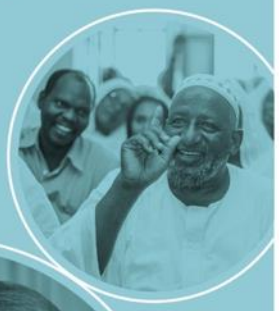
Corporate Unit Evaluation Central Project Evaluation

KNOWING WHAT WORKS



Central Project Evaluation

Promotion of Renewable Energy and Energy Efficiency Programme Uganda
PN 2016.2112.7

Evaluation Report

On behalf of GIZ by Carsten Vonnoh, Benjamin Kachero, David Arndt
(ICON-Institute Engineering GmbH)

Published Version: 05. July 2019

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Publication details

As a federally owned enterprise, GIZ supports the German Government in achieving its objectives in the field of international cooperation for sustainable development.

The Evaluation Unit of GIZ reports directly to the Management Board. It is separate from and independent of GIZ´s operational business. This organisation strengthens the independence. The Evaluation Unit is mandated to generate evidence-based results and recommendations for decision-making, to provide a credible proof of effectiveness and to increase transparency on the results.

This evaluation is ordered by the Evaluation Unit and performed by external evaluators. The report is written by external evaluators as well. It is the opinion and the valuation of the evaluators. GIZ wrote the statement and the management response.

Evaluators:
Carsten Vonnoh
Benjamin Kachero

Authors of the Evaluation Report:
Carsten Vonnoh
Benjamin Kachero
David Arndt

Consulting:
ICON-INSTITUT Engineering GmbH
Von-Groote-Straße 28, 50968 Köln
T: + 49 221 93 743 0
E: icon@icon-institute.de
I: www.icon-institute.de

Conception, coordination and management
Claudia Kornahrens, Head of section
Benjamin Bräuer, Specialist
GIZ Corporate Unit Evaluation
Central project evaluations section

Responsible:
Dr. Ricardo Gomez, GIZ, Director
GIZ Corporate Unit Evaluation

Published by:
Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices:
Bonn and Eschborn

Friedrich-Ebert-Allee 36 + 40
53113 Bonn, Germany
T +49 228 4460-0
F +49 228 4460 - 1766

E evaluierung@giz.de
I www.giz.de/evaluierung
www.youtube.com/user/GIZonlineTV
www.facebook.com/gizprofile
https://twitter.com/giz_gmbh

Design/layout etc.:
DITHO Design GmbH, Cologne

Printing and distribution:
GIZ, Bonn

Printed on 100 % recycled paper, certified to FSC standards.

Bonn, July 2019

This publication is available of GIZ-Website as pdf-Download www.giz.de/evaluierung. Inquiries for a printed issue should be addressed evaluierung@giz.de

Contents

List of Figures and Tables

Abbreviations

BEETA	Biomass Energy Efficient Technologies Association
BMZ	German Federal Ministry for Economic Cooperation and Development
DERD	Directorate of Energy Resources Development
DKTI	German Climate Technology Initiative (Deutsche Klima- und Technologieinitiative)
DLG	District Local Government
EE	energy efficiency
EEAU	Energy Efficiency Association of Uganda
EnDev	Energising Development Project
GIS	geographic information system
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GoU	Government of Uganda
HPAU	Hydropower Association of Uganda
M&E	monitoring and evaluation
MEMD	Ministry of Energy and Mineral Development
MoFPED	Ministry of Finance Planning and Economic Development
MWE	Ministry of Water and Environment
NAMA	Nationally Appropriate Mitigation Action
OECD-DAC	Organisation for Economic Co-operation and Development (OECD)-Development Assistance Committee (DAC)
PN	project number
PREEEP	Promotion of Renewable Energy and Energy Efficiency Programme
QMS	Quality Management System
QsiL	Quality assurance in line management
RBM	Results-based monitoring (system)

RE	renewable energy
SPPAD	Sector Planning and Policy Analysis Department
TC	technical cooperation
ToC	theory of change
UGBS	Uganda National Bureau of Statistics
UMA	Uganda Manufacturers Association
UNBA	Uganda National Biogas Alliance
UNDP	United Nations Development Programme
UNREEEA	Uganda National Renewable Energy and Energy Efficiency Alliance
USEA	Uganda Solar Energy Association
WWF	World Wide Fund for Nature

The Project at Glance

Uganda: 'Promotion of Renewable Energy and Energy Efficiency Programme (PREEEP)'

Project number	2016.2112.7
CRS-Purpose Code	Energy policy and administration
Project objective	The framework conditions for the sustainable supply of energy to enterprises and households in Uganda are improved.
Project term	01.02.2017 – 31.01.2019
Project volume	3.2 Mio €
Commissioning party	BMZ
Lead executing agency	GIZ
Implementing organisations (in the partner country)	Ministry of Energy and Mineral Development MEMD; Including its departments: Sector Planning and Policy Analysis Department (SPPAD); Directorate of Energy Resources Development (DERD)
Other participating development organisations	Uganda National Renewable Energy and Energy Efficiency Alliance (UNREEEA), Uganda Manufacturers Association (UMA), Biomass Energy Efficient Technologies Association (BEETA), Uganda National Biogas Alliance (UNBA), Uganda Solar Energy Association (USEA), Energy Efficiency Association of Uganda (EEAU), Hydropower Association of Uganda (HPAU), Wind Power Association of Uganda (WPAU), Uganda Manufacturers' Association (UMA), 17 District Local Governments in Northern Uganda

Summary

Background

The evaluation unit of GIZ commissioned ICON-INSTITUT Engineering GmbH to conduct an evaluation of the project 'Promotion of Renewable Energy and Energy Efficiency Programme (PREEEP IV)' (PN 2016.2112.7). The **purpose of the evaluation** was threefold. First, it aimed to provide accountability. Secondly, it aimed to explain why and how different aspects of the intervention did or did not work to improve decision-making within the intervention. Thirdly, the study's findings were expected to contribute to the planning process for an adjoining intervention, intended to take place following the field phase of this evaluation.

The **project subject to evaluation** ran from February 2017 to January 2019 and built on predecessor projects with the same name (PREEEP II and III). The total estimated project value was EUR 3.2 million.

The **project objective and intended outcome** was 'The framework conditions for the sustainable supply of energy to enterprises and households in Uganda are improved'. To achieve this result, the project provides support in five action areas described in Section 1.4.

The project was evaluated on the basis of a **theory-based evaluation design** that relied on the project's theory of change (ToC) as a basis for analysis. Specifically, the evaluation team implemented a contribution analysis for selected elements of the ToC. A contribution analysis examines the extent to which observed (positive or negative) results can be related to the project.

The evaluation relied on three main data sources: internal documentation provided by the project team, secondary data identified and generated by the evaluation team, and first-hand interviews and workshops conducted by the evaluation team. The interviews were conducted with GIZ project staff, other GIZ staff, staff from the partner institutions Ministry of Energy and Mineral Development (MEMD) (including subordinated departments Sector Planning and Political Analysis Department (SPPAD) and Directorate of Energy Resources Development (DERD)), the Uganda Manufacturers Association (UMA), renewable energy (RE) associations, private sector partners, district local governments), other development partners, and representatives of civil society organisations. Most interviews were conducted during a two-week field mission in Kampala between 9 and 20 April 2018. Preliminary findings of the evaluation were presented to and discussed with the project team and selected partners, as well as, in part, with the appraisal mission for the follow-up project.

Assessment of OECD-DAC criteria

In terms of **relevance**, the project was rated 'rather successful' (80 out of 100 points). The project supported key strategic policies from the Ugandan government, the BMZ and the Sustainable Development Goals (SDGs). The project´s alignment with the UN Agenda was manifested in SDG 7 'Ensure access to affordable, reliable, sustainable and modern energy for all', which is closely related to the project's outcome objective and its output on energy mainstreaming. However, its diverse structure and the varied level of ambition of the indicators left potential for increasing its overall relevance.

In terms of **effectiveness**, the project was rated 'rather successful' (80 out of 100 points). The stated outcome indicators and the output indicators were expected to be partly achieved by the end of the project. To provide a more differentiated analysis of the project's contribution to the outcome objective, the evaluation carried out a contribution analysis in selected action areas. The contribution analysis revealed that the project successfully contributed to enhancing framework conditions in line with the outcome objective. Positive results not formally

agreed had been successfully integrated by the project; unintended negative results could not be detected.

In terms of **impact**, the project was rated ‘rather successful’ (70 out of 100 points). The project had achieved substantial progress in this regard through its contribution to the Energy Policy Revision and the Energy Efficiency and Conservation Bill, as well as improving capacity among the key actors of the sector. A roll-out of energy mainstreaming in all districts, which was envisaged in most PREEEP phases, would provide for a substantial impact at a national level with regard to energy access, and would make a contribution to the sustainability of the energy mix and the reduction of CO_2 emissions.

In terms of **efficiency**, the project was rated ‘successful’ (82 out of 100 points). The project was able to attribute sufficient resources to all outputs to fully achieve most of the indicators. The high overarching costs were not fully distributed throughout the different outputs, therefore leaving uncertainty as to their actual size and implications. Most of the areas of intervention tackled by the project (including spin-offs) were developed in close relationship with the partners; resources were also raised from counterparts and German cooperation. Regarding allocation efficiency, differences between activities could be observed but, nonetheless, overall efficiency was considered successful.

Assessing **sustainability**, the project was rated ‘rather successful’ (80 of 100 points). While the prerequisites for ensuring long-term success in the form of tools, concepts and approaches being anchored in the partner structure had largely been fulfilled, the results of the project could not yet be considered fully durable. The project design was focused on finding technical solutions and was assessed as successful at that. Yet its concept was not sufficiently oriented towards impact and left room for improvement. Given the important political dimension of the challenges in the energy framework, it showed a high degree of flexibility towards partner needs and strategically supporting key initiatives, including joint planning and monitoring. However, in spite of its merits, the close cooperation of the project´s experienced technical advisors and key teams of the partner structure created a risk of dependency and of leaving a gap once the project was over and other priorities were set. Finally, regarding economic, social, and environmental sustainability the evaluation team observed positive results in most of the project´s different working areas.

The overall score for all criteria added up to 78.4, which amounted to the rating ‘Rather successful’.

Criterion	Score	Rating
Relevance	80	*Rather successful*
Effectiveness	80	*Rather successful*
Impact	70	*Rather successful*
Efficiency	82	*Successful*
Sustainability	80	*Rather successful*
Overall score and rating for all criteria	**78.4**	***Rather successful***

100-point-scale	6-level-scale (rating)
92–100	Level 1 = very successful
81–91	Level 2 = successful
67–80	Level 3 = rather successful
50–66	Level 4 = rather unsatisfactory
30–49	Level 5 = unsatisfactory
0–29	Level 6 = very unsatisfactory

1 Evaluation objectives and questions

1.1 Objectives of the evaluation

The evaluation of the GIZ project 'Promotion of Renewable Energy and Energy Efficiency Programme Uganda' (PREEEP) was a central project evaluation, intended to rate the success of project PN: 2016.2112.7. Its main objectives were: to assess the relevance of the project and appraise what has been achieved against what had been planned; to appraise the project's efficiency and effectiveness in realising the project's outputs as well as the tangible (direct) and non-tangible (indirect) results (outcomes and impact), including factors that influenced these results; to establish to what extent changes can be attributed to the PREEEP project; to appraise whether the project outcomes/impacts can be sustainable over time; to document lessons learned from the project and to provide implementable recommendations to support future decision making.

This evaluation was an interim evaluation and part of the Evaluation Unit's random sample. The evaluation therefore rated the success of the current project in order that adjustments could be made to activities during the ongoing phase and support planning for the next phase of PREEEP. The main stakeholders of the evaluation were the PREEEP project staff and its partner organisations, namely the Ministry of Energy and Mineral Development (MEMD), including its subordinated departments, district local governments (DLGs), private-sector representatives, and the GIZ country office and GIZ Evaluation Unit.

The feasibility of the evaluation was mainly influenced by the complexity of the project, its lines of action and the political dynamics within which it functioned. The preparatory discussions with the project management and the analysis of the vast number of available documents made it clear that due to the complexity of the intervention, not all measures carried out were depicted in the Results Model. However, to be able to fully evaluate the project, the project measures and contributions to the overall objective of the project were organised and prioritised with the support of the project team in a joint reflection process during the mission.

Responding to evolving needs of the key partners, which may not always be reflected in the Results Model, was a challenge for many technical cooperation (TC) measures. The evaluation team addressed this issue by conducting a thorough kickoff workshop involving all the GIZ team members in order to gain a comprehensive picture of how the implementation of each component compared to the Results Model, and how measures that were not outlined in the Results Model contributed to the overall objective.

1.2 Evaluation questions

The project was assessed based on standardised evaluation criteria and questions to ensure comparability. This is based on the OECD-DAC criteria for the evaluation of development cooperation and the evaluation criteria for German bilateral cooperation: relevance, efficiency, effectiveness, impact and sustainability. Aspects regarding coherence, complementarity and coordination were included in the other criteria.

Specific evaluation dimensions and analytical questions were derived from the framework provided by GIZ. These evaluation dimensions and analytical questions were the basis for all central project evaluations in GIZ and can be found in the Annex 1: Evaluation Matrix.

The evaluation design also took into account contributions to Agenda 2030 and its principles as they relate to crosscutting issues such as gender, HIV/AIDS and, also endorsed by the project, disability inclusion.

2 Object of the Evaluation

2.1 Definition of the evaluation object

The object of the evaluation was the Promotion of Renewable Energy and Energy Efficiency Programme (PREEEP). It was a project implemented on behalf of the German Federal Ministry of Economic Cooperation and Development (BMZ) that supported the Ugandan Ministry of Energy and Mineral Development (MEMD) in promoting the sustainable use of energy for social and economic empowerment, while increasing access to renewable energy and promoting the efficient use of existing supplies.

The subject of the evaluation was the technical cooperation project PN 2016.2112.7, which ran from 01.02.2017 until 31.01.2019. However, the GIZ PREEEP project started in 2009, so has been implemented for almost a decade, and was designed to deliver support in four core components.

1. Strengthening of planning, monitoring and evaluation capacities

Support was rendered towards ensuring that the sector planning, monitoring and evaluation processes of the MEMD were compliant with the International Quality Standard ISO 900.2008. In line with this, PREEEP was working to implement a Quality Management System (QMS) for MEMD. Furthermore, PREEEP supports policy development regarding energy efficiency (EE) and renewable energy (RE) as well as the revision of the Energy Policy of Uganda of 2002. One of the sub-goals of the project was for gender and HIV/AIDS aspects to be more firmly anchored in the state planning and implementation processes of Uganda's energy sector.

2. Decentralisation

Activities of previous two phases were geared towards integrating energy programmes and issues into Uganda's five-year strategic plans, annual action plans and budgets of local governments in 17 pilot districts in Lango and West Nile. These efforts resulted in individual districts raising awareness of renewable energy and energy efficiency and collecting district- and region-specific energy data. The focus of Phase IV was to strengthen the capacity of MEMD in coordinating the mainstreaming of energy at district level and preparing for a nationwide roll-out.

3. Strengthening of market structures and the development of associations

Activities were aimed at strengthening the Uganda National Alliance for Renewable Energy and Energy Efficiency Alliance (UNREEEA) in its role of developing and introducing national standards for RE and EE products and services.

4. Promotion of energy efficiency

PREEEP works to increase the pre-conditions for improved energy use in medium- and large-scale companies.

Temporal, financial and geographical delineation of PREEEP

The project was implemented in Uganda under the Ministry of Energy and Mineral Development (MEMD), including the Sector Planning and Policy Analysis Department (SPPAD) and the Directorate of Energy Resources Development (DERD). Development programmes in the energy sector have been running since 1999. This evaluation focused on the fourth phase of PREEEP, but the predecessor phase will also be considered in order to investigate the long-term results of the PREEEP project. Geographically the project was mainly implemented in Kampala, where governmental bodies are located. Decentralisation components of the projects took place in the West Nile (north-west Uganda) and Lango (central-north Uganda) sub-regions.

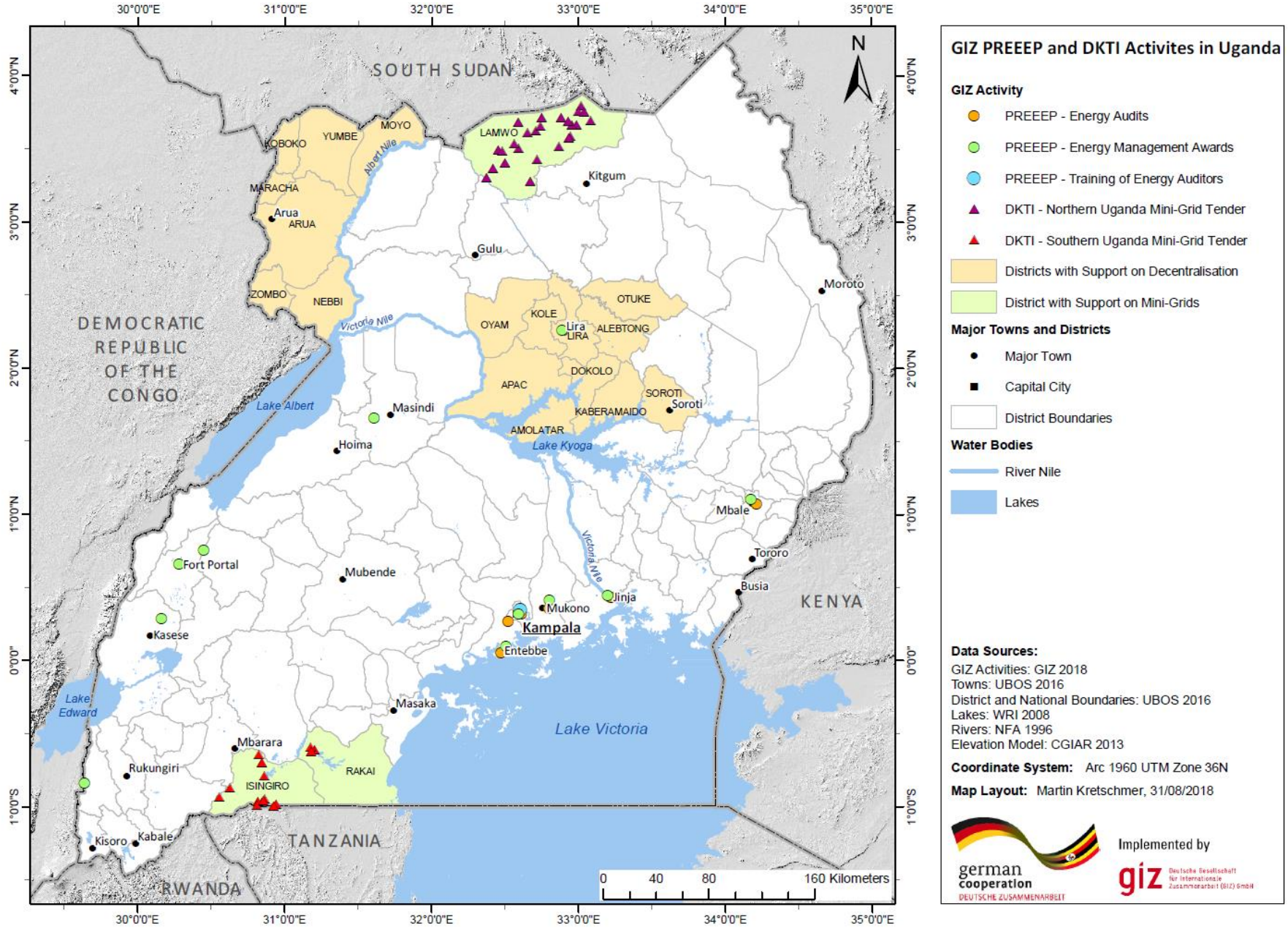


Figure 1: Map of PREEP and DKTI activities in Uganda

Phase	PN	Duration	Financial scope
II	2010.2056.9	01.03.2011 – 30.10.2013	EUR 7,129,600
III	2013.2202.3	01.11.2013 – 31.01.2017	EUR 7,100,000
IV	2016.2112.7	01.02.2017 – 31.01.2019	EUR 3,200,000

Table 1: PREEEP phases overview

Target groups

According to the project offer to BMZ, the target groups of PN: 2016.2112.7 were defined as: 'Commercial, industrial and private energy consumers in cities and rural regions who do not have access to electricity'. This rather broad description was further refined by the evaluation team to better evaluate the interaction with the direct beneficiaries of the project. The evaluation therefore assessed interactions with three kinds of beneficiaries:

- staff of national-level government who are provided with support in designing and implementing energy policies, and staff of district-level government who are supported in designing annual district energy plans,
- providers and users of renewable energy technologies and energy efficiency services who benefit directly from the measures of the project, but also in the long term from improved policy framework conditions and implementation capacities in the energy sector, and
- experts and executives from business associations, research, education and training institutions, and German and European companies that take part in knowledge and technology transfers in the fields of renewable energy and energy efficiency.

The ultimate beneficiaries (the indirect target group, as described in the project offer) are commercial, industrial and private energy consumers in cities, and consumers in rural regions who do not yet have reliable access to electricity. These currently account for about 80% of the total population: about 30 million people, half of whom are women. Nearly 20% of the population live below the poverty line and are largely excluded from the electricity supply. They would especially benefit from improved provision of social services, employment opportunities and general social and economic development through improved power supply to social institutions such as schools, community centres and health stations and through increased involvement of local district governments in national energy planning.

Role within the stakeholder structure and the levels of intervention:
The PREEEP project was commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ) and designed to support the Ugandan Ministry of Energy and Mineral Development (MEMD) to improve the framework conditions regarding sustainable energy supply. PREEEP's role was to advise on energy policies and coordinate cooperation with private sector parties. PREEEP was therefore involved in the supporting policy and regulatory functions of MEMD. The other key stakeholder were the renewable energy service companies and business associations. They had direct links to private sector players in the renewable energy market. The associations working with PREEEP included the Biomass Energy Efficient Technologies Association (BEETA), Uganda National Biogas Alliance (UNBA) and Uganda Solar Energy Association (USEA).

2.2 Results model including hypotheses

The overall goal of GIZ and KfW in Uganda is 'to improve the access to renewable and clean energies as well as the efficient usage of energy, especially in rural areas' (see Annex 3: Results Model). To achieve this goal, GIZ was commissioned by BMZ to conduct the PREEEP project with the intended outcome: 'to improve the framework conditions for the sustainable supply of energy to enterprises and households in Uganda'. For further information on outputs and results see Annex 3: Results Model.

The hypotheses for each component were derived from GIZ's project proposal to the BMZ, Part B, of 31 October 2016, as they were not clearly defined within the Results Model.

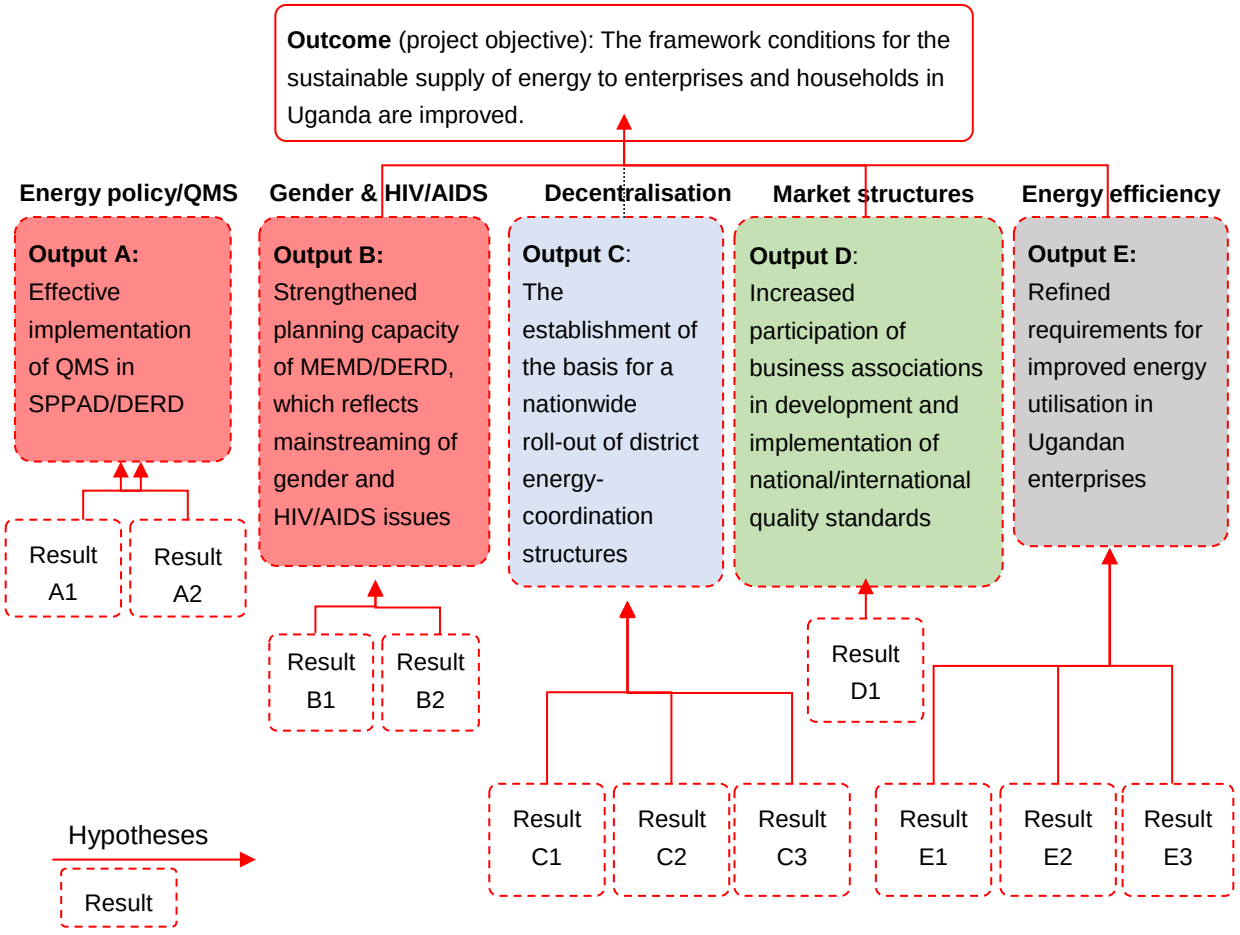


Figure 2: Simplified Results Model for PREEEP. (For original version see Annex 3.)

