotiation.

The first project will only meet a third of our off-takers power demand.

We anticipate to double production during the first quarter of 2016

We are not yet assembling solar lights but we are confident to contribute to increase production capacity over the years.

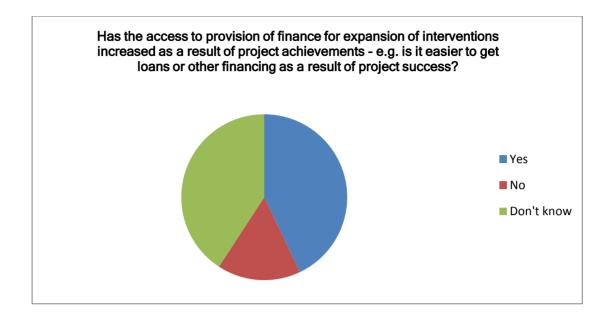
The production shall be increased during the scale up phase.

The machine purchased is capable of running for 24 hours a day on a continual basis.

It is expected that production of the CSP technology will increase once the project is fully implemented



This is planned; not yet achieved.



As regards **provision of finance for expansion**, this is seen as one of the main stumbling blocks, even for successful projects. Although it is clear that a successful project provides a good and necessary springboard for accessing additional financial resources for scaling up, acquiring the required capital is not an easy task in a climate that is averse to taking financial risks.

We have now plenty of financing institutions willing to provide loans, 40 % of project's costs but limited by lack of subsidy in order to reduce financial risks, i.e. the project still has some financial risks as imported materials/equipment, and foreign expertise make the project expensive.

EEP has helped us to start and continue operations, which is essential for most investors who want to see some evidence of the success of the product.

As this project is the first of its kind, innovation funding is very difficult to obtain in South Africa.

This certainly has helped with the process. It is just extraordinarily slow to get state funding to implement the project.

Once the project is successful, we anticipate that raising further finance will be made easier.

Without EEP support and exposure of our results and achievements on social media and cash inflow from EEP payments into bank accounts it would have been more difficult to convince banks or partners to take our project seriously.

We are getting financiers who want to lend, but as the project is on it's earlier stage...the loan will be negotiated at later stages.

Not yet, but this commercial operation of the project will result in financing being more readily available for future applications of the technology.

We are at start up stage for solar lamps. But we are confident to have financing after this first implementation.

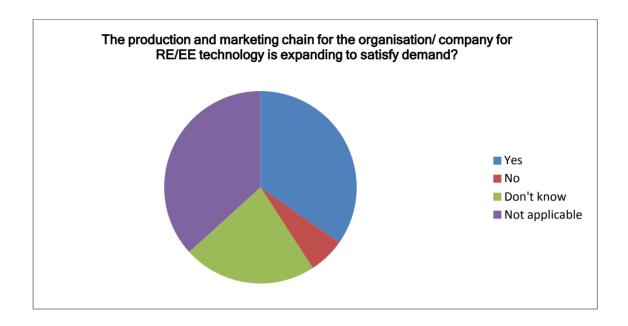




Due to empirical data of the plant, financiers are able to see economic value of supporting such projects.

Still living in the doldrums of living between grants and finding an equity partner to build to the next step. Had to move from South Africa and develop similar businesses in Kenya, Uganda & Bangladesh to ensure overall continuity. General problem with the less developed countries is that there is no prospect of hard co-funding.

Still interest rate of 26%.



Although **marketing chains are expected to expand** to satisfy demand, most respondents were hesitant in committing themselves on future market projections.

Limited outcomes by this stage.

Too early to say.

Not yet.

This is part of the objectives of the EEP project.

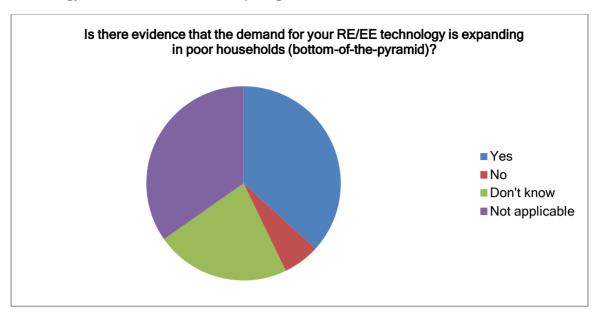
It has not happened on a large scale yet but we are gearing towards expansion. Testing of biochar produced through our RE/EE kilns will validate our product claims and only when this is obtained can we explore the market fully.

As information is flowing so is the potential of market increase.

The marketing and distribution is self contained and managed by the 5 Star Ladies and tracked by the 5 Star System.

Project is at Milestone 1 only.

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The final question explores whether the interventions are likely to **benefit the poor** - the households at the bottom-of-the pyramid. While bottom-of-the-pyramid are often stated as being the target group, there have also been situations where interventions have targeted more well-off customers who can afford to pay more, at the expense of "the poor". In other areas sales are still to pick up and outcomes are limited.

As it is a new product, the current customers are a bit above the bottom of the pyramid. However, this will change when the technology and its benefits are more known. We are developing finance mechanisms to increase the affordability for the bottom of the pyramid. However, as the biogas systems require the input of cow manure, the poorest people are hard to reach.

Power demand for isolated coastal community's is high and our technology will target the supply of RE to these communities.

The monthly fee is lower than an instalment on a loan would be, which makes it better affordable for rural households. Also the contract is better accessible than loans from formal loan institutions.

BOP markets are a large part of our clientele.

Our electricity will be fed into the local electrical grid, so households will not necessarily be able to differentiate between electricity produced renewably or non-renewably.

Because of the Pay As You Go scheme, poor people are getting solar home systems on easy terms.

Yes, but they still cannot afford it.

Not yet felt but if more plants are constructed, then this is most certainly going to happen.

Yes, more people outside the franchise areas want stoves and we are approached by prospective business people and franchisees.

End of Annex F1





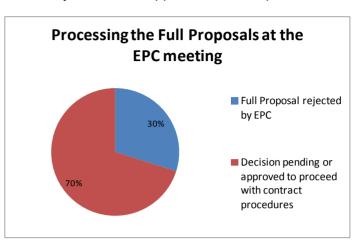
F2: Analysis of unsuccessful applications

We have looked into the reasons for rejection of full proposals at the EEP Partners' Committee (EPC) meetings. The EPC had already assessed applicants' Concept

Notes, based on an initial screening made by ECO. Thereafter applicants' draft full proposals are shared with ECO, allowing them to refine the full proposal and ensuring they live up to a set of minimum requirements, such that only complete proposals are submitted and discussed at the EPC meetings.

Still, of the 164 full proposals received since the sixth Call for Proposals (CfP), 49 were rejected by the EPC, equivalent to 30%.

A thorough analysis of the EPC meeting notes from CfP 6-11 allows the team to



analyse the reasons for rejection of the full project proposals. The reasons can be grouped into the following categories of issues: Applicant's Experience; Application – issues; EEP requirements compliance; EEP funding – additionality; Co-; funding not assured; Donors - Individual requirements; Budget – issues; Business model; Sustainability; Technology; and Value for money. These categories are explained more in detail in the following.

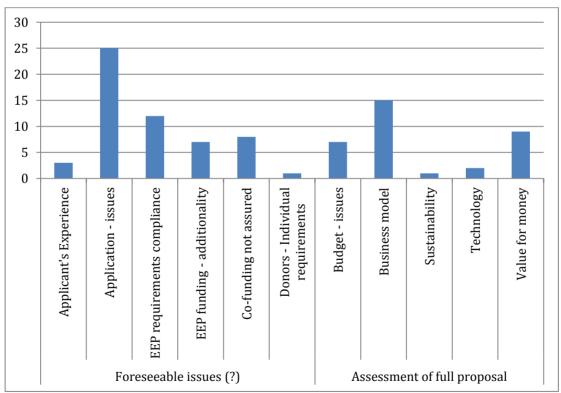


Figure 15 - Number of full proposals rejected at EPC meetings - by category

As can be seen from the graphic above, quite a high number of rejections were related to issues concerning the quality of the **application** itself or compliance with **EEP requirements**. But there are also concerns related to the proposed project





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itself, including the **business model** proposed, or the **value for money**, i.e. the costs of the project compared to the number of beneficiaries, or the cost of the outputs in general.