Component 1 (strengthening of planning, monitoring and evaluation capacities) consists of **Output A and B** and focuses on the energy policies and planning capacities of the central government.

Output A is the effective implementation of a Quality Management System (QMS) in the Sector Planning and Policy Analysis Department (SPPAD) and the Directorate of Energy Resources Development (DERD). **Output A** involves the joint development and dissemination of QMS products with the **result (A1)** to manifest at least two of eight QMS products in the agencies and the **result (A2)** that two of four project reports are derived from the monitoring and evaluation (M&E) criteria of the QMS.

Output B is the strengthened planning capacity of the Ministry of Energy and Mineral Development (MEMD) and DERD, which also reflects mainstreaming of HIV/AIDS and gender issues. With the activities of

establishing a gender working group, developing HIV/AIDS-sensitive aspects of policy and planning documents, and finally drafting a policy document, two results shall be achieved. **Result B1** is defined as 'one major energy policy/master plan is revised' and **result B2** is defined as 'biannual meetings of a gender working group on how to integrate crosscutting issues into the planning process' are held.

Hypothesis (Component 1 towards Outcome): By strengthening the planning process of SPPAD and DERD, the project contributes significantly to improving the policies for disseminating renewable energies and energy efficiency and, in the meantime, manifesting gender and other crosscutting issues in the policies.

Assumptions and risks: MEMD and subordinated institutions are willing to implement planning tools and crosscutting issues, provided planning tools are not used regularly and will therefore not improve planning processes.

Component 2 (decentralisation), congruent with **Output C**, aims to decentralise energy coordination structures.

Output C: The establishment of the basis for a nationwide roll-out of district energy-coordination structures under the guidance of MEMD. It incorporates three activities:
1. Provide technical assistance to MEMD and district local governments (DLGs), to allow them to establish district-based coordination structures for energy projects.
2. Facilitate regional exchange forums on RE&EE issues in the districts.
3. Provide advice on the constitution and tasks of an organisational unit for the support of the decentralisation process.

These three activities shall lead to the following results:
C1: the manifestation of a profound roll-out strategy within the energy master plan,
C2: establishment of 'an organisational unit at MEMD to support the energy focal structures on district level', and
C3: realisation of 'jointly planned bi-annual MEMD and Lango–West Nile DLG sub-regional energy forums'.

Hypothesis (Component 2 towards Outcome): By integrating energy activities in the DLGs planning framework coordinated through MEMD, districts institutionalise energy efficiency and renewable energy interventions (develop and implement innovative projects), hence increasing the number of RE projects.

Assumptions and risks: Time-consuming coordination processes between MEMD and district local governments (DLGs), budget cuts for DLGs, staff fluctuation in DLGs and limited financial capacities of MEMD for a roll-out of decentralised energy structures.

Component 3 (s**trengthening of market structures and the development of associations)**, congruent with Output D, focuses on the development of solid market structures.

Output D: Increased participation of business associations in development and implementation of national/international quality standards for products in the energy and energy efficiency category
The project designed the single activity of providing advice and training to RE/EE business associations on development and establishment of quality standards, to achieve the **result D1** of an 'increased number of active development processes involving RE/EE business associations with regard to national quality standards or internal quality guidelines'.

Hypothesis (Component 3 towards Outcome): By supporting national associations in developing quality standards for energy and energy efficiency services and products, the project aims to improve the quality of services and products in the market, which shall lead to better, safer, more reliable and more efficient usage.

Assumptions and risks: Business associations are not conducting standardisation for respective products and

services. Business associations of the RE/EE sector cannot agree on quality standards for respective products and services. In addition, limited capacity for the participatory development of national standards hinders progress in this regard, while the implementation of quality standards renders products and services too expensive for the consumers.

Component 4 (**promotion of energy efficiency)** targets the energy efficiency at corporate/industry level and is congruent with **Output E**.

Output E: Refined requirements for improved energy utilisation in Ugandan enterprises.
It involves three activities:
1. Large and medium energy-consuming facilities are informed and trained on the establishment of energy management systems.
2. Energy audits are conducted in selected enterprises.
3. Energy auditor training is provided on certification processes and quality-service delivery.

These activities shall achieve the results:
E1: a 10% increase in the number of large and medium energy consumers with energy-management systems,
E2: energy audits in companies, and
E3: auditors fulfilling the requirements for participating in a certification process according to an international standard.

Hypothesis (Component 4 towards Outcome): By promoting energy auditors, carrying out energy audits and supporting companies in introducing energy efficiency measures and management systems, as well as advising the government on the Energy Saving Act, more energy efficiency measures are to be implemented in the country.

Assumptions and risks: Companies are willing to allocate part of their budget for energy efficiency improvements.

3 Evaluability and evaluation process

3.1 Evaluability: data availability and quality

Based on the findings from the inception phase, the evaluation team applied the following data collection methods:

- An analysis was made of academic literature and ongoing debates.
- An analysis of documents was carried out, including the analysis of the project reports, tools, and monitoring data. The project sent various requested inputs (i.e. internal calculation sheets), which provided useful insights and allowed the evaluation team to focus on the main aspects.
- Open and semi-structured interviews were conducted with selected stakeholders, GIZ headquarter staff and former project staff.
- Further data collection methods were closely related to the participatory approach, as participative workshops with partners and the project team, using a range of exercises and techniques, were used for participative diagnoses, partly in the context of Capacity Works, and partly deepening the Theory of Change analysis and questioning the hypothesis.

The focus of the data collection and its questions was the outcome level (effectiveness) and the impact analysis, scoping the relationship between the components and the maximisation of the project's objective to support the creation of the framework conditions for the increase of sustainable energy supply for enterprises and households.

The overall data quality provided for inception and evaluation phases by the project was good and helpful. In addition, data quality on outcome and impact level was assessed and reflected upon during and after the field phase, with supplemental input from the project team.

As a basis for the document analysis, the following key documents were provided and analysed during the inception phase and consulted during the field phase:

Basic document	**Is available *(Yes/No)***	**Actuality and quality**	**Relevance to OECD-DAC criteria:**
Project's proposal and overarching programme/funds proposal (etc) and the Ergänzende Hinweise zur Durchführung/ additional information on implementation.	Yes	*Proposals for recent phase and most of the previous phases*	Effectiveness, Impact, Sustainability
Modification offers, where appropriate	Yes	*One modification offer*	See above
Contextual analyses, political-economic analyses and capacity assessments to illuminate the social context	Yes	*Various documents divided by component*	Relevance, Sustainability, Impact, Effectiveness

Basic document	Is available *(Yes/No)*	Actuality and quality	Relevance to OECD-DAC criteria:
Peace and Conflict Assessment (PCA Matrix), gender analyses, environmental and climate assessments, safeguard & gender etc.	Yes	*Quality not being evaluated*	Relevance, Impact, Sustainability
Annual project progress reports and, if embedded, also programme reporting: Annual reports 2016, 2015, 2014, 2013, 2012	Yes	*Three for BMZ, five for MEMD, Quarterly progress reports, 2017 report available as draft*	Effectiveness
Evaluation reports	Yes	*2015*	All
Country strategy BMZ	Yes	*Draft 2016 (not developed further until field visit), fact-sheets*	Relevance
National strategies	Yes	*Vision 2040, NDPII 2015/16–19/20, energy efficiency road map, Energy Policy 2002, Revised PIP2017/18*	Relevance
Sectoral/technical documents	Yes	*Sector Annual Performance report 2016/2017, 2017/18 Q2&3 progress report, ministerial policy statement 2018/19, Government Annual Performance report 2016/17 etc.*	Relevance, Impact
Results Matrix	Yes		
Results Model(s), possibly with comments if no longer up to date	Yes	1 updated version (2017), quality was yet to improve due to limited overall alignment	Effectiveness, Impact, Sustainability
Data of the results-based monitoring system (WoM) (QsiL)	Yes	Excerpts available, quality sufficient for assessment	Effectiveness
Map of actors (QsiL)	Yes	Differentiated for components, quality was sufficient, yet room for improvement with regard to additional actors within an overall strategic framework	Sustainability, Impact, Efficiency

Basic document	Is available *(Yes/No)*	Actuality and quality	Relevance to OECD-DAC criteria:
Steering structure (QsiL)	Yes		Success factors
Plan of operations (QsiL)	Yes	Standard format with relatively recent data	Effectiveness
Cost data (at least current cost commitment report/Kostenträger-Obligo-Bericht), if available data with costs assigned to outputs)	Yes	Recent data available	Efficiency
Excel sheet assigning working-months of staff to outputs	Yes	Very recent and comprehensive compilation	Efficiency

Table 2: Basic documents provided and analysed

Availability and quality of baseline and monitoring data, including partner data

The intervention's monitoring was done based on the Results Matrix and associated indicators of the intervention's proposal. There were five indicators at the level of the interventions' objective (project objective; outcome), and at least three indicators for each of the outputs, except for D1 relating to the private sector, which has just one indicator. Those indicators of the monitoring system were of high quality. Section 4.2 provides an overview of the assessment of all indicators against the SMART criteria (specific, measurable, relevant, time-bound), which shows a positive picture. The indicators also include sources of data collection as well as baseline and target values.

The evaluation team has only minor remarks with regard to the indicators:

- While the beneficiaries of the intervention were, according to the intervention's proposal, also the whole population of Uganda, none of the outcome indicators measured changes at the level of the wider population.
- On a general note, it became clear that the indicators were very different with regard to their degree of ambition and therefore seemed to require a very different level of attention and resources. With it, the overall concept of the Impact Matrix did not entirely convince the evaluators with regard to consistency and impact orientation.
- Yet, the selected indicators provided a very subtle base for measuring progress in each of the outputs.
- The indicator on the private sector (D1) at the level of the intervention's objective (outcome) was considered only partly SMART and it was unclear why this was the only output with only one indicator. Given the limited resources of the evaluation, this indicator was not considered as a priority and therefore not discussed in detail.

There was no written documentation for when the indicators were measured, but an update on the progress on all indicators was presented to the evaluation team, which suggested that it was solely done based on the milestone dates and/or external demand. The project had recently started using the GIZ results monitor, but full integration of the tool into the project's management still seemed to be a work in progress. Monitoring data were therefore considered in the further steps of the evaluation, when questions relating to effectiveness were discussed.

The project's monitoring system was not linked with the partner's evaluation system, as the political partner's evaluation system was currently being developed. Yet, some of the close direct partners, especially the MEMD/PREEEP coordinator and the MEMD M&E Team, were familiar with the intervention's Results Model and indicators (Int_18). The evaluation team assumed that this was because of the close (activity-based) joint planning and monitoring process, but the development of a results-oriented mind-set in the MEMD was still underway, which could make sharing the rather complex Results Models of the intervention prove unhelpful. Initial discussions with key partners will be used to examine this aspect further.

3.2 Evaluation process

Stakeholders of the evaluation

The evaluation team implemented the evaluation process by using a participatory approach that aimed to increase ownership for its results and build the foundation for learning from the current project phase to provide tangible insights for planning and implementation of the follow-up phase. This included making the purpose of the evaluation clear, taking into account the questions stakeholders would like to see addressed in the evaluation, being transparent on how evaluation results where arrived at, and giving stakeholders the opportunity to provide feedback on evaluation findings.

The evaluation team held preparatory discussions with the GIZ Evaluation Unit and the management of the project to come to a common understanding of aspects to be addressed in the evaluation. The GIZ Evaluation Unit and the project management had the opportunity to comment on this evaluation report, so that remarks could be considered for the final version. In addition, former team members of the previous phases, and private-sector counterparts in the country were interviewed to integrate their perspective into the overall assessment.

The partners, who were at the same time the primary direct target group, were consulted by the evaluation team at the beginning of the field visit, following a letter informing them about the purpose and dates of the evaluation. While the inception was not shared with the partners, a resume was presented at the first contact with them. All interview partners, including external actors, were informed of the objective of the evaluation when they were contacted for an appointment, and about its broad methodology in subsequent meetings.

As defined in the mission schedule, one participatory workshop with partners was held at the end of the field visit and two smaller internal workshops were held during the two weeks. It was agreed with the project management that preliminary findings of the evaluation would be shared with the project team and available partners during a debriefing session at the end of the mission. During this session, participants had the opportunity to comment and discuss results, so that findings could be validated and further focused before the final evaluation report was drafted. A short questionnaire at the end of this workshop framed the overall data collection with a sizeable number of additional remarks. Nearly all participants concurred with the findings of the evaluation team, while giving feedback on specific views and additional aspects to consider. Based on the initial presentation of findings, a common perspective emerged that gave the evaluation team a substantial basis for their report.

The overall participation of partners and target group representatives in the evaluation was good, while frequent shifts in appointments were common. Key stakeholders at MEMD were difficult to reach, but successfully interviewed through the course of the field visit. A few exceptions arose due to a perceived conflict between parts of the project and MEMD, due to the shift of management prior to the actual phase.

While the project, in its recent phase, seems to have been managed very strategically, the intervention still had to combine this impact-orientation with a history of a very demand-oriented approach that entailed responding

to evolving needs of the key partners, not always reflected in the Results Model. The evaluation team addressed this by conducting a thorough kickoff workshop with each of the GIZ team members in order to establish a comprehensive picture of how the implementation of each component compared to the Results Model, and how measures not outlined in the Results Model contributed to the overall objective.

The project proposed grouping stakeholders according to thematic areas (energy efficiency, renewable energy, monitoring), which proved to be practical with regard to timing and efficiency. Yet, some detailed discussions were limited in this setup, given the broad array of stakeholders along the seemingly differing components. The role of the local evaluator was to give an explicit Ugandan and additional professional perspective on the process and the results, concentrating on questions that related to the relevance to national framework conditions, monitoring processes and overall effectiveness. With his knowledge of national political processes and of high-level reporting, the local evaluator became a crucial part in research triangulation, which happened during the dedicated internal working slots, unexpected interruptions, and long journeys. The local evaluator prepared initial drafts of the report, contributing a relevant additional perspective to the evaluation results. The final report was drafted by the international evaluator, with backing from ICON Engineering.

With regard to knowledge transfer to partners, other stakeholders and other GIZ units (e.g. sectoral unit), all groups were considered thoroughly before, during and after the field visit. Various exchanges with GIZ units in Eschborn and Bonn were scheduled to triangulate recent and previous insights into the project, especially with the aim of understanding the contributions of the earlier phases. Discussions with DPs, project spin-offs, and similar projects sparked additional ideas considered within and beyond the evaluation report. A triangulation of selected results with GIZ internal stakeholders was carried out by means of an internal working session concentrating on management and team aspects, and an external debriefing with the GIZ office management and the project management. An early version of this report was shared with the appraisal team for the next phase of PREEEP with the intention of avoiding overlaps and generating additional learning and perspectives.

The analysis of evaluation results was systematically carried out along the Evaluation Matrix (Annex 2:). This Evaluation Matrix was developed in the inception phase of the evaluation, based on a newly designed GIZ standard document. It details evaluation dimensions, analysis questions and indicators for each evaluation criterion. In Section 4, a differentiated description shows key aspects of what was analysed with regard to the OECD-DAC evaluation criteria.

Methods used

The methods used in the evaluation included an analysis of internal documentation, of secondary data and of interviews conducted by the evaluation team. A systematic approach was used for the document analysis. In the inception phase, the project proposal and the Results Model were used to understand what the project intended to achieve and how. The progress reports and, in part, monitoring data were used to understand progress towards the project's objective as well as context factors that affected progress. In addition, a stakeholder map and further insight on instruments provided by PREEEP were also consulted to understand the role of different actors involved and the specific approach of the project. The internal documentation was continuously revisited and amended during the evaluation mission and in the analysis phase to triangulate and complement it with information from other sources.

The design of this evaluation was strongly committed to a participatory approach, which leaves space for spill-over effects, synergies and unintended results. While clear causalities were difficult to determine, it was envisaged that assumptions and questions would be based on an analysis of contributions. A contribution analysis commonly consists of an analysis of the contribution of a project (intervention), and analyses the extent to which observed (positive or negative) impacts can be related to the intervention (Mayne, 2001). It not only analyses the Theory of Change (ToC), but also seeks to formulate alternative explanations that may explain the intended impacts.

Contribution analysis does not necessarily provide for a clear causality of a factor and an impact but tries to show the extent to which the project has contributed to the observed impacts. Data from various sources was analysed to identify the causal hypotheses between inputs, outputs, outcomes and impacts formulated in the ToC. The method aims to build a credible narrative to show whether the project was a relevant factor, possibly together with other factors, leading to change. Context factors that play a role in achieving the intervention's objective were explicitly considered in contribution analysis.

The strength of the internal documentation lies in the fact that it provides information that can be directly related to the project's Results Model and the quality of the implementation process. The evaluation team found the project team very open in talking about both strengths and, in most part, weaknesses. Some of the partners were rather prone to focusing on strengths only. For this reason, consideration of the perception of other development partners and external actors was useful in order to arrive at a balanced perspective.

To obtain valid and reliable information, the evaluation team aimed for systematic data triangulation (taking into account the perspectives of different stakeholders on the same aspect) and/or method triangulation (using various methods of data collection to collect information on the same aspect) whenever possible. It was not always possible to do both for every aspect, and a stronger prioritisation on, for example, selected areas of work would have helped to establish more precise lines of attribution. Possibilities for data triangulation were limited to some evaluation aspects because only the project team and the partner with whom the project was cooperating in a given area were familiar with the specifics of the project. For this reason, external actors (other GIZ projects, sector experts, other cooperation agencies or donors) could only triangulate part of the evaluation aspects, such as general developments in a sector, the quality of coordination between different development partners, or an overall impression of the project's contribution to changes in a given area. Possibilities for method triangulation were limited for some evaluation aspects as well, because not all aspects of the project were covered in internal documentation, and secondary data did not cover project specifics. The Evaluation Matrix in Annex 2 and the presentation of the evaluation findings, give the sources and methods of data collection for each finding in order to make transparent how the evaluation team came to its conclusions.

In addition to data and method triangulation, the evaluation team carried out researcher triangulation. The local and the international evaluator regularly, but without a systematic approach, reflected and analysed their findings during the evaluation mission and beyond. The analysis of evaluation results was intended to be systematically carried out along the Evaluation Matrix, yet various specific questions could only be addressed to some of the stakeholders; no stakeholder was addressed with all the defined questions. This Evaluation Matrix, based on a generic format developed by GIZ, was adopted in the inception phase of the evaluation and details evaluation dimensions, analysis questions and indicators for each evaluation criterion. During the evaluation mission, the evaluation team documented results in interview minutes and gradually relied more heavily on the structure of the Evaluation Matrix. At the end of the evaluation mission, both evaluators elaborated the presentation for the debriefing of the mission, which was commented on by partner representatives and team members. A triangulation of results with involved stakeholders was carried out by means of an internal debriefing session with the project team and a questionnaire addressed to all participants at the final workshop. The comments made by participants in the debriefing session were taken into account in the elaboration of the final report. The final report was drafted by the international evaluator. Finally, the regional evaluator reviewed the draft report and contributed with additional chapter inputs, which further consolidated the researcher triangulation.

The overall participation of partners and a selected (secondary) target group was perceived as good. Partners on all levels were supportive and (to some extent) open to sharing their experience with the project. Yet, with the key political partner some issues were not addressed more thoroughly, since the relationship with parts of the organisation were not as supportive as with others. Due to the complexity of the stakeholder landscape, the evaluation team felt uncertainties as to their selection, which did seem to have affected the overall output of the

evaluation. The vast number of activities and actors involved required substantial focus and energy, leaving limited room to expand the analysis to what might have been further revealing perspectives. Yet, based on the observed professionalism of the project team, the evaluators trusted the overall list of visited stakeholders.

The many requirements of the evaluation process, the ambition of combining insights from the actual and all previous phases, the remarkable changes within those phases and the limited documentation of the very diverse activities, posed a serious limitation on the evaluation team. This probably reduced the opportunity to arrive at strongly analytical results beyond the recent phase,, and prevented a full picture from emerging, especially concerning the early activities of the project.

4 Assessment of the project according to OECD-DAC criteria

4.1 Relevance

Evaluation basis and design for assessing relevance

The relevance criterion analyses the extent to which the objectives of a development intervention were consistent with beneficiaries' requirements, regional needs, global priorities and the policies of partners and donors. The question was whether the intervention sets the right priorities, both in its planned concept and its implementation. In this regard, the evaluation team analysed how far the objectives of the intervention were aligned with regional strategies from BMZ/GIZ and strategies of the partners. It also addressed the extent to which the intervention took into account and contributed to overarching development frameworks such as the Agenda 2030 and the 'leave no one behind' principle.

The analysis of the relevance of the project also examined the extent to which the context and the needs of the implementing partner (the Ministry of Energy and Mineral Development and the 17 subordinated local governments piloting the project) as the direct target group of the project had evolved since the start of the current phase, and the extent to which an evolution of needs had been taken into account in the project implementation. This perspective identified first pointers to the relevance of a potential next phase of the project; these have been highlighted under each dimension of the relevance assessment.

The data on relevancy was gathered from preparatory documents provided by the project team: the PREEEP key project documents; energy policy documents; PREEEP quarterly progress reports; BMZ documents and website; the Uganda National Development Plan II; Energy National Standard Indicators for Uganda (mapping to SDGs); relevant key SDG documents; partner ministerial policy statements, and research on the project's regional and national framework. The evaluation team also held interviews and discussions with sector programme, partner and other stakeholder teams. The project's relevancy was also analysed in the context of the needs of the indirect target group, comprised of the general population of Uganda and intermediaries addressing those needs. In this regard, information on access to energy services by the population was collected from MEMD's annual reports and Uganda's survey reports.

Analysis and assessment regarding relevance

This section assesses the relevance of the project: how it fits into the relevant strategic reference frameworks of BMZ, regional strategies, partner development commitments, UN strategies (e.g. SDGs), and principles of the Agenda 2030, including the concept of 'leave no one behind' (LNOB). This section also examines how the project concept matches core problems and needs of the partner and other beneficiaries (indirect target groups such as the local governments, private sector/business community, the rural population of Uganda), how and if the design of the project was adequately adapted to the chosen goal, and any design changes.

Dimension 1: The project fits into the relevant strategic reference frameworks

The key strategic principles at the international level are the SDGs of the UN Agenda 2030 and its underlying principles such as 'leave no one behind', 'don no harm' and gender equality. The BMZ document on Sustainable Energy for Development (BMZ, 2014) and the Energy and Climate strategy (BMZ, 2018a), with the focus on renewable energy and energy-efficiency cooperation shows the strategic orientation of the BMZ. At the regional level, the key political orientation lies within the East African Community (EAC), which aims to

advance the implementation of SDG 7 through the provision of affordable, reliable, sustainable and modern energy for all by 2030.[1] The Ugandan government's long-term strategy on energy is enshrined in the country's Vision 2040, which is broken down into five-year development plans (NPA, 2015a),[2] the National Development Plan II's strategic objectives for the energy sector (NPA, 2015b), and the existing policy frameworks: the National Energy Policy for Uganda (MEMD, 2002), the Renewable Energy Policy for Uganda (MEMD, 2007) and Rural Electrification Act (MEMD, 1999). Other policy frameworks that support energy and sustainable management of natural resources are: the National Environment Management Policy (MWE, 1994), the Uganda Forestry Policy (MWE, 2001) and Local Government Act (MoLG, 1997: chap. 243) (Int_3,7,17, Docs).

With regards to strategic fit at international level, PREEEP was aligned to the UN strategic framework under SDG 7 ('ensure access to affordable, reliable, sustainable and modern energy for all' (UN SDG website))[3]. The strategic intervention objective of improved access to renewable and clean energies and the efficient usage of energy (especially in the rural areas) shows a clear link to SDG 7. The attainment of the intervention objective was through improving framework conditions for the sustainable supply of energy to enterprises and households in Uganda and related policy outputs of decentralisation through mainstreaming sustainable energy activities in local government development plans, energy market development by supporting private sector and associations, and energy efficiency by promoting energy audits and adoption of energy efficiency technologies and by enabling the policy environment to facilitate the delivery of energy services to the beneficiaries (GIZ, 2018b). The project therefore contributes to the actualisation of Uganda's medium-term focus on exploitation of abundant renewable energy sources so as to increase power generation capacity from 825 MW in 2012 to 2,500 MW by 2020, the expansion of the national electricity power grid network, and the promotion of energy efficiency and use of alternative sources of energy (Int_4,8; NPA, 2015b: xxvi).

In regard to the Agenda 2030 and the 'leave no one behind' principle, at outcome level the project addresses the core needs of the broad target group (the general population) in the concept ('access to energy of the general population of Uganda') (GIZ 2018a). The intervention was considered highly relevant in terms of the involvement of intermediate target groups such as Uganda National Biogas Alliance (UNBA), Uganda Solar Energy Association (USEA), Energy Efficiency Association of Uganda (EEAU), Hydropower Association of Uganda (HPAU), Biomass Energy Efficient Technologies Association (BEETA), Wind Power Association of Uganda (WPAU). The associations come together under the umbrella of Uganda National Renewable Energy and Energy Efficiency Alliance (UNREEEA), which seeks to involve renewable energy and energy efficiency associations in Uganda in activities that include market development, capacity building, standard quality assurance and consumer protection, lobbying for conducive policy and regulatory frameworks and their implementation, as well as awareness raising and information dissemination (UNREEEA website). Therefore, the associations are important partners and intermediaries for different energy consumers. It was noted that in Uganda, voluntary associations find it very difficult to penetrate the structures of government, especially if they have just been formed and are not strong enough to sustain themselves (Int_1,11,16).