A more detailed overview of the reasons for rejections is given in the table below, along with the number of full proposals, where this was among the reasons for their rejection. Note that a proposal is most often rejected for several reasons and therefore one proposal may be logged against more than one reason.

Detailed rejection reasons	Number of full proposals rejected
Application issues	
Full proposal not submitted/ withdrawn	10
Incomplete/ unclear/ inconsistent application	10
Not covered by the topic of that CfP	3
"Overpromising" (Unrealistic expectations)	2
Applicant experience	
Insufficient experience	3
Budget issues	
Costs too high or unbalanced distribution	7
Co-funding not assured	
Inadequate own contribution	2
Co-funding not yet confirmed	6
EEP grant - additionality	
Additionality not demonstrated	5
Already received EEP funding twice	1
Secured funding for other project first needed	1
EEP requirements – lack of full compliance	
Low potential development impacts	8
RE/ environment considerations not satisfactory	2
Requested funding below EEP minimum funding size/ inflated to reach th minimum grant amount	e 2
Business model	
High consumer price/ commercial feasibility not clear	6
Insufficient potential to scale up	1
Insufficient understanding of challenges with consumer financing models	1
Risk not addressed/ lack of feasibility study/market research	2
Too ambitious/ unconvincing	5
Donors	
Structure of project financing not supported by all program donors Sustainability	1



Detailed rejection reasons	Number of full proposals rejected
Maintenance issues not sufficiently addressed	1
Technology	
Production processes are technically challenging	1
Technology is not confirmed	1
Value for money	
Low VfM compared to cost/ equipment	9

10 applicants did not submit a full proposal despite several reminders from ECO or decided to withdraw their proposal. For the remaining close to 40 full proposals that were rejected, the reasons for rejection can be generally grouped into what we can call foreseeable/ avoidable rejections, and those rejections that arose from the merits of the full proposal.

Foreseeable rejections

Overall, a number of reasons for rejection could have been foreseen during the work on developing the full proposal. Further to the support provided by ECO, the EEPAfrica website provides full documentation of the needs and requirements with respect to the content and submissions of the applications.

However, as many as 10 proposals were rejected because they were incomplete, unclear or inconsistent. The reasons included not meeting the minimum criteria, not providing a sufficient description of their competence and capacity, or not including an emission reduction calculation. This is surprising, as the close coordination with ECO during the finalisation of the full proposals was intended to ensure adequate full proposals that could then be assessed on the merits of the quality and approach.

Furthermore, there are rejections related to non-compliance with EEP requirements or issues related to the additionality of EEP grant. 3 proposals were assessed not to fall under the area of focus for that CfP. 1 proposal requested funding below the EEP minimum funding of EUR 200,000 and another proposal was clearly inflated to reach that minimum. 1 proposal was based on a fuel stock that was not a completely renewable energy source. These are also reasons for rejections that should have been filtered out before reaching the EPC assessment stage.

7 rejections are related to the necessity for EEP grant. 5 proposals did not actually demonstrate the additionality of the EEP funding, as it would appear that the proposed projects could be implemented without the EEP grant. 1 applicant had already received EEP funding twice, so it was decided to reject a third application. In one case the "structure of the project financing was not supported by all program donors" – it is not clear whether this means there was disagreement or whether it was not in line with donor internal requirements.

Rejections based on assessment of full proposal

A number of rejections are however based on criteria/ discussions by the EPC that are more subjective and may be more difficult to anticipate for the ECO during the process of developing the full proposals.

For example, 8 proposals were assessed not to have a sufficient development impact. The same applies to the 15 projects where the business model was





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questioned by the EPC, which found 5 of them to be too ambitious or unconvincing. Other proposals did not clearly show the commercial feasibility, address the risks, or had not developed a feasibility study or undertaken market research. 2 proposals proposed a consumer price that was considered too high, and one project had not sufficiently understood the challenges associated with consumer financing models.

In the case of 7 proposals, the budget was assessed to have costs that were extravagant or too high, e.g. unacceptably high administrative costs, or human costs that were higher than the costs of equipment (3 cases), which did not seem appropriate for that type of project.