In addition, the project was designed to work closely with industries. Small and medium enterprises, in particular, do not have information on the need to use energy-saving technologies and practices (Int_12). Yet,

[1] The co-operation in the energy sector among EAC partner states is governed by Article 101 of the Treaty for the Establishment of the East African Community and EAC-instituted East African Centre for Renewable Energy and Energy Efficiency. There are several energy plans that are currently being fast tracked at EAC regional level, such as supply of sufficient, reliable, cost-effective and environmentally friendly energy, and attracting financing in the energy sector. For example, the Nile Basin Initiative/Nile Equatorial Lakes Subsidiary Action Program (NELSAP) – Interconnection of Electric Grids of Nile Equatorial Lake Countries (Uganda, Rwanda, Burundi, Kenya, D.R. Congo) financed by the Africa Development Fund. The strategies and policies can only be traced at individual country level.

[2] Government of Uganda seeks to achieve the long-term vision targets by developing and generating modern energy to drive the industry and services sectors and it is estimated that Uganda will require 41,738 MW by 2040.

[3] SDG 7 also offers vital support to other SDGs: SDG6 (clean water and sanitation), SDG11 (make cities and human settlements inclusive, safe, resilient and sustainable), SDG12 (ensure sustainable consumption and production patterns), SDG15 (protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss) and SDG17 (strengthen the means of implementation and revitalise the global partnership for sustainable development) and the contributions in PREEEPS's context are discussed in the section on impact in this report.

key partners in this area are still few and, in parts, large companies with sufficient resources undertake energy-saving practices without financing from the project. Furthermore, previous phases of PREEEP intervened in areas of solar panels and cooking stoves, targeting households, schools, health centres (GIZ, 2012–2016, Int_18). The intervention mainstreamed energy activities in local governments, thereby indirectly targeting vulnerable groups such as households headed by women through existing decentralised structures. Future strategies to scale up (roll out) in all districts will directly target disadvantaged groups (Int_1,11,12,16,17). Therefore, interventions focused on associations and decentralisation have a high multiplier effect on disadvantaged groups.

In relation to the principle of gender and equality, the project was conceptualised as having a component that supported and strengthened the partner in crosscutting areas of gender equality and HIV/AIDS by developing a MEMD gender policy and revising HIV/AIDS guidelines. This intervention concept is in line with Government of Uganda (GoU) gender and equality requirements in the planning, budgeting and reporting processes. In Uganda, an institution's budget cannot be passed by Parliament unless it has met the gender and equity rating of the Equal Opportunities Commission (Int_2,22).

In terms of embedding the BMZ country strategy, the GoU has had technical cooperation with the German government since 1964. Germany is among the key development partners of Uganda, and renewable energy and energy efficiency is among the BMZ core areas of corporation is (BMZ, 2018a). In addition, the German government is working through its development cooperation to assist Ugandan government agencies to comply with human rights standards and to strengthen civil society dialogue. The Technical Cooperation under PREEEP is aligned to renewable energy and energy efficiency under the Energy and Climate BMZ cooperation strategy (BMZ, 2018b, Int_2). This cooperation is well articulated in the project concept, which addresses energy efficiency, and a policy review to enhance an enabling environment, decentralisation, support to private sector and HIV/AIDS mainstreaming. However, there was a shift from directly supporting renewable energy activities at national level towards other priorities, as seen in the Results Model of the evaluated phase (Int_26). A dedicated BMZ country strategy did not exist at the time of the evaluation. Nonetheless, the intervention fitted well into the long-term cooperation activities between Uganda and BMZ.

The project was also aligned to Uganda's key strategic documents, including the second National Development Plan NDP II – energy sector objectives 3, 4, 5 and 6 (improve energy efficiency, promote use of alternative sources of energy, improve the policy, legal and institutional framework, and build capacity in the energy sector (NPA, 2015b)). These NDPII objectives were realised through the following focus areas: development and enforcement of standards for promoting energy efficiency, strengthening of the institutional and human capacity, promotion and facilitation of the use of renewable energy technologies at household and institutional levels (NPA, 2015b: 182-3). Therefore, PREEEP aligned to all the above objectives' focus areas through support to energy audits in companies, collaboration with associations, policy review and capacity building in the public and private sectors. Another alignment was with the GoU Vision 2040 (NPA, 2015a), the target of which is for 80% of the Ugandan population to have access to modern energy, an increase from 22% in 2017. The focus of Vision 2040 is to generate the required 41,738 MW by 2040, increasing electricity per capita consumption to 3,668 kWh, with the generation expected to come from several sources of energy (NPA, 2015b: 73). Additionally, the National Energy Policy (MEMD, 2002) provides the overall policy framework and guidance to enable the GoU to meet the energy needs of its population for social and economic development in an environmentally sustainable manner through its broad policy objectives of establishing the availability, potential and demand of the various energy resources in the country, increasing access to modern affordable and reliable energy services as a contribution to poverty eradication, improving energy governance and administration, stimulating economic development, and managing energy-related environment impacts.

Another national policy that makes the intervention relevant is the Renewable Energy Policy for Uganda (MEMD, 2007), with the overall goal to increase the use of modern renewable energy from 4% to 61% of total energy consumption by 2017. Whereas, the ToC reflects the contribution of the project to the above at macro

level, it was not sufficiently developed to show how individual project components contribute to the overall goal. The renewable-energy interventions do not stand out clearly in the current phase, unlike in the previous phases where support for mini-grids was prioritised (and now integrated into another project component). The additional energy-related projects can be considered spin-offs and therefore the result of PREEEP, including a mini-grid project, Energising Development (EnDev), which focuses on activities such as improved cooking stoves (ICS), picoPV and home solar systems, and grid densification to fill the gap (Int_14 and additional project documents). Whereas the project was well anchored in Uganda's strategic framework, as shown above, there was evidence of low political will in the advancement of some intervention outputs, such as gender policy and Quality Management System tools utilisation at ministry level. In addition, the lack of regulatory framework to enforce energy efficiency at national level was likely to affect enhancement of efficient energy utilisation in Uganda. This was likely to improve with the new Energy Efficiency law, which was awaiting parliamentary approval at the time of writing.

In regard to the extent to which interactions between the intervention and other sectors were reflected in the conception and ToC of the project, and also regarding the sustainability dimensions (ecological, economic and social), the project design showed indirect linkages with the trade and industry sector through the sector agency – the Uganda National Bureau of Standards (UNBS) – which was conceptualised to address product standards and certification to enhance participation of the business/private sector (document review). The interaction between districts and the Ministry of Water and Environment helps reinforce the interventions for environment protection, for example through use of energy-efficiency technologies in schools or improved stoves at household level. This was expected to lead to a lower demand for firewood and to reduce overall energy use (Int_17) while encouraging new sources for generation. In addition, the project's interaction with KFW Development Bank and other commissions delivers a high level of impact in terms of access to renewable energy in rural areas (Int_4). The project's energy efficiency component benefitted from the collaboration with Sunref (Sustainable Use of Natural Resources and Energy Finance), which supported companies that are large consumers of energy in adopting efficiency technologies. Other relevant actors in the sector include the United Nations Development Programme (UNDP), the Norwegian embassy, the EU-funded Sustainable Energy for All (SE4ALL) secretariat, and the World Wide Fund for Nature (WWF) (Int_22). Therefore, there were existing and potential cross-sectoral engagements that could be further strengthened to guarantee long-term effects of the intervention.

Dimension 2: Suitability of the project concept to match core problems/needs of the target groups

In regard to the suitability of the project concept to match core problems and needs of the target groups at outcome level, the project addressed core needs of the indirect target group – the Ugandan population – as the project objective was defined as 'access to energy of the general population of Uganda [is improved]'. Therefore, the intervention was considered highly relevant in terms of working towards energy access, which addressed both core needs of the government and of the general population. The latter, however, was not addressed in a differentiated way by considering the needs of disadvantaged groups in light of the 'leave no one behind' principle. The project logic within the private sector activities included: offered RE/EE products and services meet the requirements of quality standards prescribed by UNBS, and the regulator ERA and/or private sector business associations address its sustainable use (also energy mix) by the population, which is also beneficial to government. The focus areas of the previous phases – biogas, solar cooking stoves, etc. – are in line with the energy-saving demand of the partner government and the population at large.

The project aimed to provide an enabling (regulatory) environment for the whole energy sector through the conceptualisation of Quality Management Systems and the strengthening of the policy framework. Decentralisation and mainstreaming of energy activities targeted the household level, with interventions implemented at district level in line with the strategic areas of the partner (MEMD), the scaling up of energy interventions. This also addressed the principle of 'leave no one behind'. Meanwhile, the energy efficiency component targeted high-energy consumers, which helped reduce costs and increase accessible energy. In addition, market developments became key in supporting growth led by the private sector, which is also a GoU

priority for the transformation of the economy (Int_4,5).

The project was aligned to address the needs of the target group – both directly and indirectly. The challenge for the national energy supply in part derives from the limited mix of energy sources in power generation, and the overall low level of access to modern energy, from the low level of energy efficiency, the relatively high but cost-reflective tariffs, the unreliable and inefficient supply, and the inadequate institutional and regulatory capacity. All were targeted in the intervention logic (NDP, 2015b: p. 24, Int_5). However, the technical cooperation in RE was considered insufficient to support the partner to fully address the needs in the current phase (Int_18).

Dimension 3: The design of the project is adequately adapted to the chosen goal

The recent design of PREEEP was not a very generic and flexible approach; it arose from similarly contextualised GIZ interventions in the sector and, in part, from previous phases.[4] Hypotheses that exist in the Results Matrix were not strong enough to track intended and unintended results (document review, Int_20). The project components QMS/policy, market development and energy efficiency were stand-alone, though the energy policy integrates every component in the actual reviewed policy objectives (Int_22). In general, the assumed hypotheses could largely be reconstructed, but were not made explicit in the project documents. The same was true for the system boundary, which could not clearly be defined by the evaluators due to the wide range of actors/topics and a seemingly incoherent approach to various sub-systems within the energy sector. All the hypotheses made during an internal evaluation exercise were plausible but showed a wide variety of alternatives and gaps in argumentation (internal workshop). For example, addressing energy efficiency in enterprises (Output 5) could have been approached through the dissemination of key sector knowledge and best practices or by supporting learning and financing mechanisms as opposed to financing the training of auditors and paying selected energy audits.

In addition, the Results Model was mapped, but lacked clarity and a consistent integration of inputs and activities (see Annex 2). For example, there was no clear results pathway on how QMS was translated into the improved framework conditions for the sustainable supply of energy to enterprise and households in Uganda. Results were addressed on a general basis, but not differentiated by the different target groups (see discussion on target groups in Section 2). Hypotheses on both intended and unintended results were not captured in the Results Matrix and the M&E online tool and were therefore not reflected in the reporting or not tracked, since reporting was at activity level (Int_20,22, document review). Based on this, and in the event of ineffectiveness or absence of regulatory requirements, this may have jeopardised the realisation of the outputs and outcomes of some components, such as mainstreaming energy services in local governments and market structures (Int_4,8,22). This affected the project in regard to the new planning and reporting framework under the Public Finance Management Act (2015) by the GoU, especially the Programme Based System (PBS) that requires reporting on high-level results for all programmes and projects (MoFPED, 2017). A thorough analysis of risks, integrated into the M&E systems was not visible and it did not appear that the project team monitored or addressed unintended negative results.

Dimension 4: The conceptual design of the project was adapted to changes in line with requirements and re-adapted where applicable

In regard to whether the conceptual design of the intervention was adapted to changes in line with requirements and re-adapted, in the recent phase, two change offers to BMZ were formulated, which addressed only minor changes with regard to budgets and overall concept. Other changes included an additional strategic priority on the development of an MEMD gender policy due to a poor partner gender and equality rating by the Ugandan Equal Opportunity Commission (Int_4). In addition, the project shifted from directly supporting access to energy (solar market development, micro-hydro power, grid densification, stove

[4] See Results matrix for PREEEP phase I (2008) and II (2012)

market development) and promoting rural electrification to closer technical and organisational consultancy with the key partner (ref. project doc).[5] The shift towards policy/QMS, energy efficiency and market development was very likely to be a result of the second-phase experience of PREEEP with MEMD as political partner and the BMZ/GIZ focus on private-sector engagement and large-scale interventions. This has led to a lower priority being given to direct RE consultation, which might have reduced opportunities in this sub-sector.

In terms of adapting to the changes that have occurred in the framework conditions, the project, over the four phases, and especially in the recent phase, has shown strong efforts to adapt to an improving market environment and the acceptance of independent associations (Int_1,11). Yet, the evaluation team realised that many of the conceptual changes and shifts in management style were due to additional, unexpected political priorities from the Ugandan and German governments (Int_18,19), leading to sub-optimal conditions for the project team to achieve the full potential of the project's relevance.

Limitations

Limitations that surfaced related to the linking of the implemented activities to overall strategic outcomes, undocumented risks and ToC in the reporting system.

Overall assessment of relevancy criteria

The evaluation team concluded that the project fitted well into the relevant strategic reference framework, as reflected in the GoU documents, BMZ technical cooperation, the Sustainable Development Goals (SDGs) and their corresponding principles. If the energy efficiency regulation comes into place to guide and enforce energy audits and the adoption of energy efficiency technologies for industries, this will remain a key contribution to relevant changes in the sector. Furthermore, stronger alignment of the project's activities and its outputs will further enhance the relevance of the intervention. In addition, incorporation of the other GoU institutions in strengthening sectoral engagement could reinforce the relevance of the project across Uganda and guarantee long-term effects. The project was rated with 38 out of 40 points in regard to the extent to which it fitted into the relevant strategic reference frameworks.

The suitability of the project concept to match core problems and needs of the target groups in the relevant strategic reference frameworks was rated with 25 out of 30 points. The project addressed the core needs of the government and the general population. The inclusion of associations/the private sector, local governments and the focus partner priority areas made a strong case for matching needs.

The suitability of the design of the project to the chosen goal of improving framework conditions for the sustainable supply of energy to enterprises and households in Uganda was considered only adequate to some extent. While the component on M&E and Policy addresses key framework conditions, it was conceptually not entirely clear how the other components contributed to the project objective on a similar level. Therefore, this aspect was rated 10 out of 20 points.

The conceptual design of the project was adapted to changes in line with requirements, and re-adapted where applicable. The recent phase entails only minor changes within the budget. The adoption of changes was rated 7 out of 10 points.

Overall, the project was rated at 80 out of 100 points for relevance score, hence 'successful'.

[5] Those topics are party taken up by other components of the overall GIZ programme and are under discussion for the follow-up phase.

Criterion	Assessment dimension	Score
Relevance	The project fits into the relevant strategic reference frameworks.	*38 out of 40 points*
	Suitability of the conception to match core problems/needs of the target group(s).	*25 out of 30 points*
	The design of the project was adequately adapted to the chosen project objective.	*10 out of 20 points*
	The conceptual design of the project was adapted to changes in line with requirements and re-adapted where applicable.	*7 out of 10 points*
Overall rating for relevance		***80 out of 100 points***

4.2 Effectiveness

Evaluation basis and design for assessing effectiveness

With regard to effectiveness, the evaluation measured the progress towards achieving the intervention's objectives. This included an analysis of the degree to which indicators at the level of the intervention's project objective (outcome) and at output level had been achieved.

A necessary condition for using these indicators as the basis for assessment was that they fulfilled the SMART quality criteria. All the four outcome indicators formulated in the project's Results Matrix (see table below) were fully SMART (A, B, C, and D). Most of the output indicators largely fulfilled the SMART criteria, with a few such as D1 lacking clarity (specific), and indicator E1 missing clear timelines which were clarified during the field visit (Int_5).

The evaluation team's comment on possible limitations in having insufficient sources for verification still applied to the updated Outcome A. The QMS tools and annual planning calendars were developed and had been widely distributed within the three directorates of MEMD, but had not been sufficiently used yet (Int_18, GIZ staff). The evaluation team considered Indicator B in respect of its partial fulfilment of the SMART criteria to be successful, since policies were major documents for the partner. However, B2 was assessed a weak indicator since it only measured an activity (bi-annual meetings).

In addition to the reflection on outcome indicators, all the output indicators seemed appropriate and reasonable. Some of them could benefit from a stronger concentration on the SMART criteria and clear definitions.

Project objective indicator according to the offer / Original indicator	Assessment according to SMART criteria/assessment
Energy Policy/QMS/gender, HIV/AIDS mainstreaming	.
Outcome Indicator A: 25% of the sector planning, monitoring and evaluation processes of the Ministry of Energy and Mineral Development (MEMD) are compliant with the International Quality Standard ISO 9001.2008 Base value: 5% of the core processes for planning, monitoring and evaluation are compliant to ISO 9001 Target value: 25% (2019) Source: Analysis of planning and evaluation documents	Fully SMART Possible limitations in having insufficient sources for verification.
Output Indicator A1: The application of 2 of the 8 QMS products is manifested in one key product of the SPPAD/DERD by October 2018 Baseline (2017) = 0 Support QMS products have been drafted but not yet applied. Target (2019) 2 QMS support products applied	Fully SMART
Output Indicator A2: 50% of a total of 4 project reports of DERD are derived from the M&E criteria of the QMS by October 2018 Baseline (2017): 0% (General quality standards for monitoring and evaluation processes do not exist) Target (2019): 50%	Fully SMART
Outcome Indicator B: At least one major energy policy or planning document features gender- and HIV/AIDS-specific goals Base value (2017): 0. A gender policy of MEMD is elaborated, but not embedded consequently in recent planning and policy documents of the energy sector. Target value (2019): 1 key energy policy or planning document.	Partly SMART It is unclear how 'major' is defined and how relevant those features are with regard to the overall objective.
Output Indicator B1: Either one major energy policy or a energy master plan has been revised/developed Baseline 2017: 0 Target (2019): 1 policy document or master plan	Partly SMART. Unclear regarding Indicator B.
Output Indicator B2: A Gender Working Group in the DERD meets biannually on the integration of gender-topics in planning processes Baseline: 0 meetings Target: Biannual meetings	Partly SMART No clear time frame

Project objective indicator according to the offer / Original indicator	Assessment according to SMART criteria/assessment
Decentralisation	
Outcome Indicator C: 75% of the partner district local governments have signed a cooperation agreement with the MEMD for the implementation of one joint energy project per district. Base value (2017): 0 Target value (2019): 75%	Fully SMART
Output Indicator C1: A roll-out strategy is developed by MEMD and other ministries and agencies Baseline (2017): No roll-out strategy or concept by MEMD and other ministries is in place. Target (2019): 1 roll-out strategy in place	Fully SMART
Output Indicator C2: The MEMD has established an organisational unit to support the energy focal structures on district level. Baseline (2017): 1 MEMD Senior Energy Officer as Focal Person for Local Government Target (2019): 1 organisational unit, staffed with a minimum of 2 MEMD officers.	Fully SMART
Output Indicator C3: Bi-annual Sub-Regional Energy Forums are jointly planned and conducted by MEMD and the Lango and West-Nile District Local Governments Baseline (2017): Total number of sub-regional energy forum per sub-regions:2 Target (2019): 2 sub-regional energy forums per sub-region have taken place	Fully SMART
Market structures	
Outcome Indicator D: The number of offered RE/EE products and services that meet the requirements of quality standards prescribed by the national regulatory authority and/or private sector business associations have increased by 25% Base value (2017): X (Results of the final survey at the end of Phase III of PREEEP, Jan. 2017) Target value (2019): X+25%	Fully SMART

Project objective indicator according to the offer / Original indicator	Assessment according to SMART criteria/assessment
Output Indicator D1: The number of active development processes involving RE/EE business associations with regard to national quality standards or internal quality guidelines has increased. Baseline (2017): X% Target (2019): 40% increase of active development processes involving Business Associations.	SMART, yet development processes not entirely clarified
Energy Efficiency	
Outcome Indicator E: The number of large and medium energy-consuming facilities that have implemented medium and large-scale energy efficient processes increased by 20%. Base value (2017): Baseline study to determine the number of large and medium energy consumers implementing energy efficient measures Target value (2019): + 20%	Fully SMART Depending on baseline quality.
Output Indicator E1: The number of large and medium energy consumers with energy management systems has increased by 10% Baseline: X Target: X +10%	Partly SMART No clear timeframe
Output Indicator E2: Energy audits have been carried out in companies Baseline (2017): 15 Target (2019): 20 energy audits have been carried out	Fully SMART
Output Indicator E3: The requirements for participating in a certification process for Ugandan energy auditors according to an international standard are fulfilled. Baseline (2017): 20 Target (2019): 30 auditors have been prepared for certification procedure.	Fully SMART

Table 3: Assessment of indicators according to SMART criteria

With the resources available for the evaluation, it was not possible to take into account all approaches that the project had been using. The support to the key processes and how they contributed to the project objective was therefore the focus of the contribution analysis (an explanation of contribution analysis is provided in Section 2.2), as a prerequisite to understanding the relation between the achieved results and the contribution of the project and (possibly) other actors. In addition to further focus on the evaluation of objective(s), the evaluation team focused especially on the following indicators and their presumed hypotheses, based on a preliminary assessment of high chances for substantial impact:

Hypothesis in the context of Outcome Indicator A:
'By introducing a Quality Management System within ministries' key institutions (SPPAD/DERD) for the sector, the overall capacity to fulfil tasks improves and therefore the framework conditions for sustainable energy supply are improved.'

Hypothesis in the context of Outcome indicator C:

‘By integrating energy activities in the DLG’s planning framework through the coordination of MEMD, districts institutionalise energy efficiency and renewable energy interventions (develop and implement innovative projects) and therefore improve the framework conditions for sustainable energy supply on a local government level.’

Nonetheless, all indicators on outcome and output level were analysed with regard to their status and prospects of achievement.

Analysis and assessment regarding effectiveness

Dimension 1: The project achieves the goal on time in accordance with the TC-measures’ goal indicators agreed upon in the contract

Effectiveness evaluation dimension 1 focuses on the achievement of the project goal on time in accordance with the TC-measures’ goal indicators agreed upon in the contract. Below is an analysis of the project performance in regard to the dimension.

Outcome and outcome indicators

The overall outcome (project objective) of the project is described as: ‘The framework conditions for the sustainable supply of energy to enterprises and households in Uganda are improved.’

At outcome level, PREEEP has been monitoring its products, trying to systematically fulfil its goals. Only a few of the indicators defined at outcome were reached. Due to the limitations of the evaluation process with regard to time and resources as well as the wide array of PREEEP interventions, detailed analysis of the outcome indicators was reduced to the two key indicators: A and B. The following picture emerges, leaving only limited ground for a contribution analysis:

Outcome Indicator A sought to increase the share of MEMD planning, monitoring and evaluation processes to be compliant with the International Quality Standard ISO 9001.2008. It seemed unlikely that this indicator would be fully achieved, possibly because its ambition and technical complexity had been underestimated in the previous phase. While the indicator would most likely not be achieved, the strategic planning of MEMD was strongly advanced by PREEEP in areas of joint sector planning and of strengthening the production of statistics. In addition, the review of the energy policy that aimed to drive the strategic direction of the sector had a strong partner ownership (Int_4,8) whose initiation was attributed to the project. The most significant change of the project was perceived in the policy design support beyond the document itself as capacity-building exercise and increased ownership through the drafting process (Int_8). There was also strong development partner coordination in respect of the quarterly sector working group meetings at MEMD that discussed sector planning and performance (Int_34). On the other hand, under EE, the most significant change was that some companies have started investing in energy efficiency technologies (Int_9) and there were plans for reduced energy consumption within some of the selected companies that participated in energy audits (Int_12,13). The key partner had taken over the large proportion of EE activities and a pool of energy auditors was being put together with support of the private sector to address the energy audit needs when the supported EE bill is passed by Parliament, despite the minimal performance standards for private appliances and limited awareness (Int_8).

Outcome Indicator B addressed the development/revision of a major energy policy document or an energy master plan. A strong commitment from a consultant on the development of a revised energy policy and various technical inputs enhanced its progress.

Outcome Indicator C addressed the implementation of joint RE projects by MEMD and district local governments, but no clear positive tendency could be observed, and a limited number of cooperation agreements with MEMD had been achieved, even though the number of respective activities on the ground

seemed remarkable. (Decentralisation Workshop)

Outcome Indicator D focused on market structures, and aimed to increase the number of offered RE/EE products and services based on quality standards. Its achievement was close to 50%, but it remained uncertain if it would be fully met by the end of the phase.

Outcome Indicator E looked at the implementation of EE measures implemented in enterprises – an objective that is likely to be fulfilled by the end of the phase.

Output indicators

With regards to achieving the **output indicators**, the project, bearing in mind that this process was an interim evaluation, seemed only partly on track and therefore left limited space for an assessment of contribution.

Within the first component, **strengthening of planning, monitoring and evaluation capacities,** the intervention pursued the attainment of Outcome Indicator A Energy policy/QMS and Outcome Indicator B Gender/HIV/AIDS. Outcome Indicator A entails compliance of 25% of the sector planning, monitoring and evaluation processes of the Ministry of Energy and Mineral Development (MEMD) with the International Quality Standard ISO 9001.2008. The compliance requirement was too ambitious for the partner (Int_7,18, workshop). For Output Indicator A1, eight QMS tools were updated by the planning Department of MEMD and shared for application with all Directorates of MEMD in the planning process in FY2018/19. Furthermore, terms of reference of the QMS/M&E taskforce were developed. The tools include: a template for submission of revised energy policy, a template for planning of new projects, and a work-plan template. While the Department of Policy and Monitoring were reporting on active use, there was no evidence of QMS tools used in the RE department that was piloting QMS (attributed to gaps in communication and a limited conviction of its appropriateness) (Int_8,26). The outputs under QMS were considered substantial in providing new formats (i.e. planning calendar, work-plan template, project matrix), documenting and distributing existing templates for example of the development committee of Ministry of Finance, Planning and Economic Development (MoFPED) or templates of the Cabinet Secretariat, but weak in part, because MEMD was not using them consistently.

The results for A1 will be left to be judged at the end of the phase. Whereas tools were updated, the adoption within the key partner organisation was low, possibly due to the lack of champions at senior management level and the overambitious complexity at the start of the QMS activities. Low adoption was also attributed to the lack of proper alignment of the tools to current government systems on planning, budgeting and reporting (the Programme Based System) (Int_18), an assessment that was not shared by the project team and rather showed a lack of shared perception. The evaluation team felt that some of the tools' complexity might have been underestimated in its initial integration into the project's efforts. There were clear signals that its practicability and usefulness were addressed more strongly at the end of the phase.

For Output Indicator A2 ('50% of a total of four project reports of the Directorate of Energy Resources Development (DERD) were derived from the M&E criteria of the QMS by October 2018'), the partner was in the process of establishing an automated M&E system that was at concept level during the evaluation field phase and which follows the National Policy on Public Sector Monitoring and Evaluation 2013 (Int_5). A consultancy firm was hired to support the development of a statistical database at MEMD under the leadership of the SPPAD department and GIS unit. In addition, the intervention focuses on monitoring, while evaluation was only done at sector review, which was considered inadequate (Int_1).

Outcome B aims to strengthen the planning function of the DERD of the MEMD in terms of HIV/AIDS and gender mainstreaming, as well as national energy objectives. In respect of Output Indicator B1, the revision process of the energy policy was ongoing, and policy was at zero draft and considered a success (Int_1,5,8,18). In respect of B2, the gender taskforce meetings were held every six months and technical officers received training. However, there was no progress on the preparation of a gender policy as gender issues were taken as secondary due to other partner mandate priorities (Int_16). The need for gender policy may not be treated as urgent due to existing guidelines on gender mainstreaming in the planning, budgeting and reporting processes by GoU that required every institution to comply. In practice, gender and equity rating is done by the Equal Opportunities Commission on all institutional budgets, and without the gender and equality certificate Parliament cannot approve the budget (Int_4,5,8). Considering the above, there was limited commitment to deliver on the output, even though there was demand by the partner. The demand for the gender policy was initiated during the joint sector review in 2017 following the partner's poor gender and equity rating of 14% (Int_5).

In respect of the second component, **decentralisation** (Outcome C)**,** districts were expected to mainstream RE and EE interventions, with 75% of the 17 pilot district local governments (DLGs) signing cooperation agreements with MEMD for implementation of one joint energy project per district. The project was not fully on track, but the indicator was perceived as achievable within the project time frame (Int_5, 22, document review). Output Indicator C1 ('A roll-out strategy is developed by MEMD and other ministries and agencies') was not on track, as the roll-out strategy or concept by MEMD and other Ministries was not in place[6] and its attainment within the recent phase was considered improbable. Output Indicator C2 ('The MEMD has established an organisational unit to support the energy focal structures on district level') was on track, as one Senior Energy official was designated as Focal Point Person at MEMD to coordinate mainstreaming activities (Int_4,5). The evaluation team considered this as sufficient, compared with the original concept of establishing a decentralisation unit to support the energy focal structures at district level. The concept to review the structure was not in place and the process usually takes longer since it requires change in partner organisational structure which should be cleared by Ministry of Public Service and Cabinet. This also has cost implications in terms of operational costs coupled with the partner restrictions on recruitment. Given these processes, this specific area of the project was not well conceptualised, with incorrect assumptions.

Output Indicator C3 ('Bi-annual Sub-Regional Energy Forums are jointly planned and conducted by MEMD and the Lango and West Nile District Local government') was on track, with two sub-regional biannual meetings having taken place and various results reported in the evaluation of the mainstreaming efforts (i.e. all targeted districts integrated energy components, more effective long-term planning). Several outputs and activities had been undertaken by partner local governments, as follows. The mainstreaming of energy activities had taken place in the pilot districts, though implementation was low due to resource constraints and lack of adequate commitment in the face of other priorities at district level. Energy clubs were also formed in some schools (Int_17). To kick-start the signing of project agreements, the project team proposed coming up with competitive grants for pilot districts to implement two energy projects (Int_17,22). However, awareness had not taken place at some strategic levels i.e. the lower councils had not received the supported mainstreaming guidelines (Int_17). It was unlikely that the project would make good progress on the intended output ('The base for a nationwide roll-out of district energy coordination structures is established under the guidance of MEMD') if the scope of stakeholders involved in the decentralisation process was not widened. The relevant stakeholders for intersectoral linkages in the decentralisation process include: National Planning Authority, Ministry of Water and Environment, Office of the Prime Minister, Ministry of Local Government, Ministry of Finance Planning and Economic Development (budget call circular to emphasise crosscutting issues under energy and making it a requirement to mainstream energy issues at all local governments) (Int_17,22). In addition, commitment is required by the partner to take up stronger (high-level) ownership of the process.

The evaluation team also analysed progress on the other two components: **energy efficiency** and **market structures**. The project was on track on energy efficiency (Output Indicator E) during the evaluation field visit. Looking at indicator E2 ('Energy audits have been carried out in companies'), audits had been carried out in more than 15 companies of different sizes and sectors. However, the absence of the required legal framework was likely to affect enforcement and scaling-up. In addition, it was not entirely clear why the project funded audits also for a small number of large international companies that were quite sophisticated in the area of EE (Int_13). For Output Indicator E3 ('Requirements for participating in a certification process for Ugandan energy auditors according to an international standard are fulfilled'), capacity building had been undertaken and more than 20 energy auditors were internationally certified. Thus, the indicator will be fully achieved (Int_4,5,9,11,12,18,22). However, the awareness created through the Energy Week (another joint PREEEP/MEMD activity) had not led to evidence of enterprises introducing efficiency measures, as required

[6] An initial concept for a roll-out had already been developed by development workers in 2014 (Int_30) but was not able to get national support.

for Output Indicator E1 ('Number of large and medium energy consumers with energy management systems has increased by 10%') (Int_22). No outcome measures on energy savings were made because no follow-up had yet been conducted after energy audits (Int_22).[7] Little evidence exists of the implementation of energy audit recommendations, with only big corporations, such as a large brewery, embedding plans and actions on efficiency in the management system (Int_13). Other corporations were hesitant and/or had insufficient financing options (Int_12).

Regarding the **market development** component (Outcome D), the project was slightly on track. The inclusion of private sector (associations) fills the gap that had existed for a long time. The supported associations participate under their UNREEEA umbrella and they include: BEETA, EEAU, HPAU, UNBA, USEA and WPAU. Those associations, working in the fields of energy efficiency, solar energy, wind, hydro, etc., were formed and supported by the project team. Some association members conducted energy audits through the newly established structures (Int_4,11). However, the associations had not reached a level to operate on their own and were entirely supported by the project, with the exception of BEETA, which collaborates with other partners (Int_18).

With regard to the fulfilment of Outcome D ('Associations' processes contributing to the development of quality standards for products and services have increased'), the project's achievement in the increase of the defined processes (+40% target) was considered sufficient to indicate that it would reach approximately half of the target by the end of the phase (Int_9,12).

The project's performance was therefore considered strong at activity level, and there was some evidence for impact-level performance attributed to the project (i.e. an energy efficiency law, the establishment of district energy coordination structures with five-year plans and budgets integrating energy). Proxy indicators will be used at impact level to show evidence at national level. The decentralisation component required a multi-sectoral approach, financing and government reform to make RE commitments within the 17 pilot districts sustainable and expand the structural change through the nationwide roll-out. The further implementation of QMS was based on ambitious targets that require strong partner conviction and ownership, a base that was not accessible in all areas of this intervention (Int_4,19, evaluator triangulation).

Dimension 2: The services implemented by the project successfully contribute to the achievement of the goal agreed upon in the contract

This assessment was done through a contribution analysis exercise with the project team and evaluators' critical analysis of the Theory of Change and its linkage to the evidence gathered. Based on the above-mentioned prioritisation, the evaluation process reconstructed potential contributions of the project activities in those areas of action and with it their overall effectiveness. While clear causalities were difficult to determine, the evaluation based assumptions and questions on the analysis of contributions.

A contribution analysis commonly consists of an analysis of the contribution of a project (intervention) and analyses of the extent to which observed (positive or negative) results can be related to the intervention. It not only analyses the ToC, but also seeks to formulate alternative explanations that may explain the intended impacts (Mayne, 2001).

Contribution analysis does not necessarily provide for a clear causality of a factor and a result but tries to show the extent to which the project has contributed to the observed results.

While the focus of the analysis lies on Outcome indicators A and C, the following overview gives an indication of PREEEP's contributions to the indicators as a whole:

[7] Yet, they are scheduled for the third quarter of 2018.

Outcome Indicators at project level (PREEEP):	PREEEP's contributions by April 2018	Comments
A. 25 % of the sector planning, monitoring and evaluation processes of the Ministry of Energy and Mineral Development (MEMD) are compliant with the International Quality Standard ISO 9001.2008. Base value 2016: 5% Target value 2019: 25%	At the time of the evaluation, PREEEP had contributed to some significant improvements to MEMD processes through intensive consultation, but compliance with regard to ISO standard remained low and did not yet provide a sufficient basis for an assessment. Survey will be conducted in January 2019.	The design of the indicators was not fully traceable and did not always address the level of outcome, but rather small-scale interventions that served a higher, not further articulated, purpose.
B. At least one major energy policy or planning document features gender- and HIV/AIDS-specific goals Base value: 0 Target value: 1	At the time of the evaluation, PREEEP had contributed to the development of one major energy policy revision through a dedicated consultant and technical advisory process, including limited reference to gender. The fulfilment is considered at 50%, as a draft is available which should be approved by top management by the end of the phase.	The design of the indicators was not fully traceable and did not always address the level of outcome, but rather small-scale interventions that served a higher, not further articulated, purpose.
C. 75% of the partner District Local Governments have signed cooperation agreement with the MEMD for the implementation of one joint energy project per district. Base value: 0 Target value: 75%	At the time of the evaluation, PREEEP had contributed to the activities at district government level to a substantial degree with many RE initiatives arising and local energy budgets established. Yet, based on the indicator, the achievement is considered at 60%.	Level of reference did not address the impact level and showed limited clarity upon its design.
D. The number of offered RE/EE products and services that meet the requirements of quality standards prescribed by the national regulatory authority and/or private sector business associations have increased by 25% Baseline: X Target: X+25%	At the time of the evaluation no clear figures with regard to the fulfilment of the indicator were available, yet its reach was estimated at 45%. Survey will be conducted in November 2018	Survey to be conducted in November 2018

Outcome Indicators at project level (PREEEP):	PREEEP's contributions by April 2018	Comments
E. The number of large and medium energy consuming facilities that have implemented medium and large-scale energy efficient processes increased by 20%. Base value 2017: 6 Target value 2019: 6 + 20% Current value 2018: 8 Final survey will take place in November 2018.	At the time of the evaluation, PREEEP had contributed to 20 energy audits, through which few companies have made investment decisions. A full picture of the fulfilment of this indicator will emerge after an assessment in Q4 of 2018. The achievement of 100% is considered highly probable.	A lack of clarity on baseline and fulfilment numbers.

Table 4: PREEEP's contribution to indicators

Component 1[8] (strengthening of planning, monitoring and evaluation capacities) focuses on energy policies and planning capacities of the central government institution of the sector, MEMD. It includes two outputs:

- **Output A** is the effective implementation of a Quality Management System in the Sector Planning and Policy Analysis Department (SPPAD) and the Directorate of Energy Resources Development (DERD). It involves the activities to jointly develop and disseminate QMS products with the result (A1) to manifest at least two of eight QMS products in the agencies and the result (A2) that two of four project reports were derived from the M&E criteria of the QMS.
- **Output B** is the strengthened planning capacity of MEMD/DERD, which reflects mainstreaming of gender and HIV/AIDS issues.

With the establishment of a gender working group, the development of HIV/AIDS-sensitive aspects of policy and planning documents and the drafting of a policy document, two results shall be achieved: **Result B1**, the revisions of a major energy policy/master plan, and **Result B2**, biannual meetings of a gender working group on how to integrate these crosscutting issues into the planning process.

The **assumed hypothesis** was that 'by strengthening the planning process of SPPAD and DERD, the project contributes significantly to improving the policies for disseminating renewable energies and energy efficiency and at the same time manifests gender and HIV/AIDS in the sector policies'. In the assessment of the project contribution, the results were compared with the alternative hypothesis and assumptions during a discussion with the project team.

The contribution of the project to the outcomes was seen through the respective outputs results, based on activities such as providing consultancy and updating key tools (template for submission of revised energy policy, template by the development committee for preparing new projects, work-plan templates for annual planning process), developing terms of reference for a QMS/M&E taskforce, undertaking the baseline for QMS, and technical support by the project management (Int_5,22). In addition, the contribution to Result A2 was seen in the preparation of terms of reference for hiring a consultant to develop the automated M&E system, who was subsequently hired to support the development of the statistical database at MEMD under the leadership of SPPAD and GIS unit. The GIS unit[9] is involved in data collection for the Energy for Rural Transformation and Electricity Sector Development Project Projects and in monitoring activities in cooperation

[8] Outcome indicator A: 'By introducing a Quality Management System within key institutions (SPPAD/DERD) for the sector, the overall capacity to fulfil tasks improves and therefore the framework conditions for sustainable energy supply are improved.'

[9] The GIS Working Group was formed in 2011. Membership included officers from MEMD, Rural Electrification Agency (REA), Uganda Electricity Transmission Company Ltd (UETCL), UMEME, Uganda Electricity Generation Company Ltd (UEGCL), Electricity Regulation Authority (ERA) and GIZ, who meet once per month to share ideas and data and to plan joined activities, such as the annual GIS Workshops and the GIS Day.

with the Sectoral Planning and Policy Analysis Department (SPPAD). The assumptions/risks of MEMD and subordinated institutions were: a willingness to implement planning tools and crosscutting issues, and planning tools not being used regularly and the planning processes therefore not improving (Int_5,16,22). The communication gaps with the RE Department may not guarantee the piloting of the QMS tool in this key part of the MEMD structure. Looking at Output B, the project contributed by guiding the process of setting up an energy policy taskforce, organising an energy policy retreat in November 2017 and hiring a consultancy firm to support the policy review process. The partner was optimistic that the revised policy would be before cabinet by end of 2018.

While the ambitions in the project proposal regarding gender/HIV/AIDS were low, and the related indicators easily fulfilled, significant changes could be on the horizon, given a stronger recognition of the topic by MEMD key personnel, and revised requirements in the ministry's funding procedure (Int_22). HIV/AIDS is an issue considered within the MEMD management, with treatment plans and other activities, but was not an explicit topic of the evaluation interviews during the field mission. The project helped significantly to improve the policies for RE and EE and initiated gender as a new perspective in MEMD discussions and potentially into sector policies.

In **component 2**[10], which aims to decentralise energy coordination structures, at least 75% of the partner DLGs signed cooperation agreements with the MEMD for the implementation of one joint energy project per district (Outcome A). While the indicator has not yet been fulfilled, its overall intention of integrating energy planning at district level was addressed through the contributions of Output C. It became an established basis for a nationwide roll-out of district energy-coordination structures, incorporating three activities:

- providing TA to MEMD and other ministries and DLGs in the establishment of a nationwide roll-out of the district energy coordination structures;
- facilitating regional exchange forums on RE and EE issues in the districts; and
- advising on the constitution and tasks of an organisational unit to support the decentralisation process.

These three activities were expected to lead to Result C1: 'a profound roll-out strategy which is manifested within the energy master plan'; Result C2: 'an organisational unit at MEMD to support the energy focal structures on district level' and Result C3: 'jointly planned biannual MEMD and Lango–West Nile DLG sub-regional energy forums'. The **key assumption** was that by integrating energy activities in the DLGs planning framework through MEMD, districts institutionalise energy efficiency and renewable energy interventions (develop and implement innovative projects), thereby increasing the number of RE projects. Hence, joint planning will lead to joint projects and improvements in the relationship/collaboration through the establishment of a structure to facilitate the decentralisation process. This shows a clear linkage between the output and its respective project indicator. Additional hypotheses were analysed for attainment of the key outputs under decentralisation: establishment of the structure to facilitate the decentralisation process. However, it was considered sufficient by MEMD to have energy focal points at central planning (MEMD) to implement the roll-out of the mainstreaming. Other additional hypotheses included: a wider budget made available for the roll-out of the decentralisation, integrated central planning to cater for decentralisation, bi-annual performance assessment of decentralisation, making it a requirement by all local governments to incorporate energy activities in planning and reporting, having strong buy-in and willingness from top management of MEMD as well as buy in and interest from local governments. While most of these hypotheses were plausible to the PREEEP team, they were not considered as key linkage between output and outcome in that field of activity.

Given the above analysis, the output does in fact contribute to the outcome, an increase in RE deployment, especially in local communities, providing for the basis on a significant rise on a national level.

[10] Outcome indicator C: 'By integrating energy activities in the DLGs planning framework through the coordination of MEMD, districts institutionalise energy efficiency and renewable energy interventions (develop and implement innovative projects) and therefore improve the framework conditions for sustainable energy supply on a local government level.'

Based on the hypothesis related to Outcome C ('By integrating energy activities in the DLGs planning framework, districts institutionalise energy efficiency and renewable energy interventions and therefore improve the framework conditions for sustainable energy supply on a local level'), the evaluators tested this contribution through linking evidence and reflecting with the PREEEP team as follows:

The contribution the project made included:

- supporting the processes (setting up a coordination structure at MEMD, defining roles and responsibility) for designation of a dedicated senior energy officer as a coordinator at central level to spearhead the mainstreaming energy activities,
- the provision of district local service subsidies to facilitate District Energy Focal Point Persons' activities,
- supporting the undertaking of joint sector reviews aimed at mainstreaming of energy at central level, and
- developing a concept note for competitive grants to DLG for implementation of two projects by two top winners (expected in the next phase).

The project also supported the data collection for planning and gap analysis of the DLG needs (Int_22). Contribution was traced at activity level in this section. The other factors (alternative explanations) that can support the project bringing on board innovative approaches include DLGs in energy exhibitions during the energy week. Current indicators do not reflect the strong inter-sectoral approach to decentralisation. Continuing with the implementation of the roll-out strategy to MDAs at central government level would require the partner to establish the structure and recruit permanent decentralisation focal persons. In addition, having development advisors for energy in the Ministry for Local Government working closely with NPA, OPM and MoFPED, coupled with a joint stakeholder approach would be a great stride towards institutionalisation of the decentralisation of energy activities. Harnessing the support of other actors, such as the EU-funded SE4ALL secretariat (which conducted training for local banks, and needs assessments in three districts in access to energy i.e. cooking and electricity), UNDP (conducted needs assessment – green schools, NAMA) and Uganda National Alliance on Clean Cooking (study on provision of central government funding for clean cooking, funded by WWF) could make a great collaborative effort (Int_22). In addition, it can be plausibly argued that the output has contributed and will contribute more strongly to the overall improvement of framework conditions in the future, making MEMD the key driver for decentralisation based on the experiences gained in the pilot districts and the establishment of a respective unit at national level (Input Project Management). Given the analysis above, it can be plausibly assumed that PREEEP's work on national and local level with regard to framework conditions will in fact be contributing to the outcome.

Overall, it was difficult to assess the weight of each of the indicators, since none was linked to a clear target group or counterpart. It was also not entirely transparent which of the selected outputs of the project were most relevant to the project objective (the advancement of RE and EE). While the GIZ quality criteria at the start of the project (of the previous and recent phase) were not the same as today, the relationship between output and outcomes appears clear and logical, if slightly improved in its formulation. In addition to those changes, some definitions regarding the operationalising of those indicators were thought to be helpful, as well.

Dimension 3: Additional positive results and opportunities for further positive results

The effectiveness evaluation dimension 3 addressed the occurrence of additional positive results and opportunities for further positive results. Unintended results and additional results both positive and negative were not clearly visible. It was, however, noted that on the negative side partner relations had been under pressure, which reduced information flow and ownership. On the positive side, other players, especially in EE, showed remarkable ownership and steady progress (Int_5,9). For example, there were plans to establish an EE centre (Int_16). Unintended results were identified in the energy efficiency component and were particularly attributed to activities such as the Energy Week and the Energy Management Awards. The evaluation also considered internal and external factors (strengths, weaknesses, threats and opportunities) that influence progress towards the intervention's objectives. This includes a perspective on non-intended results and

potential risks. The project can draw mitigation strategies from the following weaknesses that were identified: lack of strong commitment from the partner for some aspects such as gender and decentralisation, changes in staff and slow recruitment processes of project staff in decentralisation and market-structure components, weak partner relations in information flow, the seemingly independent components of PREEEP, making it hard to deliver to an overarching objective. (Int_22).

Looking at the monitoring of unintended results, the project recently adopted a new M&E online tool but it was not yet comprehensively integrated into regular and frequent planning. Gaps were identified in sections for hypothesis/assumptions, risks and actions undertaken since these had not been captured, hence there was no evidence of monitoring unintended results. Capacity building for project component officers and users of the M&E system was urgently required to strengthen reporting (Int_20).

Overall assessment of the effectiveness criteria

The assessment of effectiveness focused on the timely attainment of the project objective in accordance with the project objective indicators. All the stated outcome indicators may be achieved with additional effort by stakeholders involved and with the continuous support of the project. While B1 and C, with related result areas C1, C2 and C3, were in advanced stages of being attained, A1 and A2 would require strong partner commitment. In addition, E2 and E3 were also on course but would require substantial awareness and regulatory framework for scaling up and sustainability. The project's performance was strong at activity level and, if well implemented, the project will contribute strongly to the intended objective by the end of the project phase. Therefore, the evaluation rating was 30 out of 40 points.

The services provided by the project were assessed to successfully contribute to the partner capacity and attainment of the partner priorities. However, attainment of the project objective was hinged on the partner commitment and information flow gaps. The involvement of multi-sectoral stakeholders in the project implementation was likely to bring about more output and with it more outcome, especially in the Policy/QMS and Decentralisation components. This criterion was therefore rated at 26 out of 30 points.

The assessment of unintended results showed evidence to a small extent and relied mainly on the identified risks and weaknesses from the SWOT analysis. Addressing the gaps identified in the M&E system so as to track hypothesis/assumptions, risks and actions undertaken will support learning and identification of proper unintended results and possible additional opportunities. It was therefore rated 24 out of 30 points.

Therefore, based on the above assessment, effectiveness was rated at 80 out 100 points.

Criterion	Assessment dimension	Score
Effectiveness	The project achieves the objective on time in accordance with the project objective indicators agreed upon in the contract.	*30 out of 40 points*
	The services implemented by the project successfully contribute to the achievement of the project objective.	*22 out of 30 points*
	The occurrence of additional (not formally agreed) positive results has been monitored and additional opportunities for further positive results have been seized. No project-related negative results have occurred – and if any negative results occurred the project responded adequately.	*28 out of 30 points*
Overall rating for effectiveness		***80 out of 100 points***

4.3 Impact

Evaluation basis and design for assessing impact

The impact criterion measures the extent to which the project contributes to the achievement of overarching development results. In this regard, evaluation questions on impact typically relate to the contribution to the achievement of national targets or to the contribution to the implementation of the SDG agenda. The first aspect was very relevant in the context of this evaluation, since the outcome was in fact the improvement of framework conditions in the sector of EE and RE. With regard to the SDG agenda, the evaluation team points out that while the beneficiaries of the intervention were, according to the proposal, the whole population of Uganda, the outcome indicators formulated do not necessarily reflect this. This was understandable since causal chains between the activities and the changes at the level of the population were very long for a project that works primarily at the institutional level with few stakeholders. The impact at the level of these final beneficiaries was also not included in the overall results model.

To assess the impact at the programme level, impact indicators referring to the whole energy system of Uganda would need to be analysed. Yet, such indicators do not exist and are only slowly being developed under the ongoing revision of the overall programme. Up to now, numbers for exact superordinate long-term results have not been available, although they do occur at a small scale or are likely to do so in the foreseeable future. In any case, PREEEP can only make a limited contribution to wider macro-economic impact.

The evaluation team, however, believed that it was able to assess the potential impact to some extent, based on the processes visible through the outcome indicators and an analysis of potential wider impacts according to the Results Model. The evaluation process therefore aimed to assess to what extent and in what ways the general population as the originally defined target group of the intervention and the direct/indirect target groups (MEMD employees, Associations, Companies) were affected by the intervention. The evaluation team therefore reviewed the national statistics on energy access and renewable energy generation and compared these developments against the activities of PREEEP to get a perception of its contribution to the superordinate results. A limited contribution analysis undertaken with the project team and within the evaluation team was added for further evidence.

Analysis and assessment regarding impact

Dimension 1: The announced superordinate long-term results have occurred or are foreseen
Looking at the (not clearly defined) superordinate long-term results, the project contributed to increasing the access of Uganda's population to electricity, from 20% in 2015 to 22.5% by December 2018 (MEMD, 2018), against the FY2019/20 national development plan of 30% access (NDP II). This performance was far below the energy demand of Uganda's population (estimated at 37.7 million), which was growing at a very fast rate of 7% per annum. Whereas there was good progress, the long-term result was unlikely to be achieved. The project contributes to the national statistics through its interventions of policy revision, decentralisation, market development and energy efficiency support. Since no other actor was currently addressing these issues along with the political partner, PREEEP's contribution could be considered significant.

In this regard, efficient usage of energy, especially in rural areas, was gaining momentum, given that the core service delivery in Uganda was through decentralisation, which was highly supported by PREEEP (Int_5,17). For example, the mainstreaming of the energy activities in local governments was already leading to adoption of energy conservation technologies, such as improved cooking stoves, coverage of which was expected to be 15% by 2020 (NDP II). Hence, stronger efficiency in energy use was promised with the implementation of a roll-out to other local governments and a spread of a more sustainable and accountable mind-set, and of planning that included dedicated budgets at district level, and improved communication between local and national level (ref. workshop).

In addition, the involvement of the private sector through its participation in business associations and a strong market that limits entry of substandard RE and EE technologies showed signs of more effective and efficient delivery of energy services to the people of Uganda (Int_9,17). With increased private-sector investment in Uganda, a 10 MW solar power plant was constructed in rural Eastern Uganda (so far, the largest in East Africa) to provide clean electricity to 40,000 residents (MEMD, 2017). Statistics also indicate that the energy losses in the distribution network were reduced from 19.5% in 2015 to 19% in 2016 (Int_9, doc). While this is somewhat unremarkable, further reduction potential can be expected. Yet, the contribution to these areas of potential impact require a long causal chain and, based on the available data, cannot be stated without doubt.