Two applicants proposed to use production processes that were technically challenging or a technology (bio methane production) that was not confirmed. Similarly, three applicants were insufficiently experienced in working with the technology or in that field of work.

Finally, quite a lot of proposed projects did not demonstrate sufficient value for money, which may both be a question of objective and subjective judgement criteria. For one project, the proposal was assessed not to be technically feasible based on the projections of the number of beneficiaries that could be reached with the given equipment. Others were considered not to have a sufficiently significant impact compared to the costs of the action.

Annex G: Comments to Results Framework

OVERALL DEVELOPMENT OBJE	OVERALL DEVELOPMENT OBJECTIVE - LONG TERM DEVELOPMENT IMPACT				
Poverty reduction through inclus	Poverty reduction through inclusive and job-creating green economy and improved energy access and security while mitigating global climate change				
RESULTS	INDICATORS	TARGETS	COMMENT		
IMMEDIATE OBJECTIVE AND PI	ROGRAMME PURPOSE, MEDIU	M TERM RESULTS			
Greater access to sustainable energy services achieved through the fast tracking of RE project demonstration and deployment, including through technological learning, donor co-ordination and private sector investment	Per cent of population benefiting from improved RE/EE products and services in EEP program countries	4% improvement	The immediate objective is well defined, reflecting the aim of the project. It may be difficult to measure an additional 4% of population benefiting from improved RE/EE products and services in EEP program countries. The attribution gap also comes into question: Even if there would be a 4% improvement measured, we cannot deduce from this that the result came about through the EEP programme. The annual target for 2014 was that 2.5% of the population benefit from a baseline of 2%, but it has not been measured. As baseline exercise was not undertaken so it is unclear how this baseline was derived.		

OUTCOME STATEMENTS (Shor	OUTCOME STATEMENTS (Short to medium term change in development situation)				
RESULTS	INDICATORS	TARGETS	COMMENT		
OC 1: Inclusive green economic growth contributed to, through increased access to sustainable energy services, significant scale up of proven energy services, increase in installed capacity, reduction in energy expenditure	OCI 1a: Economic benefits achieved through uptake of RE/EE services	16.6 million €/year	OC1 is well defined, though very comprehensive. OC11a - The economic benefits are measured as the monetary sums of (permanent) jobs, savings, and income, which is possible to measure. Compared to other targets this does not seem un-ambitious, given that the target is 16.6 million €/year. So measurement should be based on annual achievements, however it is not certain whether the 5.7 M€ economics benefits measured by June 2015 are cumulative or 2015		



and mitigation of climate change achieved primarily through support to small to medium size organisations.			achievements by June 2015. As for all other targets, according to the M&E team the actual achievements only include those projects that have been verified, thus currently 61 projects. Actual achievements can be much higher.
	OCI 1b: Potential cumulative t CO2 emission reductions achieved over the life time of the installed technology and/or	300,000 tCO ₂	OCI1b: Notice that this is 'potential' and 'cumulative' over lifetime. So it could already be measured now for all approved projects summarising their <i>theoretical</i> lifetime savings. Actual savings are reported by calculating the actual output figures and multiplying this by the estimated savings to get a more realistic overall savings figure.
	project		Methane emission reductions would need to be included. Methane is produced in biogas production and is 20 times more potent as a greenhouse gas than carbon dioxide. Looking at the whole chain of biogas production from supply source to the energy produced, some biomass sources can actually lead to increased emissions of GHG. Using dung in biogas production (like in the EEP products) leads to secure CO ₂ reductions, but it is important to ensure that methane leakage is kept to a very low level.
			Target: Assuming that the June 2015 result 174,000 t CO2 emission reduction includes only those 61 projects that have been verified, this target will be reached). But given that the indicator use <i>potential</i> emission reductions, it would be possible to already now include all projects in the measurement (in which case the goal will not be reached).
OC 2: EEP project developers are successful in starting and managing RE/EE energy businesses, raising and leveraging finance, managing project implementation.	OCI 2a: Number of projects reporting increased potential to reach commercial viability as a direct result of business support	45% of EEP supported projects reporting increased potential to reach commercial viability as a direct result of business support	How can 'increased potential' be measured? Actually this indicator has not been possible to measure yet. Would it be measured as the percentage of projects with a 'green' status according to the internal grading of the projects? This would not be correct, as this grading would look at milestone completion as well as challenges in implementation however it is viability that counts for this indicator. A more ambitious M&E of the projects may allow ECO to capture the achievements towards this target. There is no reference to innovative solutions to energy access for the poor in this indicator, which is a key differentiating factor between this programme and others.
OC 3: EEP is an active regional partner in; generating RE / EE knowledge and evidence,	OCI 3a: Level of relevant stakeholder knowledge and awareness of the RE/EE sectors	200 RE/EE businesses applying knowledge learnt	OC3: Different OC compared to the previous 2 OCs. It is a nice goal to set but would indeed also be quite important as a results indicator for ECO. The OCI 3a is a good attempt for an indicator for this Outcome, but is really difficult to