In respect to the 'leave no one behind' (LNOB) principle, there was a limitation on data disaggregation. However, through the decentralisation component, the population was affected in its entirety through access to solar energy in schools and health centres, use of improved cooking stoves in households and awareness of risks associated with the use of unsustainable (unclean) energy sources and deforestation. This was reflected in the fact that, for the first time, local planning and budgeting considered energy-relevant topics, and initiated activities to increase both RE and EE. This promised further progress and an indication that it might be possible to replicate it in other districts (ref. Evaluation of Mainstreaming efforts).

Looking at the market development component, associations that play a key role in undertaking energy audits (EE) are recognised by MEMD (Int_9). Overall, the changes in the outcome level goals were linked to the partner's national standard indicators, especially through EE, decentralisation and market development, where impact was expected to be high if the commitment and regulatory aspects were addressed. Given the positive perception of the developments in nearly all pilot districts, this impact would very likely benefit disadvantaged groups such as (poor) women and children by considering their specific needs and considerations as well as developing community-based solutions that could address productive use of energy, better-equipped schools and health centres.

Beyond the above-listed superordinate long-term results, targets within the Agenda 2030 will be part of the following contribution analysis as well.

Dimension 2: Linking PREEEP contributions to the intended superordinate long-term results
As mentioned above, the project's direct contributions to impact were difficult to measure and could only be constructed with long causal chains and a variety of assumptions (due to the lack of a sector cluster or programme structure). Yet, the Results Model shows indications of what have been considered long-term results in the design of this phase. The following list of contributions provided by PREEEP tries to establish a link between assumed long-term results and plausible contributions of the project:

Intended superordinate long-term results[11]	Examples of PREEEP contributions to the intended superordinate long-term results
1. Share of renewable energy in energy matrix is increased	If the revised energy policy were adopted, the basis for a stronger share of RE would be laid out. Since PREEEP has substantially supported the process of its revision and provided technical advice at various levels, its contribution can be considered strong with regard to the change of the RE mix as well. Its efforts to bring district level governments to consider RE projects will potentially also contribute to the change in the energy mix towards a more sustainable composition.

[11] Based on the PREEEP results model 2017.

Intended superordinate long-term results[11]	Examples of PREEEP contributions to the intended superordinate long-term results
2. More effective and efficient delivery of energy services to the people of Uganda	The Revised Energy Policy (see above) would have a significant impact here as well and, given the strong involvement of PREEEP in the design, its contribution can be considered high. In addition, other activities of the project, including the planning support for local district governments and the technical advice at the national level, will contribute to this result as well.
3. Strong market which limits entry of substandard RE and EE technologies	While key associations have been established with PREEEP support and now start to develop guidelines or similar documents for their respective sub-sector (i.e. biogas, solar), an analysis of the availability of quality RE and EE technologies would have to be done at a later stage.
4. Energy efficiency among large and middle-size consumers is improved	PREEEP has substantially contributed to EE awareness among selected enterprises with relatively high energy consumption and has most likely initiated the basis for EE investments. A basis for a thorough analysis should have become available in Q4 of 2018, when partnering enterprises will have been assessed for investments, based on the advice and auditing through the GIZ project.

Table 5: PREEEP's contributions to long-term results

The above analysis shows that PREEEP contributed, in part constructively, to the intended superordinate long-term results, though it cannot be stated that the country could not have produced any changes in the 'right' direction without the intervention. And, as stated above, the superordinate long-term goals were not made explicit within a programme structure or adequate outcome level indicators.

Activities in **component 1 (Policy/QMS)** to strengthen sector planning, monitoring and evaluation processes, as well as the policy framework, indicate evidence for a potential linkage to efficiency and effectiveness to increase RE in the energy mix (see 1 above) and to energy service delivery to the people of Uganda (2). The project's support for improving data quality, integrating gender as a key perspective, strengthening monitoring and evaluation at national and local level, preparing standard documents/tools, and procurement processes was considered the basis for sector-related impact. The support for a policy review helped to fulfil the partner mandate (Int_7,8).

Activities in **component 3 (market structures)** had a strong link to improved access to RE and EE in rural areas through a developing market (3), which limits substandard technologies (through standard development in the predecessor phases). However, the potential had not been developed to guarantee the achievement of the intervention outcome as associations have not reached their 'maturity phase' (Int_17).

In the analysis of the contribution of the project's outcomes to the objectives at impact level, a strong link was seen in outcomes of **component 2** (**decentralisation**) that contributed to improving access to renewable and clean energy and efficient energy use in pilot districts – although this was based on the condition that the Government of Uganda (GoU) rolls out the decentralisation strategy through a multi-partner approach. Setting up initial coordination structures, accessing district local service subsidies, and supporting data collection to enhance joint planning led to the mainstreaming of energy activities in local government, which was attributed to the project and poses the potential for significant increase in RE deployment (Int_17).

Activities in **component 4 (energy efficiency)** had a plausible link to enhancing requirements for improved energy utilisation in Ugandan enterprises and improving energy efficiency among large and medium-size

energy consumers in Uganda, therefore showing potential for plausible impact (see 4 above). This will get reinforced through the supported EE regulatory framework, if all players support its implementation (as discussed in Section 4.2 Effectiveness (Int_9). Raising EE awareness through training workshops, facilitating information dissemination during Energy Week, establishing energy management awards and capacity building for energy auditors, including their certification, financing energy audits and creating a development partnership with a German consultancy to enhance EE, all attributed to the project (Int_22), pave the way for a potential substantial reduction in energy use by industries.

Another alternative explanation that provided evidence for potential impact in the sub-sector of EE was the implementation of the EE roadmap, learning and knowledge sharing through the EE associations and national financing scheme for EE measures, a clear contribution by PREEEP (Int_22). If MEMD would execute those activities strategically, with the support of the project, the relevance of EE in industry would significantly rise, potentially reducing cost and emissions.

Whereas the project did not have a policy indicator for the second part of **component 1 (gender/HIV/AIDS)**, there is alternative explanation for gender compliance. For example, there is a strong requirement for gender and equity requirement at planning, budgeting and reporting levels where the budget partner, just as in any other government institution of Uganda, is supposed to address crosscutting issues in the budget. The requirement is administered through the Equal Opportunities Commission, MOFPED and Parliament of Uganda, as elaborated in Section 4.2 Effectiveness (Int_4,5,8). In addition, local companies' access to financing for energy efficiency from Agence francaise du development (AfD) explains the synergies and efforts for adoption of EE technologies. Also, the already existing monitoring and evaluation policy and tools developed for the development of new projects for inclusion in the Projects Investment Plan may explain the progress in planning, budgeting and reporting (Int_4,5).

The project's active and systematic contribution to widespread potential impact was therefore seen in the following areas. In Policy/M&E, the key policy documents for RE and EE were developed with strong support from the intervention i.e. the revised energy policy or the Energy Efficiency and Conservation Bill. Both, if fully implemented and enforced, would have a substantial impact on the sector. In addition, the establishment of a district-level proposal for implementing energy projects through competitive grant support provides a strong basis for innovative thinking and competitiveness in renewable energy access (Int_17,18). The progress assessed in EE was considered a success story by the project and the partner (Int_1), where key management of MEMD of the EE department developed a strong interest and ownership. Yet, the approach remained at activity level in the implementation of the current phase, showing limited strategic ambition and direction, making it difficult to predict areas of impact. The Energy Efficiency and Conservation Bill supported by PREEEP could substantially impact EE and drive the sector further, yet at the time of writing the Bill had not been passed by Parliament (Int_1,8).

In regard to the **SDGs/Agenda 2030**, the project was implementing interventions that contributed to the attainment of SDG 7 – provision of affordable, reliable, sustainable and modern energy for all by 2030, specifically 7.1 (by 2030: 'ensure universal access to affordable, reliable and modern energy services'), 7.2 (by 2030: increase substantially the share of renewable energy in the global energy mix') and 7.3 (by 2030: 'double the global rate of improvement in energy efficiency') through the implementation of specific interventions under result areas E, B1, C2 and C3, which is also in line with the BMZ Fact Sheet from 2017 (BMZ, 2017).

In addition to contributions to SDG 7 ('Ensure access to affordable, reliable, sustainable and modern energy for all'), SDG 13 ('Take urgent action to combat climate change and its impacts') was addressed by the PREEEP project. The most tangible results arose in connection with the Energy Policy Revision, which was intensively promoted by GIZ. Through the establishment of an Energy Policy Task Force, the participation of GIZ representatives in monthly meetings and the appointment of a consultant for the detailed structuring of the policy, climate-relevant topics could be placed in the draft. At the time of the evaluation, a zero draft of the new

energy policy was already available, and the first energy policy retreat had taken place to discuss its further development. The policy draft included the objective of increasing the share of renewable energies in electricity generation to over 90% and the share of renewable energies in heat generation to 36% by 2030. In addition, energy efficiency was to be increased by 20% and fuel wood consumption reduced to below 40%. If these ambitious targets could be maintained until the energy policy is finalised, Uganda's climate targets could even be exceeded, if the policy were to be well implemented. According to Uganda's INDCs, this could result in a reduction of approximately 22% of national greenhouse gas emissions compared to the business-as-usual scenario. This means a reduction from 77.3 million tonnes CO_2 per year to 61.8 million tons. In general, however, the greenhouse gas savings potential is greater in other sectors in Uganda, as the energy supply is already largely covered by hydropower.

Looking at how changes in the framework conditions of the energy sector influence superordinate long-term results, partner priorities can change, while there seemed to be a neglect by the project of high-level technical assistance (which previous phases addressed), especially in RE. This was seen as a significant shift which may affect partner operations (Int_18).

Throughout all phases, the potential impact was perceived as huge, for example through unbundling processes in the sector, creating a conducive investment climate in the energy sector, establishing/bringing on board independent private-sector associations, anchoring RE and EE as integral parts of MEMD priorities, improving monitoring and data management of MEMD (Int_2,7,8). In addition, potential success stories at the impact level were seen in the improvement of the legal framework through support of the revision of the energy policy (Int_2,8), DKTI's scaling up of solar intervention and other various initiatives from previous phases of PREEEP, as well as interventions under the 'Energising Development; component: SHS, PicoPV, stoves, grid with revised access strategies and ambitious targets with a stronger focus on institutions (Int_3,33, docs).

While the impact orientation of the project was showing deficits, through a missing programme or cluster approach and a limited alignment of the outputs, this impact dimension remained a difficult area to assess within the evaluation process, providing a limited basis for a contribution analysis. However, PREEEP has supported potential large-scale change in sector framework conditions to increase growth of renewables and energy efficiency that would reduce CO_2 emissions in comparison to the fossil-fuelled national system before. It can therefore be plausibly stated that PREEEP in fact has shown strong (potential) contributions towards a larger range of impact. Given the missing definition of superordinate results, this assessment was made on the basis of rather strong assumptions and possibly long chains of causality.

In reference to the three dimensions of sustainability – economic, ecological, social aspects – the fourth PREEEP phase started to create synergies through, for example, a stronger focus on the general target group, despite the 'adventurous' project concept (Int_4,22). While there were strong implications that the project would have an impact on all three dimensions, it was difficult to predict what this impact would look like specifically, given the long causal chains described above. On a more general note, RE and EE efforts could provide potential for employment and market development with a stronger focus on sustainability (economic dimension). Reducing emissions of CO_2 and others, and shifting the energy mix towards a more sustainable composition (through solar PV, for example), ecological (and health) risks could be reduced. A change in key energy sources always affects the social dimension of sustainability, which can be seen through the introduction of mini-grids, community-based electricity generation, etc., but it would need further analysis in this area to provide a grounded thesis.

Dimension 3: Additional positive and negative results at impact level

The projects' informally agreed positive results were identified in the proposed establishment of an energy management centre, a one-stop RE & EE facility at the Uganda Manufacturers Association (UMA) (Int_9) and the establishment of a 'lab of tomorrow' (Int_3). In addition, the involvement of the companies through UMA has led to the signing of a memorandum of understanding between UMA and UNREEA to provide energy audit

services with the support of an international company (Int_9).

Negative unintended results were observed in several working areas of the predecessor phase of PREEEP, such as the failed large-scale cooking stove initiative that 'ruined' in part the use of improved cooking stoves (which was later revived by EnDev) (Int_17); the different prioritisation of high-level technical advice on RE (Int_26), as well as the relationship with the key partner (or some departments) which changed frequently over the phases and was still not at an optimal level in Phase IV, putting impact and information flow at risk (Int_1,31,33,34). In addition, the approach and selection criteria for targeting the financing of the pilot phase of energy audits in companies gave no value for money, and hence did not contribute to real competitiveness. It partly supported large-scale companies that had their own EE dedicated budgets and could afford the audits themselves.

Overall assessment of the impact dimension

The superordinate long-term results the project contributes were not easy to define, in part due to the design of the outcome indicators and the missing programme structure through which potential impacts could be constructed (which was addressed in the planning of the follow-up project). It can be stated, that PREEEP has indeed paved the way in various areas for a fundamental change in the sector with regard to EE and RE. The implementation of components of decentralisation, energy efficiency, market development and some aspects of Policy/QMS show very good results towards attainment of the overall impact. However, more partner commitment, dedicated financing and implemented regulatory framework were all necessary conditions to ensure these potentials for significant impact. Therefore, this dimension was rated 30 out of 40 points.

In respect to the contributions made by the project, the support to scaling-up (mainstreaming) energy activities into local governments played a role in increasing RE and EE in rural areas, therefore affecting the national energy mix and level of CO_2 emissions as a whole. The appreciation and adoption of energy saving technologies in companies and households as a result of awareness and building capacity of the private sector was a clear and strong contribution by the project. Yet, in other dimensions, the contributions of the project to impact was rather uncertain due to the limited availability of key data as well as limited indication for causal chains. They would need further attention in the remaining and follow-up project phase to increase the potential towards impact. This dimension was rated 20 out of 30 points.

In regard to the occurrence of additional, not formally agreed, positive and unintended negative results, some unexpected initiatives at the activity level were found, but, so far, this had not been visible for the impact level. Based on those initiatives, potential for further areas of impact remains (i.e. sector innovations based on the lab of tomorrow and, with it, a stronger market-driven sector for RE and EE). However, the uncertain relationship with some key positions of the partner threatened information flows and larger overall impact. In addition, the lack of commitment by the partner on some project areas put the achievement of the long-term project goals at risk, including the roll-out of decentralised RE structures and the establishment of sector associations. Based on this assessment, this dimension was rated 20 out of 30 points.

Overall, the impact dimension was rated at 70 out of 100 points.

Criterion	Assessment dimension	Score
Impact	The intended overarching development results have occurred or are foreseen (should be plausibly explained).	*30 out of 40 points*
	The project contributed to the intended overarching development results.	*20 out of 30 points*
	The occurrence of additional (not formally agreed) positive results at impact level has been monitored and additional opportunities for further positive results have been seized. No project-related negative results at impact level have occurred – and if any negative results occurred the project responded adequately.	*20 out of 30 points*
Overall rating for impact		***70 out of 100 points***

4.4 Efficiency

Evaluation basis and design for assessing efficiency

The efficiency criterion measured the extent to which objectives of a project were achieved cost-effectively. The assessment of efficiency in GIZ Central Project Evaluations was based on analysing production efficiency, which described the transformation of inputs to outputs, and allocation efficiency, and examined the transformation of inputs to outcomes. In addition, aspects of implementation efficiency (structures and processes of project implementation) were analysed and considered in the assessment of production efficiency, since they contributed to maximise outputs.

To perform the analysis of production efficiency, the GIZ Evaluation Unit introduced an Excel tool to carry out a ‘follow-the-money’ analysis. The tool aims to show how many resources have been spent on the respective outputs, and to analyse this against progress on the indicators associated with each output. As w the case with most current GIZ projects, PREEEP was not conceptualised based on the expectation of clear input–output efficiency, which made a post-implementation analysis along the GIZ guidelines an energy-intensive exercise. It was also based on a project concept that did not fully show its impact orientation nor a clear causality of selected outputs.

To conduct the assessment, the evaluation team (with the support of the project team) used the Excel tool to examine how much money had been disbursed or committed so far for each of the five output areas (based on data derived from the components) of the project proposal, and then undertook a qualitative assessment of progress on the different action areas. The project team provided substantial numbers that were adjusted according to the respective output. It remained unclear how to differentiate the weight of each activity for the achievement of the respective output objective.

As mentioned above, the time recording of the project was not designed to allocate the hours worked by the employees to individual outputs. Therefore, the following numbers are solely based on assumptions made by the project during the evaluation process. Staff working for multiple outputs were mistakenly accounted within the overhead costs section of the efficiency tool. This resulted in an incorrect cost distribution. Therefore, the evaluation team judged efficiency partly independently of the provided figures.

	Output A	Output B	Output C	Output D	Output E
Outputs	Effective implementation of QMS in SPPAD/DERD	Strengthened planning capacity of MEMD/DERD, which reflects mainstreaming of gender and HIV/AIDS issues	The establishment of the basis for a nationwide roll-out of district energy-coordination structures under the guidance of MEMD	Increased participation of business associations in development and implementation of national/international quality standards	Refined requirements for improved energy utilisation in Ugandan enterprises
Kosten inkl. Obligo	€220,774	€124,499	€226,725	€264,984	€227,669
Ko-Finanzierungen	€0.00	€0.00	€0.00	€0.00	€0.00
Partner-beiträge	0.00	0.00	0.00	0.00	0.00
Gesamt-kosten	**€220,774**	**€124,499**	**€226,725**	**€264,984**	**€227,669**
Gesamt-kosten in %	**11%**	**6%**	**12%**	**13%**	**12%**
Output Indikatoren	The application of 2 of the 8 QMS products is manifested in one key product of the SPPAD/ DERD by October 2018. Baseline value 2017: Support QMS products have been drafted but not applied. Target value 2019: 2 QMS support products applied	Either one major energy policy or an energy master plan has been revised/developed (to incorporate Gender and HIV and AIDS topics) Baseline value 2017: 0 Target value 2019: 1	A roll-out-strategy is developed by MEMD and other ministries and agencies Baseline value: 0 Target value: 1	The number of active development processes regarding national quality standards or internal quality guidelines involving RE/EE business associations increased by 40%. Baseline value 2017: 0 Target value 2019: 0 +40% Study scheduled for 11.2018	The number of large and medium energy consumers with energy management systems increased by 10% Baseline value: 4 Target value: 4+10% Study scheduled for 11.2018

	Output A	Output B	Output C	Output D	Output E
Zielerreichung	**150%**	**50%**	**0%**		
Output Indikatoren	50% (2) of a total of 4 project reports of DERD are derived from the M&E criteria of the QMS by October 2018 Baseline value 2017: 0% Target value 2019: 50%	Gender Working Group in the DERD meets biannually on the integration of gender topics in planning processes. Baseline value 2017: 0 Target value 2019: 4	A coordination structure composed of MEMD officers to steer the decentralisation process is established. Baseline value: 0 (no unit in place) Target value: 1		Energy audits have been carried out in companies Baseline value: 15 Target value: 25
Zielerreichung	0%	75%	100%		100%
Output Indikatoren			4 sub-regional energy forums are jointly planned and conducted by MEMD and the Lango and West-Nile district local governments, Backstopping Method from MEMD to DLGs. Baseline value 2017: 0.5 (per year) Target value 2019: 2 (per year)		10 additional energy auditors fulfil the requirements for participating in a certification according to an international standard Baseline value: 20 Target value: 30
Zielerreichung			150%		133%

Table 6: Efficiency matrix

In addition to the above-mentioned costs, 46% of total project budget was used for overarching expenses or was used for output-related activities but was not accounted accordingly within the efficiency evaluation tool (including some of the international and national long-term staff, i.e. for accounting, monitoring, and overall management).

Analysis and assessment regarding efficiency

Dimension 1: The project's use of resources is appropriate with regard to the outputs achieved [production efficiency]

The project had achieved or would achieve some of its output indicators and had therefore found a way to attribute reasonable amounts of resources to selected outputs. It remained open whether a more strategic differentiation of resources would have allowed for a higher degree of indicator fulfilment. While Output D had received the largest share of funds (13%), Output B received only 6% of the overall project. As mentioned above, 46% was accounted for in overarching expenses that in part also contributed to each of the indicators in various forms (i.e. overall management, finance management, monitoring). The required consolidation of finances, given the budget deficit from the previous phase, had led to a strong control over expenses and a changed prioritisation (Int_1,17,26).

In addition to fulfilling some of its indicators, PREEEP, partly through its close communication with key partners and high-quality technical advice (mainly in EE), has helped to initiate a mind-shift and had reduced reservations regarding key elements of a sustainable energy system (i.e. independent associations, decentralisation, outcome-oriented planning). As part of the Output A activities, the project had strongly supported key policy initiatives both for RE and EE subsectors (Int_1,8,26) even though this key contribution was not explicitly mentioned in the output indicators. Therefore, its efficiency according to the above structure could be judged as high in this regard. Yet, while Output D had received a larger amount of dedicated funds, its fulfilment with regard to the indicators and its overall outcome remained uncertain and made a clear assessment of production efficiency difficult.

Looking at Output B, a reasonable amount of project finances had brought the output indicators near fulfilment, yet their conceptual quality with regard to outcome remained unclear – an observation that is now considered in the planning of a follow-up project.

Output C had received strong attention in the recent phase to consolidate previous efforts and bring energy mainstreaming more strongly onto local/district levels. While it received 12% of total funds spent, and a higher share in the remaining duration of the project, its output indicators were far from achieved. Yet, initial results with regard to impact emerged in recent months along the evaluation period. While there seemed potential for further increasing dedicated funds, issues regarding governmental ownership and changing personnel required a concluding analysis to be made after the end of the phase.

Output D (associations) had received a share of 13% of total costs spent and would continue to do so until the project end. While it is uncertain whether the output indicator will be achieved entirely, given the positive outlook by associations and project team (Int_4,11,22) the strong investment could pay off, if the self-sustainability and relevance of these target groups became stronger.

With regard to Output E (energy efficiency), two of the three indicators had been fulfilled by the time of the evaluation and the third would eventually be fulfilled after the assessment at the end of the phase. While the impact considerations made in Section 4.3 question its overall concept, in terms of production efficiency, the project had attributed sufficient resources for this area of work. Spending a substantial amount of the output resources on an external consultancy company had proved effective and reduced some of the pressure on the project team, clarifying more focused areas and responsibilities.

Dimension 2: The project's use of resources is appropriate with regard to achieving the project's objective (outcome) [allocation efficiency]

Modulziel	**The framework conditions for the sustainable supply of energy to enterprises and households in Uganda are improved**				
Kosten inkl. Obligo	€1,970,468				
Ko-Finanzierungen	€0.00				
Partnerbeiträge	€0.00				
Gesamtkosten	€1,970,468				
Modulziel Indikatoren A – E / Outcome Indicators A – E	25% of the sector planning, monitoring and evaluation processes of the Ministry of Energy and Mineral Development (MEMD) are compliant with the International Quality Standard ISO 9001.2008. Baseline value 2016: 5% Target value 2019: 25% Study scheduled for Jan 2019	At least one major energy policy or planning document features gender- and HIV/AIDS-specific goals Baseline value 2016: 0 Target value 2019: 1	75% of the partner district local governments have signed cooperation agreement with the MEMD for the implementation of one joint energy project per district. Baseline value 2016: 0% Target value 2019: 75%	The number of offered RE/EE products and services that meet the requirements of quality standards prescribed by the national regulatory authority and/or private sector business associations have increased by 25% Baseline value 2017: 0% Target value 2019: X+25% Study scheduled for Nov.18	The number of large and medium energy-consuming facilities that have implemented medium and large-scale energy-efficient processes increased by 20%. Baseline value 2017: 6 Target value 2019: 6 +20% Study scheduled for Nov 2018
Zielerreichung		50%	80%		

Table 7: Distribution of resources

Allocation efficiency assesses inputs in relation to outcomes. The traditional approach for such an analysis is to monetise the added value of outcomes. The evaluation basis for such an approach within this intervention was limited since it appeared extremely difficult to monetise the added value of improved framework conditions, stronger capacities and awareness within the sector. Key values in relation to the fulfilment of the outcome indicators were unavailable and there was therefore a limited basis for more in-depth analysis (Outcome indicators A, D, E). In addition, the project concept remains diffuse with regard to outcomes and did not give

sufficient room for large synergies and focus. Therefore, the evaluation team decided to stick with a qualitative assessment of allocation efficiency. (See Table 7: Efficiency matrix, above.)

In Outcome Indicator A, much had been achieved beyond the fulfilment of the indicator (e.g. policy support with possible impact in the entire sector). Given the highly technical nature of this area, which requires strong advisory skills, the related approach on output level was assessed positively by the partner and other stakeholders. Remaining financial resources for the final year of the intervention should and will be used for anchoring produced products to an even greater extent, finding more practical steps for QMS improvements and mechanisms as well as the promotion of the achieved results. (Int_16,22,26) Yet, regarding the fulfilment of the project indicator, numbers remained low, for unclear reasons. The original intention of the indicator, to introduce a very sophisticated management standard throughout the key areas of MEMD, seemed too ambitious and its judgement must be revisited in 2019 after a specific study to estimate achievements and gaps.

Outcome Indicator B was achieved before the end of the project with the use of approximately 6% of project resources (through Output B), less than in any other action area. During the field visit it became apparent that gender did indeed become a strategic topic with the political partner and is most likely to continue to do so. It is likely that additional budget for that action area could foster the articulated momentum and make Gender/HIV-AIDS an anchored concept in MEMD management on all levels (Int_26, Final Workshop).

With regard to Outcome Indicator C, the initial effects of the project's efficient use of its resources could be observed. Examples were integration of sustainable energy-related budget planning and a perceived awareness among key stakeholders at national and district level. It remained to be seen whether the endeavour to roll-out the positive pilot experience would happen with additional national government support and budgeting. The high achievement of this project indicator seemed to be in relation to an appropriate allocation of inputs.