sharing of experiences, and informing effective and inclusive regional RE/EE policies.	and issues	from information disseminated through EEP or EEP supported projects	measure, and would be based on subjective judgements. Relevant stakeholders would need to be defined. Perhaps a survey could provide some information.
	OCI 3b: Increased level of awareness of EEP within the Region	50% of interviewed RE/EE sector actors think that EEP is effective in supporting RE/EE sector development	OCI 3b is one of those indicators that can be quite difficult to measure. The target that has been set concerns an appreciation of the EEP programme (actors find EEP is effective). This is important, but actually reaches a bit further than seems to be the aim of the indicator. This could be measured through a survey of RE/EE sector actors now, and at the end of the programme, with simple yes/no replies. A more simple interim measure would be number of conferences presented at in the region and number of websites where EEP is referred to.
	OCI 3c: Evidence in place to support RE/EE policy development	5 policy processes influenced by evidence provided by EEP or EEP supported projects	Again, this would seem to be a subjective judgement. It is based on feedback from the project developers, who have to provide information about what exactly was influenced and how. Actual measures show that a cumulative 7 policy processes have already been influenced. This target is un-ambitious.

OUTPUTS RELATED TO OUTCOME 1: "Green economic growth contributed to, through increased; access to sustainable energy services, significant scale up of proven energy services, increase in installed capacity, reduction in energy expenditure and mitigation of climate change achieved primarily through support to small to medium size organisations."

RESULTS	INDICATORS	TARGETS	COMMENT
OP1.1: Increased actual and probable commercial scale-up and replication of, and investment in EEP supported projects	OPI 1.1a: Number of projects replicated and / or scaled up	15% of EEP supported projects replicated and/or scaled up	OP1.1. reflects well the aims of the EEP. OPI 1.1.a is a good measure. Target: Even with the revision of targets from 2014 (6%) to 2015 (36%), it is clearly un-ambitious; given this is a major objective of the programme.