Finally, the presented overarching costs of 46% were high, resulting in an administrative 'burden' that could potentially be have been used to maximise results. Yet, the project was not able to provide differentiated numbers of these mainly personnel/administrative costs and it was perceived that the crosscutting functions of other projects within the GIZ country portfolio and some requirements for financial consolidation did not leave much room for manoeuvre. Nonetheless, as mentioned by some stakeholders, the strong network, reputation and capacity of GIZ as a whole might have provided the access and leverage needed to tackle the results expected and therefore more than justify those substantial overarching costs.

A stronger focus on coordination with various actors beyond the existing scope could improve overall effectiveness, as well as project efficiency. A more coherent strategic approach combined with a monitoring system would show potential for stronger impact in relation to overall resources.

In comparison to other donors, costs for GIZ salaries and consultancies were considered low, giving general personnel cost a high level of allocation efficiency. Yet, for the evaluated phase this was not perceived as such by key personnel of the partner MEMD. Given the amounts invested in project staff within the ministry, its efficiency with regard to outputs was reflected on positively in some, but not all, of the areas addressed by the project team (Int_17).

Overall assessment of efficiency

Overall, the evaluation team observed a reasonable and somewhat efficient allocation of resources to the outputs, with a strong investment in overarching costs. Yet it remained unclear as to how many of the indicators would be reached within the project phase and if their overall concept was efficiently achievable at all. While the amounts spent showed no indication regarding overall achievement, it is likely that more strategic

use of resources would have achieved stronger results. The evaluation team awarded 59 out of 70 to the aspect of production efficiency.

In terms of allocation efficiency, the evaluation team observed examples of synergies, which could however be further exploited in part through better coordination within the donor landscape. On the outcome level, the contribution beyond the policy and EE outputs remained unclear, where relatively low amounts led to a possibly substantial impact in the sector. In conclusion, the evaluation team awarded 23 out of 30 points to the aspect of allocation efficiency. The overall score for the assessment criterion efficiency added up to 82 out of 100 points: successful.

The overall score for the assessment criterion efficiency added up to 82 out of 100 points: successful.

Criterion	Assessment dimension	Score
Efficiency	The project's use of resources is appropriate with regard to the outputs achieved. [Production efficiency]	*59 out of 70 points*
	The project's use of resources is appropriate with regard to achieving the projects objective (outcome). [Allocation efficiency]	*23 out of 30 points*
Overall rating for efficiency		***82 out of 100 points***

4.5 Sustainability

Evaluation basis and design for assessing sustainability

The sustainability criterion examines the extent to which positive results of the intervention could be expected to last once the project had ended. In this regard, the evaluation team analysed the efforts of the project and its partners towards sustainability, for example whether risk mitigation strategies were developed with regard to the risks identified in the intervention's proposal, whether learnings and recommendations from previous evaluations were taken into account, and the extent to which approaches and tools were elaborated jointly with the partner to foster ownership. The evaluation also analysed the extent to which partners had been incorporating approaches and tools developed with PREEEP, and the extent to which they were incorporated into the drawing up of new legislation and other key documents. Finally, the evaluation also examined the extent to which external conditions, such as a change in the counterparts' management or the rededication of funds, affect sustainability.

The assessment of sustainability was limited by the fact that this was an interim evaluation. Therefore, the focus of this analysis was on prospective sustainability. To assess this, the evaluation team took into account the following aspects:

- an analysis of the extent to which selected results had been anchored in partner structures,
- a forecast of the durability of results, based on already existing levels of ownership, and
- an analysis of the results' balance with regard to ecological, social and economic dimensions.

Analysis and assessment regarding sustainability

Dimension 1: Prerequisite for ensuring the long-term success of the project: results are anchored in

(partner) structures

Looking at sustainability dimension 1, the evaluation aimed to identify successful examples of anchoring results in the partner structures in the project's areas of action, and how each partner institution was involved in this process, and to create a list of consolidated achievements.

Regarding the component of **policy/QMS**[12], the key outcomes with regard to sustainability were the respective energy policy and the Energy Efficiency and Conservation Bill, which were both substantially supported by the project (through a local consultant for its design and coordination, technical expertise). Most of the key activities depend greatly on their approval by Parliament (EE Bill) and Cabinet (energy policy) with regard to sustainability, putting in place significant changes in the energy-sector framework (Int_8,9). In addition, the ongoing progress to support the advancement of MEMD's monitoring and evaluation system, including elements of planning, statistics and procurement, will most likely remain (with support from partner departments) (Int_4,7,8). However, the ambitious compliance with ISO 9001.2008, which was introduced in 2014, is not likely to be attained in the near future, while not catering fully to the actual partner's needs and capabilities (Int_8,16,26). The existing approaches, methods and concepts anchored in the system were mainly the QMS tools for policy review, annual planning, and project development templates. These tools were utilised during the FY2018/19 planning phase (Int_5,22) and will most likely show sustainable use in the financial years to come.

Within PREEEPs work with regard to **gender/HIV-AIDS**, the gender policy may not be realised (formulated) without renewed commitment, which was, in part shown during the site visit of this evaluation (Int_26 and mission debriefing). While the Gender Task Force has met regularly, and sensitisation efforts have been made, the overall sustainability of these aspects is uncertain. However, the gender requirements for the monitoring at a national level could give them real momentum (Int_1, 22, 26).

Regarding the component of **decentralisation,** to reach the intended effect in the medium to long term by the partners, the adaptation of the initial district-focused approach to a more strategic one, incorporating the recommendation of involving key national actors at central government level, will potentially lead to a nationwide roll-out. While throughout all phases, pilots and different scaling-up approaches have been conceptualised, only in the recent phase has the prospect seemed promising (Interviews at Workshop). Initial phases could convince MEMD of the relevance and added value of decentralised energy planning, despite articulated concerns and fears of downsizing at national level (Int_17). The mind-set towards energy sensitive and more sustainable planning within the 17 selected pilot districts will most likely remain and has led to numerous promising energy and awareness initiatives and the creation of a dedicated budget (Int_17, Workshop). It improved overall communication between national and local level through improved data collection and the dedication of local personnel articulating local and regional needs. Yet, a dedicated person responsible for energy issues is not likely to be financed, which is why the compromise of adding responsibility to the environmental focal person was created, showing a sustainable structure if supported by an explicit budget for energy activities as well (Int_16,17,36). In addition, the energy awareness of district level administration and communities was perceived as a vital approach likely to spill over to non-intervention local government initiatives (such as in the formation of energy school clubs, RE approaches in communities) (Int_Workshop, 17, 36).

In addition, looking at the **market structure** component, the Uganda Manufacturer's Association's capacity for energy-efficient activities and the operations of business associations will remain within a self-sustaining member base. Also, the energy mainstreaming guidelines and integration in district level planning were well institutionalised in the piloted local governments, which can be attributed to the close consultation process of

[12] Implementation and revision is the jurisdiction of government (executive) supported by the Office of the President (Policy development department) and the policy overseer in energy sector level is the Minister in charge of Energy and Mineral Development. Therefore, with the progress made (zero draft), and given the existing SPPAD and ownership by the partner, the policy review will be finalised, presented to Cabinet and most likely to be passed to guide implementation of several energy interventions across the sector.

the recent phase and its preparation in the previous phase (Int_9,16,22).

In regard to **energy efficiency**, the strong cooperation both on management and operational level with the MEMD Energy Efficiency Department will ensure the realisation of the intended effect over the long term (Int_4,5,9). The department's officials, having benefited from technical capacity building, were likely to push forward this component's inputs and focus on the future without (significant) further support by a succeeding phase. The intensive and close cooperation beyond the actual phase has left a thorough understanding of technical aspects as well as additional needs required by the implementation of the new legislation (Int_5,9).

Some of the above-mentioned approaches, methods and concepts were continuously used by the implementing partners, such as the project planning format. In regard to the availability of partner resources and capacities to ensure the continuation of achieved results, the current project budgeting system had incorporated all the project components, and their outputs and activities and reported quarterly to the Prime Minister's office. This was a continuation of the previous output budgeting tool managed by the MoPFED (ref. MEMD Q2 report 2017/18). Planning and coordination capacities increased at district level, as did awareness with regard to sustainability topics (Int_17, MEMD). Hence, involving the planning department in decentralisation increased the momentum.

Dimension 2: Forecast of durability: Results of the project are permanent, stable and long-term resilient

The second sustainability evaluation dimension looked into the durability, stability and resilience of project results in the longer term. In this regard, the capacity building for direct target group institutions (MEMD, local district governments, associations) and the awareness created at national and district level for the general population (such as the support of MEMD energy weeks and campaigns for households, teaching institutions, factories and medical facilities) will ensure a changed approach and perception towards sustainable energy supply and use. Revised processes, for example reporting, budgeting (at local level) and project planning, were incorporated within key partner's structures and were likely to provide stability to the project outputs. In addition, GoU will most likely have a changed policy framework by 2019, with a stronger focus on RE and EE, strongly supported by PREEEP (Int_8,9,11).

The increased awareness among the selected private companies following supported energy audits were also going to benefit overall energy consumption over time. Households have adopted energy-saving products based on standards developed with PREEEP.[13] Yet, this process has not taken place countrywide, nor reached a level of effectiveness that shows significant impact, partly due to the high population growth (Int_28). Many of the activities of the project have high-level political backing and multi-sectoral and partner involvement, such as the annual awareness campaigns (Int_4,5). This is not only the case with EE but also benefits the mainstreaming of sustainable energy awareness within local governments.

Renewable energy use in private households and domestic economy increased in the pilot districts as a result of the mainstreaming of increased capacities (Int_5,16,17). However, energy mainstreaming was perceived by local governments as a GIZ topic, and reporting had been undertaken by the Focal Point Person at the MEMD to the project officers, which reduced ownership and resource commitment (see Section 4.2). In addition, the MEMD budget for RE and EE had not increased in the previous eight years, but the perspective on budget changes was apparent for energy mainstreaming (Int_4). Looking at an exit strategy, national funding mechanisms had been partly addressed and had not been established for energy mainstreaming (Int_15), an issue that would be further focused on in the follow-up project. However, the availability of GoU funding (although not adequate), incorporation of PREEEP components into the sector strategic plan and Programme Budgeting System signalled the ownership by the partner government. In addition, the partner collaboration with other players such as Energising Development (EnDev), the UNDP, and Norway showed continuity of

[13] Which will be revised to more ambitious standards soon (Int_9).

some key parts of the intervention, i.e. improved cooking stoves and solar photovoltaics (Int_18,36).

The regulation to support EE is vital; without it there will be no clear and strong framework for industry's reduction of energy consumption (Int_8). Whereas energy efficiency showed durable results, not evident in other components. The remaining aspects of introducing QMS,[14] its over-ambition aside, would be affected by the lack of champions and pragmatism to drive its implementation further. The supported M&E system, energised by existing planning and budgeting framework changes through MoFPED, is going to remain a durable output, significantly raised through the revised energy policy and the relevant political will and ownership.

Decentralised results can only be resilient in the long-term with dedicated support and budget from other key government institutions (Int_17). The market development through associations and the private sector remains dependent on self-sustaining structures, ability to organise members and significant outreach, and would benefit from additional capacity building and a stronger independence from the sector ministry (Int_11). Though support to associations appears not to be a partner priority and the perception is that they would become potential competitors for services offered, its overall establishment and prospect has the potential for durability (Int_8).

In respect to the potential for the long-term protection of the results, clear risks were visible in at least three components: there was no enabling regulatory framework in EE (yet), **policy/QMS** and **gender** required motivated champions; and decentralisation required stronger national government involvement and a multi-sectoral approach to provide stability for and beyond the established pilot structures. In addition, under decentralisation, the general concept of transferring competencies and the jobs potentially resulting from this created fear among national MEMD employees and resistance against the dedicated Energy Focal Points. This risk remained a threat to the roll-out of the pilots (Int_2,14). Regarding what would remain, realised savings within audited companies would persist and possibly expand due to increased awareness, if supported by financing options (Int_12,13). Under the component **market structure**, the sustainable funding of the supported renewable energy associations remained promising, but uncertain – this could be addressed through self-sustaining financing mechanisms, for example through sufficient membership fees that are partly expected for 2019 and hence remain a risk (Int_11). In **QMS/policy**, the supported key policies (revision of energy policy, proposed development of energy efficiency policy, proposed revision of renewable energy policy) depended very much on Cabinet approval; with such support they could potentially have a large impact (Int_5,8). The monitoring database which was developed would most likely remain (Int_7); the developed QM tools were not yet fully mainstreamed within MEMD, partly due to their complexity and a wide-reaching but less realistic ownership approach of the consultant who (jointly) developed them (Int_8). Overall, PREEEP joint planning with the partner beyond one year remained a challenge due to the many demands and very limited funding (Int_4). Discussions with MEMD on specific risks within the project did not create a common understanding and hence produce a potential risk to the project management (Int_5). However, potentials emerged, for example through the spill-over effects towards additional projects such as DKTI, integration of solar and cooking activities into EnDev (Int_4,33), and the prospects beyond the approval of the new policy documents.

Dimension 3: Are the results of the project ecologically, socially and economically balanced?
The third sustainability dimension examines whether the results of the project were ecologically, socially and economically balanced. Here, the project is perceived as working towards economic and ecological sustainability through the overall aim of improving deployment conditions for RE and EE technologies, potentially reducing the dependency on fossil-fuel energy and large-scale hydropower, which have substantial ecological and social costs. The adaptation of energy saving and cooking technologies in rural areas has reduced the usage of firewood and with it deforestation, yet the impact was limited due to population growth, priority changes and ineffective dissemination schemes and products (Int_17). A negative perception of

[14] An output of a previous PREEEP phase, consolidated by the evaluated phase.

improved cooking stoves due to earlier PREEEP interventions, had been reversed by EnDev and PREEEP 4, yet the relevance and impact of the technology with regard to ecological and health impact remained uncertain (Int_37). The supported energy efficiency measures in companies could provide for some significant savings and reduction of emissions; an assessment in Q4 of 2018 should show a positive direction, with potential for upscaling. The high cost involved in the installation of energy-efficient technologies without means of financing may affect efficiency adoption (Int_5,37). Social sustainability was also addressed by supporting associations, local governments and institutions, such as through the creation of students' energy clubs in schools to support learning and knowledge transfer (Int_5,17, Workshop).

In regard to the intended and unintended economic, social, and ecological results produced by the project, there was stronger awareness in selected communities (i.e. Lira) of energy-related sustainability aspects such as on cooking stoves and the inclusion of district level planning, with some social implications brought about by associations with firms participating in the process (Int_17). The issue of forest destruction was being addressed through reforestation, solar solutions, school activities, and briquetting being incorporated in the pilot districts and sub-counties. Therefore, the intervention of energy mainstreaming became the key vehicle to address more strongly ecological issues, where there was the potential to reduce tension with regard to the most pressing issue of illegal logging and deforestation. In general, a stronger vision for alternative fuel sources and RE means of supplying energy could reduce ecological issues through lower fuel use and emission that cause health risks, and a greater awareness of the risks of climate change. On a more general note, the development of energy sectors showed some trade-offs that need to be considered thoroughly, especially regarding poverty reduction. The increase of electricity costs for RE investments, expansion of the grid and its stability, would have to be reflected in an increase in spending power among poorer and marginalised households.

Overall assessment of the sustainability criteria

The sustainability criterion focused on which positive results of the intervention could be expected to last once the project had ended, and given that this was an interim evaluation, attention was given to the prospective sustainability: taking into consideration how the results were anchored in the partner structures, forecasting the durability of the results based on the existing levels of ownership, and analysing the results in respect of ecological, social and economic dimensions.

In regard to the anchoring of the results to partner structures, the ongoing efforts for improving the partner M&E (and GIS) systems under the **policy/QMS** component responds to the respective efforts of GoU and showed a strong potential for sustainable anchoring. In addition, the revision of the Energy Policy was in line with the political mandate of MEMD, and was accelerated by the ongoing developments in the energy sector in both RE and EE. The mainstreaming of energy activities in the pilot local governments was anchored to the existing planning, budgeting and reporting framework through long term District Development Plans and the annualised framework in the Programme Budgeting System of the Ministry of Finance (Int_4,5, Research[15]). Despite the substantial mind change in the pilot regions, partner commitments were only beginning to realise RE capacities, and overall sustainability within a national roll-out was yet to be fostered. In addition, the interventions such as awareness, training and certification of energy auditors to foster EE was anchored within the MEMD EE department and its energy policy direction on energy utilisation substantially improved within the supported EE bill. However, if the absence of a specific regulation to enforce, for example energy audits, and further develop the sub-sector of EE remains, it will limit sustainability to a fairly small number of companies. In respect to an exit strategy, the alignment of the programme components in the planning systems and partner involvement with other funders promise continuity of some aspects of the project, despite the inadequate partner financial prioritisation. Based on the above assessment and the high expectations with regard to the key policy documents, this dimension aspect was rated 35 out of 40 points.

[15] Ministry of Finance: https://pbs.finance.go.ug, 13.05.2018

With regard to the forecast of the durability of the results, changes in awareness, pilots and approaches in the districts will most likely endure beyond the project duration, with a strong prospect for EE, decentralised structures, and the policy framework (if amended by Parliament). However, the lack of champions in other components of the project such as **Policy/QMS**, **gender/HIV/AIDS** and (on a national level) **decentralisation** limits the durability of results. With regard to HIV/AIDS it remained unclear if it was a relevant topic within the management of the political partner and respective policies. To increase the durability of initial promotion, the project would need more dedicated efforts in this regard. The recent project phase aim of stabilising results met with some success, but long-term resilience needs further focus. Based on this assessment, this dimension aspect was rated at 20 out of 30 points.

In respect to ecological, social and economic balance, it can be stated that PREEEP IV was indeed addressing all three dimensions. Social aspects were addressed through the energy mainstreaming activities on local level. Ecological aspects were touched on with the adaptation of energy saving to household appliances and private sector EE as well as improved cooking technologies in rural areas[16] and alternative energy sources such as biogas. Economically, the overall market framework support, the established associations and energy auditors will support sustainability in the sector. Based on this analysis, and given the uncertainty of the supported policy processes, this dimension aspect was rated 25 out of 30 points.

Overall, based on the assessment of all the three sustainability dimension aspects, the project was rated at 80 out of 100 points.

Criterion	Assessment dimension	Score
Sustainability	Prerequisite for ensuring the long-term success of the project: Results are anchored in (partner) structures.	*35 out of 40 points*
	Forecast of durability: Results of the project are permanent, stable and long-term resilient.	*20 out of 30 points*
	Are the results of the project ecologically, socially and economically balanced?	*25 out of 30 points*
Overall rating for sustainability		***80 out of 100 points***

[16] Addressed in Phase 1 and 2 of PREEEP.

4.6 Long-term results of predecessor(s)

Evaluation basis and design for assessing long-term results of the predecessor

The predecessor interventions of Phase 4 (PN: Phase 2: 2010.2056.9; Phase 3: 2013.2202.3) were considered in the evaluation to the extent that they helped understand the impacts and sustainability of the current intervention. Since all four phases have had significantly different structures and focus areas, analysing each of them in detail would have gone beyond the scope of this evaluation. Yet, some hints from former and actual staff of GIZ and the political partner, and from GIZ headquarter representatives, were available to reconstruct the key lineages and difficulties. In addition, the long-term results of the predecessor intervention were analysed as much as possible, taking into account the limitations of documentation, time and resources, and of personnel turnover.

Analysis and assessment regarding long-term results of the predecessor phases

There was continuity between the initial phase of PREEEP regarding its objective ('The framework conditions for the sustainable supply of energy to enterprises and households in Uganda are improved') and key counterparts. The third phase (November 2013–January 2017) worked with similar components as the current phase, although it emphasised access to energy through EnDev, DKTI and carbon-market development. Phase IV was built on interventions such as the policy review, QMS/M&E system (GIS lab and automated database) and crosscutting issues, energy mainstreaming in local governments and capacity development in energy efficiency and market development that were implemented in Phase III (GIZ, 2016). In addition, other components from the previous phases were being continued by EnDev. However, the current phase inherited managerial challenges related to the style of management and a sub-optimal relationship with some parts of the partner organisations (that distorted information flow), which was increasingly being addressed by the new project team.

The second phase of PREEEP (June 2011– May 2014) focused on improving access to modern energy services and promoting efficient use of energy. The long-term results from this phase include the off-grid electrification of health centres that was adopted by the Government of Uganda (GoU) as an off-grid strategy, especially in peri-urban rural areas and in areas where government has not acted. Communities also mobilise resources for solar panels for health centres (Int_1,5). In addition, the Energy Week activities were institutionalised by the partner and are now being held at regional level (Int_3,18). Also, under the new framework cooperation with the EU, GIZ is supporting implementing mini-grids (energy access) in refugee-affected areas in northern Uganda through the Development Initiative for Northern Uganda Programme (DINU, 2016–2020) (Int_2, doc); this is a continuation of support to refugees targeted in Phase 2. There is ongoing demand and use of improved cooking methods in schools, prisons and homesteads as the GoU restricts the cutting of trees for fuel use (Int_17). Also, MEMD, through Energy Weeks, distributes free energy-saving bulbs to households, enterprises, health centres and schools in exchange for high-consuming ones from the users (Int_9); as a result, many households have adopted energy-efficient bulbs across the country.

Phase III had pointers to long-term impacts (e.g. new and revised RE/EE policy documents, acceptance of private sector associations and the emergence of initial decentralisation of energy planning/implementation). Interventions were in part integrated into the Phase IV, and progress seems to have increased in the areas of policy development and decentralisation, while QMS and gender have developed more slowly than expected.

4.7 Key results and overall rating

Criterion	Score	Rating
Relevance	*80*	rather successful
Effectiveness	*80*	rather successful
Impact	*70*	rather successful
Efficiency	*82*	successful
Sustainability	*80*	rather successful
Overall score and rating for all criteria	***78.4 (sum divided by 5, max. 100 points, see below)***	***rather successful***

100-point-scale (Score)	6-level-scale (Rating)
92–100	Level 1 = very successful
81–91	Level 2 = successful
67–80	Level 3 = rather successful
50–66	Level 4 = rather unsatisfactory
30–49	Level 5 = unsatisfactory
0–29	Level 6 = very unsatisfactory

5 Conclusions and recommendations

5.1 Conclusions

Regarding **relevance,** PREEEP fitted into Uganda's sectoral priorities and policies through interventions aimed at supporting the strengthening of energy-sector planning, reporting and policy revision, and development. The project was also in line with strategies[17] at the national level and directly involved in the drafting process of future key policy documents. Its activities towards decentralisation and energy mainstreaming at the district level, were aligned with national and SDG level (SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all) strategies, contributing to access to renewable and clean energies, efficient energy utilisation and increased electrification. Through the project objective, PREEEP was starting to indirectly reach households and selected enterprises.

Looking at the relevance of its energy efficiency (EE) activities, PREEP was considered in line with the National Development Plan II (2015/16–2019/20).[18] This addresses the urgent need for efficient and sustainable use of energy as a critical requirement for development. The focus on private sector-led growth was in line with the strategy of the Government of Uganda (GoU). The supported associations that operate in various renewable energy (RE) and EE areas were relevant in filling the gaps in targeting and the provision of energy services. Pertaining to the component **gender & HIV/AIDS**, the project's activities/outputs align with Uganda's mainstreaming of crosscutting issues in planning and reporting as a national priority (Equal Opportunities Commission) and also matched its emphasis at international level (Agenda 2030, esp. SDG 7).

With reference to **effectiveness,** through the Policy/QMS component**,** PREEEP provided tools for planning, monitoring and evaluation that were being partly utilised. An M&E database was being developed, but 25% process compliance with the International Quality Standard ISO 9001.2008 may be an ambitious target (current value at less than 8%). The support for the energy-policy revision proved effective and would mark a significant outcome if adopted by the government. Looking at the component **decentralisation**, none of the pilot districts had signed cooperation agreements to implement joint energy projects, and the decentralised units were not fully established, but the initial success on awareness, budgeting and initiatives in the pilot districts showed promise that could be scaled up with sufficient strategic involvement of key national stakeholders. The output of **energy efficiency** (EE) had been fully achieved through the certification of more than 20 energy auditors, energy audits in more than 15 companies, and energy management awards to enterprises/companies utilising energy-efficient measures. However, the absence of a legal framework for EE affected enforcement and, with it, the overall output/impact. Within the output of **market structures**, associations in EE, solar energy, hydro etc. were formed and supported. Yet, they have not reached a level to operate on their own. Looking at the crosscutting topics of gender and HIV/AIDS, the requirement for biannual gender working group meetings were met, showing initial ambition for further potential, including progress on the development of an MEMD gender policy.

Looking at PREEEP's **impact**, the project made substantial achievements in this regard within **Policy/QMS** through its contribution to the revised energy policy, the Energy Efficiency and Conservation Bill, and changing the mind-set in the planning department. Within the component **Decentralisation**, the project has supported the 17 pilot districts in introducing energy planning and budgeting, accountability and awareness. A roll-out in all districts would provide for a substantial impact on a national level regarding energy access. Impacts in EE

[17] Sector Development Plan, NDPII, Vision 2040, The National Energy Policy 2002, and The Renewable Energy Policy 2007

[18] EMD objective 3 focuses on improving energy efficiency.

remain limited, yet energy audits and campaigns provided for initial awareness of EE in (selected) companies; further impact in the sector depends largely on policy changes. EE standards for appliances introduced efficiency to households, but expansion and awareness activities seem to be needed in order to reach more impact. **Market structures**, with the preparatory work of predecessor phases, were enabled in the sector, making the private sector a relevant catalyst for scaling-up of sustainable energy and efficiency investments (e.g. energy audits, energy-efficiency networks). Associations have been created and supported in structure and operation as players for their respective field and would expect to have substantial impact in due course, generating new members and ownership in the sector. As to the topics of **gender** and **HIV/AIDS**, these were newly introduced through capacity building and the requirements by MoFPED and EOC. However, they have not reached the level of institutional mainstreaming, showing only limited impact to date but with promise of greater impact by the end of Phase 4.

Assessing **sustainability**, the work within the component **energy policy/QMS** and the supported policies will show substantial sustainability if amended by Parliament, which seems to be a very probable path. New approaches and tools will most likely remain and will be further developed, along with the introduction of long-term planning. Activities in the component **decentralisation**, despite the risk of a failing roll-out, created local and national awareness, increased capacities and improved existing (limited) structures. The upscaling was strongly dependent on further PREEEP support and high-level commitment to further develop existing initiatives and ownership by the districts. Within the action area of **energy efficiency**, trained energy auditors were working, in part successfully, and the initial awareness among reached stakeholders remains the implementation of EE measures in the private sector depends on policy and further awareness. While the private sector became relevant as a catalyst for scaling-up (e.g. energy audits, energy efficiency networks) and started to invest in RE and EE measures/projects, the prospect of the created associations remains strongly dependent on their role and self-sufficiency in the sector. And, finally, if the topics of **gender** and **HIV/AIDS** are not taken up at a high-level as a relevant issue for the sector, initiatives might not be sustainable, and mainstreaming will become critical.

The following PREEEP **success factors** helped to achieve the progress made during its four phases. The close relationship and position of the team within the political partner's premises supported short and efficient communication as well as joint learning. It cannot be underestimated that the permanent and flexible presence of the project was the basis for additional opportunities and the development of a strong level of cooperation up to joint annual planning and reporting, in itself a potential success factor (**cooperation**). The **strategy** to support specific needs of the political partner, including policy, capacity building, and management issues, as well as addressing the need for RE decentralisation and the development of market structures, led to high potential for impact. With regard to its **steering structure**, the joint annual planning and reporting between PREEEP and MEMD proved to be a successful and innovative approach which holds the potential for even more strategic cooperation in the sector, including additional actors. Monthly and bi-weekly meetings with other GoU commissions, development partners, and other projects added to a promising structure of coordination. Looking at **processes**, direct advice to key partners and UNREEEA, the involvement of specialised consultancies for policy development, and the close process support at local level have shown remarkable success. The close relationship with the partner staff, innovative approaches like the 'lab of tomorrow', and substantial training efforts, provide a good basis for institutional and individual **learning**, a quality that was essential for finding creative solutions to develop the sector further. However, through the very different priorities and styles of management, the changing ownership of key partners, and the changing set-up of key processes, strategy, and use of personnel, none of the above factors prove to be equally and consistently successful over all four phases. The complexity of this evaluation area could not explore in detail where those factors varied most or develop theses for each of the phases. Yet, the preparation of the follow-up phase showed substantial learning on many of the above-mentioned areas of success.

5.2 Recommendations

The evaluation took place in April 2018, at a time when PREEEP had been operating for more than 10 years in different phases. Fewer than 10 months were left to the close of Phase IV. The project team was fully aware of the need to sustainably anchor its contributions, and even developed initial adaptations for different products.

Therefore, the recommendations must take into consideration the context of high political uncertainty and the brief period left for implementation, for which the central activities towards a newly defined joint objective had already been defined and planned by PREEEP/MEMD.

General recommendations

The evaluation team makes the following recommendations for further improving the project, to:

- Reinforce or reorient some of the already planned activities of PREEEP, e.g. a more pragmatic and effective approach with regard to a Quality Management System.
- Learn more systematically from challenges of other GIZ energy projects outside Uganda.
- Consolidate partner relationships and, with it, the development of new initiatives, ownership, and momentum for more ambitious objectives in the follow-up phase.
- Concentrate resources more on the support of renewable energy activities (rather than energy efficiency) and overall impact, with MEMD as the key partner, along with its departments (renewable energy policy design, senior level expertise, M&E support regarding impact, budget increase, focal point budget and roll-out).
- Prioritise project activities more strategically, addressing larger impact and sustainability of previous phase(s) results.
- Jointly reflect within the GIZ team(s) and with other key stakeholders (i.e. MEMD, KfW, other development partners) on the relevance and effectiveness of activities regarding the overall objective (impact).
- Foster working relations with key counterparts and improve flow of information.
- Identify synergies and potential for scaling-up/replication with existing and additional partners and leave sufficient budget flexibility.
- Connect local activities (such as RE-oriented planning) more strongly to national opportunities (i.e. financing opportunities and technical support) to make decentralisation sustainable.
- Reflect on what would make a substantial input for rural and peri-urban population and focus on those key changes.
- Design the next phase of PREEEP with stronger impact orientation and clarity of indicators, showing direct linkages to the project outcome.
- Target key sector challenges more decisively: rural energy access for households and institutions.
- Consider enforcement aspects (e.g. energy auditing after policy change).
- Keep strong support on policy design and regulations.

Further observations

In addition to the general recommendations, the following observations identify issues that would benefit from further attention:

- Statistical data for investors are not available; this is maybe an area of future activity.
- As long as the scope of national stakeholders involved in the decentralisation process is not widened, the progress towards national roll-out seems unlikely. The relevant stakeholders for intersectoral linkages in the decentralisation process should be included. In addition, having development advisors linking local government energy activities to the national level, working closely with NPA, OPM and MoFPED, coupled with a joint stakeholder approach could provide more momentum towards the institutionalisation of energy

activities at district and local level.

- Capacity building for project component officers and users of the M&E system is urgently required to strengthen reporting and could be an activity in the recent phase.
- Addressing the gaps identified in the M&E system so as to track hypothesis/assumptions, risks and actions undertaken will support learning and identification of proper unintended results.
- The relationship between costs for outputs and overarching costs seems hardly reasonable to external observers. While understandable, given the conditions of the recent phase, a follow-up measure should more strongly consider the reasonable distribution of costs along the respective outputs and keep overarching costs at moderate levels, especially if costs have been a rather conflicting issue with the political partner.
- The institutional adoption of the policies and products by the Government of Uganda (GoU) and its institutions should remain a priority for project support of the political partner(s).

Addressing persisting practical aspects

PREEEP could make an 'in house' survey of the aspects that will remain open and cannot be fully addressed by the project, in order to identify future practical 'to-dos' in the follow-up phase. This recommendation aims at aspects that the project team itself, as well as other actors, identify as not sufficiently achieved. Among them there can be mentioned:

- the effective reporting, monitoring and verification of achieved and future energy efficiency in the industry and a broader strategy for creating national awareness within companies of all sectors,
- the adaptation of the Quality Management System (QMS) approach to a more practical methodology, focusing on improving processes and substantial improvements within and outside the key partner,
- reflection on which studies are available or still needed for the sector, and
- an assessment of whether more strategic and impact-oriented communication could be established.

Annexes

Annex 1: Evaluation matrix

Annex 2: Bibliography

Annex 3 Terms of reference

Annex 4: Pictures of PREEEP Project Activities

Annex 1: Evaluation matrix

	Evaluation Dimension	Analysis question	Evaluation indicator	Available data source	Other planned data collection projects	Evaluation strategy (evaluation design, method, procedure	Expected evidence strength (narrative
	RELEVANCE						
Relevance	**The project fits into the relevant strategic reference frameworks**	Which framework conditions or guidelines exist for the project?	Inclusiveness of the project strategic areas (partnership, policies, participation)	Preparatory documents provided by the project, research on regional and national framework	Interviews & discussion with project team	Analysis of existing and integrated framework	Strong
		To what extent does the project contribute to the implementation of the underlying strategies?	Level of alignment of the project objectives to national priorities	PREEP main programme document, Energy Policy documents; and PREEEP quarterly progress reports; BMZ country strategy, Uganda National Development II, Energy National Standard Indicators for Uganda (mapping to SDGs), Office of the Prime Minister Coordination- SDGs (Agenda 2030) Ministerial Policy Statements.	Reviews & Interview	Document Analysis, Key Informative Interviews	Strong
		To what extent does the TC-measure fit into the programme and the BMZ country strategy?	Compliance with indicators related to BMZ country strategy				
		What NDCs and objectives of the 2030 Agenda committed by Uganda addresses the programme?	Compliance to Agenda 2030				
		To what extent is the contribution of the intervention to the national/global SDGs reflected in the ToC?	Compliance with indicators related to government action with programme support:				
		Cross-sectoral change strategies, etc. Where has work been carried out on a supra-sectoral basis and where have such approaches been used to reinforce results/avoid negative results?					
		To what extent are the interactions (synergies/trade-offs) of the intervention with other sectors reflected in conception and ToC – also regarding the sustainability dimensions (ecological, economic and social)?	Evaluation of other programs, counterparts and other relevant actors of the contributions of the interaction with the project				
	Suitability of the the project concept to match core problems/needs of the target groups	To what extent was the concept designed to reach particularly disadvantaged groups (LNOB principle)? Which prerequisites were addressed for the concept and used as a basis?	Atleast one disadvantaged group is targeted by the project, or % of disadvantages beneficiaries who say that PREEEP services met their needs (by group)	Annual and quarterly plans, Gender analysis, Progress reports.	Needs Assessment Reports.	Document Analysis, Key Informative Interviews	Low

	How are the different perspectives, needs and concerns of women and men represented in the change process and how are the objectives represented (Safeguard & Gender)?	compliance to gender mainstreaming in the project-safeguard measures are in place				Moderate
	To what extent is the chosen Technical Cooperation-measures' goal geared to the core problems/needs of the target group?	extent of alignment and implementation of the project to achieve needs of target group				Strong
The design of the project is adequately adapted to the chosen goal	Results logic as a basis for monitoring and evaluability (Theory of Change) o Are the hypotheses plausible? o Are the risks pre-sented plausibly?	Clarity of the Results logic, innterrelatedness of results in ToC and to highlevel goal. Ease to appraise and report risks	Project documents/plans.		Document Analysis, Key Informative Interviews	Moderate
	Is the strategic reference framework well anchored in the concept?	The project concept concide with strategic reference framework.				Strong
	To what extent does the strategic orientation of the project address changes in its framework conditions.	Ability of project to adapt to changes and align to new conditions			Contribution analysis	Moderate
	How is/was the complexity of the framework conditions and guidelines handled? How is/was any possible overloading dealt with and strategically focused?	Innovative approaches on handling complexities. Posititioning and strength of the Project Management Unit to shiftly address reforms. Any reforms in project implementation				Moderate
The conceptual design of the project was adapted to changes in line with requirements and re-adapted where applicable.	What changes have occurred?		Project reports and changed proposals	Team perception and key counterparts' perception	Reconstruction of phase development with team, Document Analysis, Key Informative Interviews	Strong
	How were the changes dealt with?	Evidence of handling the changes				Moderate

	Evaluation Dimension	Analysis question	Evaluation indicator	Available data source	Other planned data collection projects	Evaluation strategy (evaluation design, method, procedure)	Expected evidence strength (narrative)
Effectiveness	**EFFECTIVENESS**						
	The project achieves the goal on time in accordance with the TC-measures' goal indicators agreed upon in the contract.	To what extent has the agreed TC-measures' goal already been achieved at the time of evaluation, measured against the goal indicators?	Present degree of goal-attainment and anticipated degree of goal-attainment until the end of the project term	PREEEP progress reports, initial monitoring report	Updated monitoring extracts, stakeholders confirmation.	Discussion with project team and PREEEP coordinator, Contribution analysis, documents review, questionnaires	Moderate

	To what extent is it foreseeable that unachieved goals will be achieved during the current project term?	Number of initially unexpected or already achieved results in relation to defined results. Reasons behind non achievement of the goals		Updated monitoring extracts, stakeholders confirmation.		
	Did the program obtain more and / or initially not intended or expected outputs?	Stakeholders' perception adressed in semi-structured interviews and questionnaires		Team perception, key partner information		
The services implemented by the project successfully contribute to the achievement of the goal agreed upon in the contract	What concrete contribution does the project make to the achievement of the agreed TC-measures' goal, measured against the goal indicators?	Number of expected goals with concrete and traceable project contribution	PREEEP project document, progress reports, Stakeholders feedback, Team discussion, researcher triangulation	Alternative hypotheses and respective contributions (Team)	Contribution analysis, document review, discussion with team and counterparts, CW exercises	moderate
	Which factors in the implementation contribute successfully to the achievement of the project objectives?	Citations of success factors by key partners		Success factor analysis		moderate
	What other/alternative reasons contributed to the fact that the objective was achieved or not achieved?	Number of plausible alternative assumptions that were confirmed				Low
	Are core, support and management processes designed in such a way that they contribute to the achievement of the objective?	Convincing number of contributions identified		Contribution analysis and/or CW Process Analysis with the team (if time allows)		moderate
	To what extent have risks (see also Safeguards & Gender) and assumptions of the Theory of Change been addressed in the implementation and steering of the project?	Present degree of addressing of risks, assumptions. Number of foreseable risks that affect the project		Specific discussion with PREEEP team and MEMD coordinator for triangulation		moderate (Low)
The occurrence of additional (not formally agreed) positive results has been monitored and addition-al opportunities for further posi-tive results have been seized. **No project-related negative results have occured – and if any nega-tive results occured the project responded adequately.**	To what extent were risks of unintended results assessed as observation fields by the monitoring system (e.g. compass)?	Degree to which risk profiling and assessment captured aspects of unintended results.	Limited data from monitoring system	Specific discussion with PREEEP team and MEMD coordinator for triangulation		Low
	To what extent have the project's benefits produced results that were unintended?	Description by partners and key stakeholders of unintended results	none	Questionnaire, additional perspectives	Exercise to identify alternative hypotheses and respective contributions (Team)	moderate
	Which positive or negative unintended results (economic, social, ecological) does the project produce? Is there any identifiable tension between the ecological, economic and social dimensions?	Project team has reflected on the three dimensions and their activities	Project reports	Team perception, key partner information	Reflection on ecological, economic, and social dimensions with team and coordinator MEMD	moderate
	How were negative unintended results and interactions counteracted and synergies exploited?	Identified unintended risks were taken up by project management	Project reports, Inputs from FMB and former team colleagues	Further data from additional (former) stakeholders	Interviews with former staff, actual staff, GIZ projects in the sector	strong
	What measures were taken?				Reflection with project team guided by evaluation team	

	Evaluation Dimension	Analysis question	Evaluation indicator	Available data source	Other planned data collection projects	Evaluation strategy (evaluation design, method, procedure)	Expected evidence strength (narrative)
	EFFICIENCY						
Efficiency	**The project's use of resources is appropriate with regard to the outputs achieved.** **[Production efficiency: Resources/Services in accordance with the BMZ]**	To what extent are there deviations between the identified costs and the projected costs? What are the reasons for the identified deviation(s)?	Description of differences between planned and actual costs	Performance reports/ Financial or Audit reports	Data from collaborating institutions (trainers, promotion of EE and ER, others)	Documents review, Analysis along the efficiency tool, Workshop with project team	moderate
		To what extent could the outputs have been maximised with the same amount of resources and under the same framework conditions and with the same or better quality (maximum principle)?	Perception of cost-efficiency by programme team and counterparts	PREEEP project documents, Stake holders, workplans and cost output sheet provided by team			low to moderate
		To what extent could outputs have been maximised by reallocating resources between the outputs?	Perception of cost-efficiency by program team and counterparts		Analysis along the GIZ efficiency tool		low to moderate
		Were the output/resource ratio and alternatives carefully considered during the design and implementation process – and if so, how?	Unit cost of outputs (actual vs planned)		Input by relevant team members		moderate
		For interim evaluations based on the analysis to date: To what extent are further planned expenditures meaningfully distributed among the targeted outputs?	Degree of allocation of resources against working areas		Analysis of planned budget with regards to possible impact		moderate
	The project's use of resources is appropriate with regard to achieving the TC-measures' goal (outcome). **[Allocation efficiency: Resources/Services in accordance with the BMZ]**	To what extent could the outcome have been maximised with the same amount of resources and the same or better quality (maximum principle)?	Qualitative assessment of possibilities for yield maximization on outcome level	Workplans, performance reports of PREEEP, output cost balance sheet	Incorporation into contribution analysis	Discussion of initial findings with project team (and key partners)	low to moderate
		Were the outcome-resources ratio and alternatives carefully considered during the conception and implementation process – and if so, how? Were any scaling-up options considered?	Clarity of project results vs project cost and actual results v actual expenditure. Proportion of PREEEP interventions scaled up	PREEEP project document, workplans and performance reports			moderate
		To what extent was more impact achieved through synergies and/or leverage of more resources, with the help of other bilateral and multilateral donors and organisations (e.g. Kofi, MSPs)? If so, was the relationship between costs and results appropriate?	Level of collaboration and involvement by contributing funders. Percentage of projected partner contribution realised vs percentage achievement of results.	workplans, performance reports of PREEEP, Partners			moderate to high

	Evaluation Dimension	Analysis question	Evaluation indicator	Available data source	Other planned data collection projects	Evaluation strategy (evaluation design, method, procedure)	Expected evidence strength (narrative)
	IMPACT						
Impact	**The announced superordinate long-term results have occurred or are foreseen (should be plausibly explained).**	To which superordinate long-term results should the project contribute (cf. module and programme proposal, if no individual measure; indicators, identifiers, narrative)?	Proportion of longterm results achieved.	Project proposal, Monitoring system	Updated monitoring data	Reflection workshop with team, interviews with high level counterparts	strong
		To what extent will the project contribute to the implementation of the Agenda 2030/to the SDGs?	Degree to which the programme contributed to selected SDGs	Project reports	Perception of MEMD and project team	Reflection workshop with team, interviews with high level counterparts	strong
		Which dimensions of sustainability (economic, ecological, social) does the project affect at impact level? Were there positive synergies on the three levels?			Perception of MEMD and project team	Reflection workshop with team, interviews with high level counterparts	strong
		'Leave No One Behind': To what extent have targeted marginalised groups (such as women, children, young people, the elderly, people with disabilities, indigenous peoples, refugees, IDPs and migrants, people living with HIV/AIDS and the poorest of the poor) been reached and is there evidence of the results achieved at target group level?	Degree to which marginalised groups were targeted in the implementation of PREEEP. Perception of stakeholders on targeting of marginalised groups	Indicator 2 reporting	Assessment of key partners and Project head	Interviews with local beneficiaries and key stakeholders for HIV/Gender "component"	moderate
	The project contributed to the intended superordinate long-term results.	To what extent is it plausible that the results of the project on the output and outcome levels (project goal) contribute to the superordinate results? (contri-bution-analysis approach)	% of actual results to those committed by the program. Degree of linkage of actual results to those in results logic. Propotion of activities implemented as set out in results frame work/ToC, degree to which ToC elements are supported by existing evidence. To what extent do the ToC assumptions make sense.	PREEEP reports, survey reports, Project documents, hypotheses of the inception report	Perception of Project implementation team and other stakeholder/players,	Document reviews; Discussion of indicators and hypotheses, exercise of contribution analysis and discussion of specific questions	moderate
		What are the alternative explanations/reasons for the results observed? (e.g. the activities of other stakeholders)	Extent to which convincing alternative hypotheses and related contributions found	Hypotheses in the IR, stakeholder analysis	Perception of other stakeholders incl. Other donors in the sector, alternative hypotheses	Contribution analysis within evaluation team and/or with project team, testing alternatives with key stakeholders	moderate
		To what extent do changes in the framework conditions influence superordinate long-term results?	Percieved changes in framework conditions and documented influence on impact level	Project reports and intitial interviews of GIZ staff	Perception of key partners and project team	Reflection workshop with team, interviews with high level counterparts	moderate
		To what extent is the effectiveness of the development measures positively or negatively influenced by other policy areas, strategies or interests (German ministries, bilateral and multilateral development partners)? What are the consequences of the project?	Mentioning of other key influences and respective consequences	Project reports, initial skype interviews	Perception of Project implementation team	Reflection workshop with team, interviews with high level counterparts	moderate

	To what extent has the project made an active and systematic contribution to widespread impact? (4 dimensions: relevance, quality, quantity, sustainability; scaling-up approaches: vertical, horizontal, functional or combined)? If not, could there have been potential? Why was the potential not exploited?	Impact observed in the four dimensions and/ or scaling-up opportunities	Project monitoring / reporting, initial feedback of former project staff	Project data on strategic decisions and scaling-up mechanisms	Reflection workshop with team, interviews with high level counterparts	moderate
	Referring to the three dimensions of sustainability (economic, ecological, social): How was it ensured that synergies were exploited in the three dimensions? What measures were taken? (-> discussion of interactions in the sense of trade-offs below for unintended results)	Areas considered in project planning and monitoring	Project reports	Perception of Project implementation team and other stakeholder/players,	Individual discussions with key team members	moderate
The occurrence of additional (not formally agreed) positive results has been monitored and additional opportunities for further positive results have been seized. **No project-related negative results have occured – and if any negative results occured the project responded adequately.**	Which unintended positive and/or negative results/changes at the level of superordinate results can be observed in the wider sectoral and regional environment of the development measure (e.g. cross-cutting issues, interactions between the three sustainability dimensions)?	Mentioning of unintended results/changes	Project reports, monitoring data and initial feedback by GIZ staff, private sector	Perception by key partners and team, further monitoring data, NGO perspectives	Individual discussions with key partners and team reflection exercise, additional interviews with selected NGO (tbd)	
	To what extent is the (positive or negative) contribution of the project plausible?	Partners and stakeholder perception of changes as a result of the project.	Project reports, initial feedback by GIZ former project staff	Perception of partners and key stakeholders, project team, evaluation team	Contribution analysis within evaluation team and/or with project team, testing alternatives with key stakeholders or qualititative assessment based on interviews	moderate
	What are the alternative explanations/reasons for the results observed? (e.g. the activities of other stakeholders)		none	Alternative hypotheses and perception by team members and key partners	Contribution analysis with project team and triangulation within evaluation team	moderate
	Have negative results occurred?	Extent of mentioning of negative results	Initial interviews with former project staff	non-monitored results, team perception, other donor perspective	Interviews with team menbers, key stakeholders, other donors	moderate
	To what extent were the risks of negative, unintended, superordinate results identified and assessed in the monitoring system? To what extent were these negative results in the sense of (negative) interactions or trade-offs in the ecological, economic and social dimensions already known during the conception of the project and reflected (e.g. in the module or programme proposal)?	Risks mentioned in the monitoring system and related response documented	Monitoring data (partial)	Full monitoring data, team perception, MEMD coordinator perception	Interviews with team members, key stakeholders, other donors	moderate
	Was there a corresponding risk assessment in the TC-measures' proposal? How was the ability to influence these risks originally assessed?	Availability of risk assessment	none	Perspective on risk management and list of measures	Analysis of further monitoring data and reflection with team	strong

	To what extent have the project's services caused negative (unintended) results (economic, social, ecological)? Is there any identifiable tension between the ecological, economic and social dimensions? -Economically: Impairment of competitiveness, employability, etc. -Socially: How should the impact be assessed in terms of distributive results, non-discrimination and universal access to social services and social security systems? To what extent can particularly disadvantaged population groups benefit from the results or have negative results for particularly disadvantaged population groups been created? -Ecologically: What are the positive or negative environmental impacts of the project?	Number and size of unintended results	Social impact assessment by GIZ, reporting	Perspective of partners and other actors in the sector, team perception	Interviews with dedicated question(s), reflection workshop with team	moderate
	What measures have been taken by the project to counteract the risks/negative interactions?	Measures based on the numbers of unintended results	none	AV perspective, further perception of former staff	Seperate interviews, team reflection	moderate
	To what extent have the framework conditions for the negative results played a role? How did the project react to this?	Connection of negative results to framework conditions	project reports	Project team perception, other GIZ sector heads perspective	Project team reflection with inputs from other sector projects	strong

	Evaluation Dimension	Analysis question	Evaluation indicator	Indikatoren	Available data source	Evaluation strategy (evaluation design, method, procedure)	Other planned data collection projects	Expected evidence strength (narrative
	SUSTAINABLILITY							
Sustainability	**Prerequisite for ensuring the long-term success of the project: results are anchored in (partner) structures**	What has the project done to ensure that the intended effect can be achieved in the medi-um to long term by the partners themselves (working aid re-view)?	Extent to which the project strategically approached / systematically anchoring of products		Project reports, initial monitoring data, secondary documents, initial inputs from former project staff	Stakeholder interviews, internal analysis and reflection with project team	Perception of team and MEMD coordinator	Strong
		Which advisory contents, approaches, methods and concepts of the project are anchored/institutionalised in the (partner) system?	List of contents, approaches, methods, concepts developed within the intervention 1. used by the partners 2. not used by the partners				List of anchored products	Strong
		To what extent are they continuously used and/or further developed by the target group and/or implementing partners?	see above, further developed				Description of used products, joint analysis with team	Strong
		To what extent are (organisational, personnel, financial, economic) resources and capacities in the partner country (longer-term) available to ensure the continuation of the results achieved (e.g. multi-stakeholder partnerships (MSPs)?	Qualitative assessment of organizational and human resources in partner institutions				Perception of institutions capacities	Moderate
		To what extent are national structures and accountability mechanisms in place to support the results achieved (e.g. for the implementation and review of Agenda 2030)? o What is the project's exit strategy? o How are lessons learnt prepared and document-ed?					Team perception and direct CPs	Moderate

	Forecast of durability: Results of the project are permanent, stable and long-term resilient	To what extent are the results of the project durable, stable and resilient in the longer-term under the given conditions?	Narrative assessment of three dimensions of sustainability	.2.1.1 Wahrnehmung der GIZ als Arbeitgeber, der das Thema Gender in seiner Organisation berücksichtigt a) Nur Männer in Führungspositionen/ Nur Frauen in Führungspositionen b) Fördert Gleichberechtigung/ Benachteiligt die Geschlechter c) Vorreiter im Thema innerbetriebliche Gleichstellung/ Nachzügler im Thema innerbetriebliche Gleichstellung d) Familienfreundlich/ Familienunfreundlich Die Auswertung der Wahrnehmungsabfrage erfolgt differenziert nach Außenstruktur und HQ.	Monitoring data and initial feedback by GIZ staff	Reflection with team members and key partners	Perception of closest partners and project team	Moderate
		What risks and potential are emerging for the long-term protection of the results and how likely are these factors to occur? o (Example: Adaptability of target groups and institu-tions regarding economic dynamism & climate change; particularly disad-vantaged groups are able to represent themselves in the long term and their in-dividual countries have the capacity for their participa-tion; changes in behav-iour, attitudes and aware-ness among target groups and institutions that sup-port the sustainability of the project's results, etc.? o What has the project done to reduce these risks and exploit potential?	Description of unintended results with regards to three sustainability dimensions 1. Positive & 2. Negative		Project reports to BMZ	Discussion with key partners / e.g. on workshops	Perception of key partners and AV	Strong
	Are the results of the project eco-logically, socially and economi-cally balanced?	Evaluation of the outcome results with regard to interactions between the environmental, social and economic dimensions of sustainability	Qualitative assessment of conflicts between sustainability dimensions on the impact level	Indikator 6: Gendersensibilität der Rekrutierung von Personal 1.2.2.1 Anteil von Frauen bzw. Männern, die sich auf Stellen in der GIZ beworben haben, differenziert nach a) Bändern b) OE c) Personalkörper mit deutschem Arbeitsvertrag; nationales Personal (im Rahmen der Fallstudien) d) CIMler; EHler e) Jahren 1.2.2.2 Anteil von Frauen bzw. Männern, die zu Vorstellungsgesprächen eingeladen wurden, differenziert nach a) Bändern b) OE c) Personalkörper mit deutschem Arbeitsvertrag; nationales Personal d) CIMler; EHler e) Jahren 1.2.2.3 Anteil von Frauen bzw. Männern, die eingestellt wurden, differenziert nach a) Bändern b) OE c) Personalkörper mit deutschem Arbeitsvertrag; nationales Personal d) CIMler; EHler e) Jahren	Project reports	Reflection with team members and key partners		Moderate
		Which positive or negative intended and unintended results (economic, social, ecological) does the project produce? (Assign intended and unintended results from the effectiveness evaluation to the three sustainability dimensions)	Mentioning of results related to the three dimensions of sustainability		Project reports, Social dimension analysis	Interviews and workshop reflection with team	NGO perspective and team perception, historical data from previous phases	Strong
		Is there any identifiable tension between the ecological, economic and social dimensions? o Economically: Impairment of competitiveness, em-ployability, etc o Socially: How should the impact be assessed in terms of distributive re-sults, non-discrimination and universal access to social services and social security systems? To what extent can particularly dis-advantaged population groups benefit from the results or have negative results for particularly dis-advantaged population groups been created? o Ecologically: What are the positive or negative envi-ronmental impacts of the project?	Qualitative assesssment		Initial feedback from former staff	see above	see above	Moderate
		If negative interactions have been avoided and synergies exploited, how was this ensured? What measures were taken?	Description of risks potentially affecting sustainability / Description of mitigation strategies		Project reports	Reflection with team members and key partners	Team perception and direct CPs	Moderate

Annex 2: Bibliography

BMZ (2014), Sustainable Energy for Development [online] https://www.bmz.de/en/publications/type_of_publication/information_flyer/information_brochures/Materialie235_Information_Brochure_1_2014.pdf

BMZ (2018a): Energy and Climate strategy [online] https://www.bmz.de/en/issues/klimaschutz/energy-and-climate/index.html [May 2018)].