	OPI 1.1b: Number of projects with high probability of replication and / or scale-up	40% of projects demonstrated high probability of replication and/or scale up	This is based on information provided by the project developer, and is intended to be judged by the monitoring expert with feedback from the beneficiaries. Still, it is a rather subjectively assessed. Maybe it would be better measured e.g. through examples of spontaneous replication and diffusion of innovations.
	OPI 1.1c: Number of projects receiving private sector investment	20% of projects receive private sector investment	Good but imprecise indicator. Is it for replicated / scaled-up projects <i>after</i> EEP funding period? If during, can this be everything from 1% to 75% contribution to the funding? Even the revised annual target is clearly unambitious, as 2014 achievement was 32.5% but 2015 target was only 20%. Furthermore, at June 2015 achievement was 25%. Target needs revision
	OPI 1.1d: Cumulative amount of public and private sector finance leveraged	28.1million €	Good Indicator. But target seems unambitious, if it includes the present co-financing. If it includes subsequent achieved financing, e.g. if EEP co-financed a feasibility study and the project is subsequently implemented without EEP financing the target seems more appropriate. This seems to be the way of measuring it in the current monitoring framework.
OP1.2: Reduction in CO2e emissions achieved through demonstration and deployment of RE/EE energy solutions.	OPI 1.2a : Annual cumulative t CO ₂ emission reductions achieved	60,000tCO ₂ e	OP1.2 reflects well the aims of the EEP. Again, methane reductions need to be included as a measure as well. OPI 1.2.a is well defined, but it remains difficult to verify. Numbers are provided in the results based framework. It is a calculated number based on a number of assumptions; it is actually not really verified by the M&E staff during their site visits or during in-depth studies to understand if projected savings have been realised in terms of how technologies are used. Target seems sufficiently ambitious.
OP1.3: Increased uptake of RE/EE energy solution by the rural and urban poor	OPI 1.3a: Number of rural and urban households with improved access to off grid clean energy	100,000 households	OP1.3 reflects well the aims of the EEP Good indicator that is easy to measure. The yearly target is clearly unambitious and needs revision. Again if the actual achievements are related only to the 61 verified projects, the EoP target may be potentially much higher. An analysis of the project portfolio and each project's objectives should give a good indication of the expected EoP target.
	OPI 1.3b: Economic time saved for households (particularly	790,000€	Difficult to measure. Based on multiple assumptions. Discuss whether it is needed. Target seems sufficiently ambitious.



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	women and girls)		
	OPI 1.3c: Number of direct jobs created for women, men and youth	2,000 (30% men, 35% women and 35% youth)	This indicator does indeed show the contribution of the EEP projects to the dissemination and appreciation of the energy products. The M&E reporting covers permanent jobs and temporary jobs that were established as part of project implementation. The target combines both, so all jobs could be in principle be temporary, and targets would be achieved. However, this would not be an appropriate objective for the EEP programme. Targets would need revision if the indicator remains an aggregate measure as it is already reached. (However, there is an error in the M&E data, the sum of the total number of jobs is 1866 or 1903 (difference among the sheets), not 2276 – meaning that the target is not reached). If the target is redefined, such that e.g. a minimum of 75% of the 2000 targeted jobs should be permanent (= 1500 jobs), it seems quite ambitious. Currently 617 permanent jobs have been created.
OP1.4: Increased energy generation from RE technologies and energy savings from EE measures	OPI 1.4a: Newly installed electricity generation (MW) from demonstration projects	2MW	OP1.4. reflects well the aims of the EEP. OPI1.4.a is a relevant indicator and easy to measure. Seems the target is correct. Yearly target is clearly un-ambitious, and not linked to the EoP target.
THE GOVERNMENT OF THE GOVERNME	OPI 1.4b: Amount of energy generated disaggregated by heat and electricity (MWhr)	6,000 MWh	Relevant indicator and relatively easy to use; but needs to know the extent of up-time. The target set is unambitious, as it should measure not only electricity generation, but also heat. But the 6000 MWh can easily be reached with the expected electricity generation capacity allowing for a max generation of (2 MW * 365 days * 24 hours = 17520 MWh). This may be reduced to 6000 MWh if EEP only includes solar PV projects, but there are also hydro and wind projects, that operate during more / all hours of the day. Heat generation should be added to this. Target is already over-reached and should be revised.
	OPI 1.4c: Absolute amount of energy saved through installation of energy efficient technologies / projects.	6,000 MWh	Nice indicator, but its measurement is based on assumptions although these assumptions have been derived from studies. Targets are already overreached, and need to be revised.
OP1.5: Increased number of commercially viable business models and feasibility studies.	OPI 1.5a: Number of feasibility studies going forward to implementation.	4	Interesting output, where the indicators help to define it. OPI 1.5.a is a good and relevant indicator. A more ambitious target would be an important part of ECO's results-based contract.



OPI 1.5b: Total potential installed and generation capacity (MW and MWh)	40MW	OPI 1.5.b seems to lack a target for MWh.

OUTPUTS RELATED TO OUTCOME 2: "EEP project developers are successful in starting and managing RE/EE energy businesses, raising and leveraging finance, managing project implementation."

-			
RESULTS	INDICATORS	TARGETS	COMMENT
OP 2.1:Increased capacity and competence amongst RE/EE developers in Southern and Eastern Africa	OPI 2.1a: Percentage of projects (from CfP6 onwards) completed according to schedule.	40%	OP 2.1: This Output is a bit difficult to assess. It should be clear that it only concerns the EEP grant beneficiaries. The Output does, further to the help provided through the financial inputs to the project (the EEP grant), also reflect the ability of ECO to ensure that the project developers are increasingly able to implement their RE/EE projects, currently measured by OPI2.1.b. see below. OPI 2.1.a: It is not clear whether schedule means time schedule only. Why is it important that the projects are completed according to schedule? Discussions with project developers show that it is easy to get project extensions. If the projects are completed according to the new schedules, is the indicator then met? According to our survey, more than half (58%) of the 54 respondents reported that it was necessary to extend due to delays. It may be appropriate to look at other indicators than simply the schedule, for example if the projects are reaching their objectives / outcomes / outputs. There is also no reflection of quality of the implementation. Indicators need to be defined which measure, for example the number of complaints/ returns of faulty equipment or customer satisfaction measures.
	OPI 2.1b: Percentage of projects requiring technical assistance receiving support	90%	The indicator does not correctly reflect the extent to which ECO should be providing Technical Assistance, and it is not clear whether this also comprises business development support. If only 1 project is requiring and receiving support, the percentage would be 100%. The target is 90%. Currently the percentage is 0% as apparently no projects have requested technical assistance, perhaps because they are not aware that it is available (based on the interviews); it is not yet measured. The degree of provision of Business Development Support should be included as an indicator.



OUTPUTS RELATED TO OUTCOME 3: "EEP is an active regional partner in; generating RE / EE knowledge and evidence, sharing of experiences, and informing effective and inclusive regional RE/EE policies."

RESULTS	INDICATORS	TARGETS	COMMENT
OP 3.1: Increased networking between RE/EE actors within the regions	OPI: Number of forums engaged in (policy, technology, investor, business to business)	10	This output is nice to have, but not need to have. The Indicators are appropriate, but OPI 3.1.b and OPI 3.1.c are difficult to measure, see below. Consider what it brings to the LogFrame. OPI3.1a is easy to measure for ECO, and to some extent also for the projects. It is relevant. However, there is no quality dimension, i.e. that engagement can mean attendance rather than presentation to. It seems unambitious, given the need to work on knowledge exchange and to inform others about the EEP programme. If it included the project developers, the engagement in forums could add to the dissemination of new technologies and business models.
	OPI 3.1b: Number of partnerships formed with complementary initiatives	5	A bit arbitrary specifically as it does not define a partnership. Does it constitute an informal agreement to work together or a formalised partnership with an agreed MOU?
	OPI 3.1c: Percentage of EEP projects engaged in relevant networks	30%	Based on information by the Project Developer. Again, what is a relevant network? Is this network within EEP projects or outside as well? It should rather be a role of ECO, to either actively seek to enhance networking between the projects, or to seek to inform projects about potential networks to engage in.
OP 3.2: Increased amount of and access to relevant evidence and information on	OPI 3.2a: Number of technical briefings published, including case studies	5	OP3.2 is a relevant output, which is well described through the indicators. OPI3.2.a: Good indicator. Surprising that no technical briefings have yet been published. Is there a target audience or general distribution?



RE / EE	OPI 3.2b: Number of policy briefings generated and disseminated to relevant forum and decision making bodies	5	Good indicator. No policy briefings have yet been published. Do the briefings only target policy makers?
	OPI 3.2c: Number of quality tools developed and utilised to disseminate and share information disaggregated by tools; EEP website, media articles, social media networks, newsletter, workshops, events and donor information channels.	7	Seems that it is not used cumulatively. In 2014, 2 tools were developed and used, and in 2015 (to date), only 1 tool has been developed and used (according to the monitoring masterfile, but 4 in total according to the Outcome and Output results December 2014). The aggregation seems awkward. Media articles are clearly easier to develop than workshops, for example. Not clear whether it is only ECO or also projects. Has to be more clearly defined.
	OPI 3.2d: Number of people / organisation accessing EEP information through information / knowledge management tools.	3,450 EEP website visits per month	The indicator is relevant. The target is easy to measure. It seems appropriate, but should be measured on an average per month basis (it reached 314% in December 2014 and only reached by 56% in June 2015). This clearly indicates the use of the website: primarily for information about CfPs. It would be relevant to analyse which pages in the site are used, and whether this adds to the expected Output: Increased amount of and access to relevant evidence and information on RE/EE.

Lack of indicators

The extent to which ECO should be providing business development support is not well included in the LogFrame.

The extent of innovative business solutions reached also needs to be included.



Appendix H: Budget Reconciliation

			Cumulative spend up to		%
			31st March		budget
Ref	Budget Line	Total Budget	2015	Balance	available
	Programme Management Outputs				
	for Outcome 1: Regional RE and EE				
	inclusive innovation and market				
OC1	creation	€2,804,300	€1,662,600	€1,141,700	41%
A1.1	Programme windows designed	€131,500	€124,800	€6,700	5%
A1.2	Call for Proposals	€762,000	€671,000	€91,000	12%
	Funding windows in operation -				
A1.3	grant management	€1,910,800	€866,800	€1,044,000	55%
	Programme Management Outputs				
	for OC2: Business development				
0.00	support to the EEP Project	6694 999	64.44.000		770/
OC2	Developers	€621,922	€141,922	€480,000	77%
A2.1	Increasing capacity and competence amongst PDs	€621,922	€141,922	€480,000	77%
AZ.1	Programme Management Outputs	€021,922	£141,322	€460,000	1170
	for OC3: Policy impact, knowledge				
ОСЗ	production and regional network	€1,879,913	€936,970	€942,943	50%
	Increased networking between				
A3.1	RE/EE actors within the regions	€255,497	€104,000	€151,497	59%
	Increased amount of and access to				
	relevant evidence and information				
A3.2	on RE/EE	€349,000	€84,000	€265,000	76%
A3.3	Monitoring and Evaluation	€952,970	€570,370	€382,600	40%
A3.4	Programme Management	€322,446	€178,600	€143,846	45%
	Reimbursable and operational				
R.1	expenses	€493,865	€287,846	€206,019	42%
C.1	Contingency	€200,000	€0	€200,000	100%
	TOTAL	€6,000,000	€3,029,338	€2,970,662	50%
		<u> </u>			
	Budget available for business			£400 000	
	development			€480,000	
	Budget available for networking			€151,497	
	Budget available for knowledge			6265 000	
	management			€265,000	
	Total available for activities related to BDS and KM	as at 31st Mar	ch 2015	€896,497	



Appendix I: Example Communications Matrix

Objectives	 To improve the performance of projects within the EEP portfolio and other schemes through the sharing of lessons learned and project portfolio analysis. To contribute to the information available to those in a position to influence policy related to RE/EE. To raise the awareness of stakeholders of the initiatives being supported by DFID, FINNIDA and ADA in the East and Southern Africa, to improve understanding of the nature of the support. 					
Target Groups	Specific Objective per Target Group	Approach	Media/ Modality	Concrete Outputs		
i. The general public in Africa	Raise the awareness of the general population in the results being achieved in their own country by the partnership between DFID, FINNIDA and ADA and SADC and the EAC	The communications product should be user- friendly, informative and eye-catching, attracting a very broad-based readership	Internet website SE4All homepage Other	General public website		
ii. The general public in Europe	Raise the awareness of the general public in Europe as to the value of the intercontinental relationship and the results achieved, specifically in relation to the investment opportunities that are realised as a result of the project.	The communications product should be user- friendly, informative and eye-catching, attracting a very broad-based readership	Internet website	General public website		
iii. Policy-makers and influencers	Further the existing knowledge sharing and networking relationship to develop a broader awareness of the project and its results	The communications should provide both useful statistics to promote achievements and discuss issues in political fora regarding the achievements of the programme, as well as access to informative materials that can inform policy discussion.	Internet website Printed materials	Knowledge sharing portal Case studies & analytical papers Awareness events Knowledge exchange fora		
iv. EEP's partners (EAC, SADC, national governments)						
v. Potential investors						
vi. Sharing with other regional programmes in Africa						