BMZ (2018b): Uganda [online] http://www.bmz.de/en/countries_regions/subsahara/uganda/index.html?follow=adword [May 2018].

East African Community (2018): https://www.eac.int/energy [16 May 2018].

Francke, M. (2017): BMZ – Promotion of Renewable Energy and Energy Efficiency Programme, 2017 Factsheet. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

Francke, M. (2017): SDGs – Promotion of Renewable Energy and Energy Efficiency Programme, 2017 Factsheet. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

GIZ (2012, 2013, 2014, 2015 & 2016): Promotion of Renewable Energy and Energy Efficiency Programme (PREEEP) Annual Performance Reports 2012, 2013, 2014, 2015, 2016, Kampala: Deutsche Gesellschaft für Internationale Zusammenarbeit, unpublished reports.

GIZ (2018a): Promotion of Renewable Energy and Energy Efficiency Programme (PREEEP), Results Matrix, unpublished report.

GIZ (2018b): Promotion of Renewable Energy and Energy Efficiency Programme (PREEEP), Theory of Change, unpublished report.

Mayne, J. (2001): Addressing attribution through contribution analysis: using performance measures sensibly. *Canadian Journal of Program Evaluation*, Vol. 16, No. 1 pp. 1-24.

MEMD (1999): Rural Electrification Act (1999), Kampala: Ministry of Energy and Mineral Development.

MEMD (2002): The National Energy Policy 2002. Kampala: Ministry of Energy and Mineral Development.

MEMD (2007): The Renewable Energy Policy for Uganda (2007). Kampala: Ministry of Energy and Mineral Development.

MEMD (2017): Energy Efficiency Roadmap for Uganda, 2017. Kampala: Ministry of Energy and Mineral Development.

MEMD (2017): Mineral Policy Statement 2017/18. Kampala: Ministry of Energy and Mineral Development.

MEMD (2018): Draft National Standard Indicators Document. Kampala: Ministry of Energy and Mineral Development.

MEMD (2018): Third Quarter Progress Performance Report FY2017/18. Kampala: Ministry of Energy and Mineral Development.

MWE (1994): The National Environment Management Policy 1994. Kampala: Ministry of Water and Environment.

MWE (2001): The Uganda Forestry Policy -2001. Kampala: Ministry of Water and Environment.

MoFPED (2015): Public Finance Management Act, Kampala: Ministry of Finance Planning and Economic Development.

MoLG (1997): Local Government Act, chap 243, (1997): Kampala: Ministry of Local Government.

NPA (2015a): Government of Uganda Vision 2040. Kampala: National Planning Authority.

NPA (2015b): The National Development Plan II (2015/16 – 2019/20): Kampala: National Planning Authority.

Office of the Prime Minister (2017): Government Annual Performance Report FY2016/17. Kampala: Office of the Prime Minister.

Sustainable Energy Forum for East Africa (2018): [online] https://sef-ea2018.b2match.io/page-4531 [16 May 2018].

Uganda National Renewable Energy and Energy Efficiency Alliance (UNREEEA): [online] http://unreeea.org/ [May 2018].

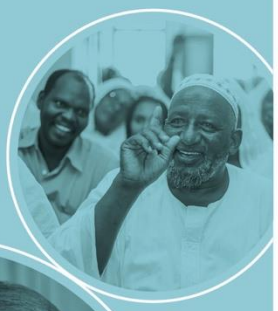
UNREEEA (2018): [online] http://unreeea.org/ [May 2018].

UN Sustainable Development Goals [online] https://www.un.org/sustainabledevelopment/sustainable-development-goals [May 2018].

Annex 3: Terms of reference

Stabsstelle Evaluierung Zentrale Projektevaluierung

WISSEN WAS WIRKT



Terms of reference

Central project evaluation of the project

“Promotion of Renewable Energy and Energy Efficiency Programme Uganda” (2016.2112.7)

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Contents

List of abbreviations

AV	Officer responsible for the commission
BMZ	German Federal Ministry for Economic Cooperation and Development
CV	Curriculum vitae
DeGEval	DeGEval – Evaluation Society
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GVR	Joint Procedural Reform
OECD-DAC	Organisation for Economic Co-operation and Development (OECD)/Development Assistance Committee (DAC)
PN	Project number
RBM	Results-based monitoring (system)

1. Central project evaluations at GIZ

1.1 Context and objectives

GIZ's evaluation system is facing a number of new challenges, which include increasingly diverse types of commissions and projects, the growing complexity of implementation contexts and projects, and new information requirements on the part of policy-makers (short-term achievement of results, other evaluation criteria, etc.). In addition, there are the new evaluation requirements arising from the 2030 Agenda for Sustainable Development and the Joint Procedural Reform in commissioning procedures with BMZ. Requirements related to how GIZ evaluations are used have also changed. 'Learning from evaluations' is still an important function of evaluations. The main task here is to process the knowledge generated by the evaluations to precisely facilitate decision-making. In addition, the requirements for accountability (and hence for the quality and independence of evaluations and evaluation reports) have become increasingly rigorous in recent years. Against this backdrop, GIZ's Management Board decided to fundamentally reform the GIZ evaluation system in December 2016. The goals of this reform are particularly:

- **To improve evidence of effectiveness:** The new evaluation system is intended to put GIZ in a better position to observe long-term results and the sustainability and mainstreaming of approaches in the partner structures. In addition, evaluations should be conducted at a time when statements about results and sustainability are possible and appropriate, and should be designed using the appropriate methodologies and procedures to ensure this is the case.

- **Enhance credibility of evaluation findings:** We want to further increase the credibility of our evaluation findings by strengthening the independence of project evaluations. Project evaluations will accordingly be managed by and under the responsibility of the Evaluation Unit, which reports directly to the Management Board and is separated from operational business. Implementation is carried out by specialist external evaluators. Evaluations will be conducted in line with recognised national and international standards and quality criteria, and the evaluation reports will be published.

- **Gearing project evaluations to new challenges:** Central evaluations should take into account the growing complexity of projects and implementation contexts, the increased requirements for accountability and the evaluation challenges arising from the 2030 Agenda and the Joint Procedural Reform.

1.2 Designing implementation of the multi-year evaluation portfolio

Central project evaluations generally concern projects that GIZ carries out on behalf of BMZ. Central project evaluations involve a critical analytical review of the results and implementation of a project. They can be carried out at different times. Completed projects are evaluated some eight months after the end of their term, which is usually three years (final evaluation). Projects with planned follow-on measures are also evaluated during their term (interim evaluation), depending on the intended use (submission for planning the follow-on commission, project steering, reporting to the commissioning party, strategic reflection). Both the interim and final evaluations take predecessor projects into consideration (where substantively relevant) in order to make statements about long-term results and sustainability.

In BMZ business, all projects with a commission value over EUR 3.0 million are included in the evaluation process on a standard basis. A two-stage procedure is used to select projects for evaluation. In the first stage the projects to be evaluated are selected by means of a regionally stratified random sample. In a second stage the sample is supplemented by evaluations that are selected in accordance with specific information requirements (criteria-based selection).

Overall, it is planned to ensure that in the medium term, project evaluations cover between 30% and 50% of the total population of all projects with a commission value exceeding EUR 3.0 million in business with BMZ. This will mean carrying out some 100 central project evaluations a year. The total number of evaluated projects should be large enough to make a representative statement about the assessment of the OECD-DAC criteria

for the total population of all projects.

An EU-wide tender will be carried out for implementation of the first evaluation portfolio. The goal is to enter into framework agreements with pools of evaluators who are structures by technical sector and regional knowledge and experience, and who will carry out evaluations for this random sample up to 2020. As completion of the contract award procedure cannot expected before the second quarter of 2018, the first pilot evaluations at the end of 2017 and beginning of 2018 will be put out to tender as individual services using a short list or an e-tendering procedure.

2. Object and goal of the evaluation

2.1 Project description and object of the evaluation

Uganda is endowed with a wide variety of natural energy resources. The country has abundant supplies of biomass, water and peat, as well as favourable conditions for solar, wind and geothermal power generation. Of these, hydropower and biomass are the resources that currently contribute most to meeting the population's energy demands. While over 90% of all the energy consumed in the country derives from biomass, little is done to replace the supply once it has been used. Furthermore, though the country has a low rate of electrification at 15%, the electricity that is generated is often used wastefully, hence aggravating the already insufficient supply. The situation has caused Uganda to be one of the world's lowest energy consumers, with the low consumption being attributed mainly to the largely underdeveloped state of the energy sector.

Conditions in the Ugandan energy sector are more conducive to the use of renewable resources, and steps have been taken to encourage greater efficiency of energy consumption.

The Promotion of Renewable Energy and Energy Efficiency Programme (PREEEP) supports the Ugandan Ministry of Energy and Mineral Development (MEMD) in promoting the sustainable use of energy for social and economic empowerment, while increasing access to renewable energy and promoting the efficient use of existing supplies. PREEEP has four components: Policy and Development of a Quality Management System, Decentralisation, Market Structures Development and Energy Efficiency:

- Energy Policy: Support is rendered towards ensuring that the sector planning, monitoring and evaluation processes of MEMD are compliant with the International Quality Standard ISO 900.2008. In line with this, PREEEP is working to implement a Quality Management System (QMS) for the Ministry. Activities also aim to integrate Gender and HIV/AIDS-issues into major energy policies/ planning documents. Furthermore, PREEEP supports policy development with regard to Energy Efficiency and Renewable Energies.
- Decentralisation: Activities are geared towards integrating energy programmes and issues into the five-year strategic plans, annual action plans and budgets of local governments in 17 pilot districts in Lango and West Nile. These efforts result in individual districts raising awareness on renewable energy and energy efficiency, and collecting district/ region - specific energy data.
- Market Structures Development: Activities aim to increase the number of quality renewable energy and energy efficiency products and services on the Ugandan market.
- Energy Efficiency Promotion: Here, PREEEP works to increase the number of large and medium energy consuming facilities that utilize medium and large-scale energy efficient processes.

Meanwhile, measures are also carried out in partnership with German businesses. This is the result of the BMZ's 'develoPPP.de' initiative, which supports European companies interested in investing in developing and emerging economies. So far, partnerships have been started with Evidatec in support of an energy efficiency network.

The programme also supports the mainstreaming of crosscutting issues, such as gender equality and HIV/AIDS.

Subject to this evaluation is the technical cooperation module (PN 2016.2112.7) with an overall term starting from 01.02.2017 - 31.01.2019. If relevant, the predecessor module (PN 2013.2202.3) and further predecessor modules should be considered within the framework of the evaluation in order to obtain reasonable results on long-term impacts and sustainability of the project.

2.2 Goal of the evaluation

A key element of evaluation work at GIZ is that evaluations should be geared to their intended use. The central project evaluations follow this fundamental approach and are intended to support decision-making.

- Evaluation processes and findings help strengthen the decision-making competence of decision-makers and other change agents.
- This leads to decisions that improve either public policies, the design and implementation of GIZ projects, or GIZ corporate strategies.
- These improvements in turn lead to improved service delivery by partners for their own citizens, by GIZ for its partners and target groups, and for its commissioning parties and employees.
- This will ultimately increase the effectiveness of public policies and GIZ projects for the target groups, and enhance satisfaction among partners, clients and employees.

This is an interim evaluation. The evaluation is intended to rate the success of the current module. This is done in line with the OECD-DAC criteria, based on data, facts and figures, and within the framework of a predefined rating system. As already noted in Section 2.1 above, predecessor modules are also taken into consideration (if substantively relevant) in order to make statements on the long-term results and sustainability of the project.

At an initial meeting between the contractor and the Evaluation Unit, the officer responsible for the commission at the project and possibly the partner, the information requirements are spelled out in detail and the object of the evaluation is jointly defined.

3. Process and inputs

3.1 Responsibilities

The Evaluation Unit is responsible for planning and steering the evaluation portfolio of central project evaluations. The contractor is responsible for preparation, implementation, quality assurance and backstopping, and reporting on individual evaluations with due regard to the requirements for inputs listed under Section 4 below. The evaluation team always consists of two members (one international and one local evaluator). The contractor is responsible for the choice and integration of the regional/local evaluator. GIZ assists at various points in the individual process steps.

Support by the project or local country office covers:

- coordination with the political partner (MEMD)
- providing relevant documents
- recommendation for a suitably located hotel
- identification of relevant interview partners + support to the coordination / development of interview plan
- local GIZ project driver will be provided

The procedure for the evaluation, including clarification of roles, can be seen in the following process overview. The process chart is based on the experience of the Evaluation Unit with the independent evaluation programme and decentralised project evaluations, and will now be examined within the framework of central project evaluations, and successively modified where necessary. Joint assessment with the contractor at the end of the evaluation is planned for this purpose.

3.2 Overview of central project evaluation process

The following inputs must be provided in the period from 01.02.2018 to 30.06.2018. The timeline is provisional and might be subject to minor changes. The local evaluation mission will take place in Uganda.

Work step	When	Responsible	Collaborating	To be informed
Preliminary clarifications including agreement on timing of evaluation	Dec 2017	Evaluation Unit	AV, partner(s)	
Provision of documents	Until 26 January 2017	Evaluation Unit (standard evaluation documents) AV, project team (project documents)		
Clarification of commission incl. role clarification in evaluator team	05.02.2018	Evaluation Unit	International evaluator, local evaluator	
Launch meeting (if needed) to clarify roles and determine information requirements	07.02.2018	Evaluation Unit	AV, partner(s) international evaluator, local evaluator	
Letter informing central stakeholders at the start of evaluation (inc. information on process and roles)	13.02.2018	Evaluation Unit		Director of division, country director or head of section, AV, partner(s), BMZ
Desk study inc. initial preliminary clarification of content at GIZ and **(if needed) local check** (local evaluator) - data available (inc. RBM) - partner systems - partners' information requirements	05.02.2018-02.03.2018	International evaluator/ Local evaluator	GIZ staff	
Preparation for travel (sometimes only possible after inception report)	Jan – April 2018	International evaluator	Local evaluator, AV/project team, (country office)	

Draft inception report (IR) in accordance with GIZ specifications and template, report language: English	**Submission of IR 02.03.2018**	International evaluator	Local evaluator	
Quality check of IR	Feedback to contractor: 07.03.2018	Evaluation Unit		
Revision of IR	14.03.2018	International evaluator	(Local evaluator)	
Quality check 2 of IR	Feedback to contractor: 23.03.2018	Evaluation Unit	AV, partner(s) (for material accuracy)	
Revision 2 of IR	29.03.2018	International evaluator	(Local evaluator)	
Approval of IR	05.04.2018	Evaluation Unit		BMZ
Formulation and agreement of interview plan	19.02.2018-07.04.2018	Int. & loc. evaluators	AV, partner(s)	
Performance of mission	**09.04.2018 – 20.04.2018**	International and local evaluator		
Launch meeting, local briefing	09.04.2018	International and local evaluator	AV/project team, country director, partner(s), embassy	
Documentation of provisional findings for local final presentation/debriefing (in accordance with GIZ specifications)	20.04.2018	International and local evaluator		
Final presentation, debriefing/ final meeting, local	20.04.2018	International and local evaluator	AV/project team, country director, partner(s), embassy	
Evaluation, analysis, report	until 11.05.2018	International evaluator	Local evaluator	
Submission of evaluation report (in accordance with GIZ specifications and template; report language: English)	**11.05.2018**	International evaluator	(Local evaluator)	

Quality check 1 on evaluation report	Feedback to contractor: until 18.05.2018	Evaluation Unit		
Revision 1 of evaluation report	Until 28.05.2018	International evaluator	(Local evaluator)	
Quality check 2 on evaluation report	Feedback to contractor: until 08.06.2018	Evaluation Unit	AV, partner(s) (for material accuracy)	
Revision 2 of evaluation report (including linguistic and editorial quality assurance)	Until 15.06.2018	International evaluator	(Local evaluator)	
Approval of evaluation report	20.06.2018	Evaluation Unit		
Final meeting by Skype (joint assessment of evaluation)	25.06.2018	Evaluation Unit, int. evaluator	(Local evaluator)	
Publication of evaluation report	July 2018	Evaluation Unit		Evaluators AV, partner(s)

4. Specific requirements for inputs

The inputs must be provided as shown above in Section 3.2 in the period from 01.02.2018 to 30.06.2018. The inception report (IR) must be submitted by 02.03.2018 in English, any revision based on feedback to the contractor must be completed by 23.03.2018. The evaluation report must be submitted by 11.05.2018 in English, any revision based on feedback to the contractor must be completed by 08.06.2018 (for the detailed procedure, see process overview in Section 3.2).

4.1 Quality requirements for central project evaluations

In its evaluations GIZ follows the evaluation standards of the Evaluation Society (DeGEval): usefulness, feasibility, fairness and accuracy, and the OECD-DAC quality standards for development evaluation. As a basis for developing quality assurance instruments, the Evaluation Unit defines the quality standards for process quality, methodological quality and product quality.

The **usefulness** of an evaluation ensures that the information requirements of its users are taken into account and the desired information is provided to them.

- Identification of participating and affected parties: the individuals or groups of individuals involved in the object of the evaluation or affected by it should be identified so that their interests can be clarified and, as far as possible, taken into account in setting up the evaluation.
- Clarification of the purposes of the evaluation: it should be made clear what the purposes of the evaluation are, so that participating and affected parties can state an opinion on this and the evaluation team can follow a clear work order.

- Credibility and competence of the evaluator: persons carrying out evaluations should be personally credible and possess the required methodological and technical expertise so that the evaluation findings offer maximum credibility and acceptance.
- Selection and scope of information: the selection and scope of the information collected should enable treatment of the questions to be investigated for the object of the evaluation and at the same time take into account the information requirements of the commissioning party and other recipients.
- Transparency of values: the perspectives and assumptions of the participating and affected parties on which the evaluation and interpretation of findings are based should be described in such a way that the basis for the assessment is clearly comprehensible.
- Completeness and clarity of reporting: evaluation reports should provide all material information, and be easy to understand and verifiable.
- Timeliness of evaluation: evaluation projects should be started and completed in time for the evaluation findings to be incorporated into impending decision-making processes and improvement processes.
- Use and benefits of evaluation: planning, execution and reporting of an evaluation should encourage the participating and affected parties to review the evaluation attentively and use its findings.

The **process quality** meets the DeGEval standards for feasibility and fairness. The way the process of an evaluation is designed is decisive for the use of the evaluation. To make the evaluation as useful as possible for decision-making processes, the following standards should be met.

- Appropriate procedure: evaluation procedures, including the procedure for obtaining necessary information, should be chosen so that there is a reasonable relationship between the burden on the object of evaluation or participating and affected parties and the expected benefits of the evaluation.
- Diplomatic approach: evaluations should be planned and carried out such as to achieve the greatest possible acceptance of the evaluation approach and findings among the various participating and affected parties.
- Efficiency of the evaluation: there should be a reasonable relationship between the effort involved in conducting the evaluation and its benefits.
- Formal agreements: the obligations of the parties to the contract for the evaluation (what should be done, how, who by and when) should be set down in writing so that the parties are obliged to meet all the conditions of the agreement or renegotiate it.
- Protection of individual rights: evaluations should be planned and carried out so that the security, dignity and rights of the persons included in an evaluation are protected.
- Complete and fair review: evaluations should investigate and present the strengths and weaknesses of the object of the evaluation as fully and fairly as possible, so that the strengths can be further developed and the weaknesses addressed.
- Impartial execution and reporting: the evaluation should make clear the different views of participating and affected parties with regard to the object and findings of the evaluation. Reports and the overall evaluation process should demonstrate the impartiality of the evaluation team. Assessments should be made fairly and be as free as possible from personal feelings.
- Publication of findings: the findings of the evaluation should be made accessible to all participating and affected parties as far as possible.

The **methodological quality** of an evaluation relates to the application of the methods of empirical social research for data collection and analysis and corresponds to the DeGEval criterion of accuracy.

- Description of the object of the evaluation: the object of the evaluation should be clearly and accurately described and documented, so that it can be unambiguously identified.
- Context analysis: the context of the object of the evaluation should be investigated and analysed in sufficient detail.
- Description of purposes and approach: the object, purposes, questions and approach of the evaluation, including methods used, should be accurately documented and described so that they can be identified and assessed.
- Citation of sources of information: the sources of information used in an evaluation should be documented with sufficient accuracy to assess whether the information is reliable and appropriate.

- Valid and reliable information[19]: the procedure for obtaining data should be chosen or developed and applied in such a way as to ensure the reliability of the data obtained and their validity for answering the questions in the evaluation in line with technical standards. The technical standards should be aligned with the quality criteria of empirical social research.
- Systematic error checking: the information collected, processed, analysed and presented in an evaluation should be systematically checked for errors.
- Analysis of qualitative and quantitative information: qualitative and quantitative information in an evaluation should be appropriately and systematically analysed to technical standards so that the questions in the evaluation can be effectively answered.
- Justified conclusions: the conclusions drawn in an evaluation should be derived from findings in a way the recipients can follow.

4.2 Profile for evaluators

- Experience of evaluation
- Experience with complex evaluation designs
- Social-scientific research methods (quantitative, qualitative and participatory methods)
- Sectoral knowledge and experience: Energy Efficiency and Renewable Energies, Decentralisation and Organisational Development
- Experience with GIZ
- Country knowledge in Uganda or Subsahara Africa
- Experience in applying and assessing the OECD-DAC criteria
- An excellent written and oral command of English (international and regional/local evaluator), German (international evaluator) is mandatory and thus, not part of the assessment.

As stated above, the evaluation should be carried out by an (international, regional) evaluation team. The contractor is responsible for the choice and integration of the regional/local evaluator. The CV of the local evaluator must be approved by GIZ. The same profile requirements listed above also apply to the regional/local evaluator, except for knowledge of German. The local evaluator doesn't have to be part of the bid and can be recruited after the acceptance of the bid. Only the profile of the international expert will be weighted in the assessment of the bid. The bid must explain the cooperation and division of labour (see the specifications in Section 5 Scope and content of the bid to be submitted). For reasons of independence, neither evaluator may have participated in designing, planning, implementing, providing advisory services to or evaluating the project.

4.3 Methodological procedure

For the central project evaluations it is generally sufficient as a basis for credible accountability to document as robustly as possible the contribution that the project under consideration has made towards achieving objectives (*contribution*). It is a matter of showing a plausible relationship between the project and the results, i.e. using methodological and data triangulation to collect sufficient evidence that the observed intended results are most probably due to the project. Besides documenting the project contribution, understanding and knowledge should be increased of *what is working and what not*, in order to be able to make sound decisions on the future orientation of the project.

To enable robust proof of results in the central project evaluations, GIZ prescribes a theory-based approach to evaluation. Theory-based approaches, such as realist evaluation, process tracing and contribution analysis, are distinguished by the following methodological elements:

- a *results model*, which is contained in the project proposal at GIZ and visualises expectations of the project's causal relationships and shows pathways from the inputs via activities and outputs to the desired outcomes and impacts.

[19] i.e. verified and reliable information

- A *theory of change* based on the results model, which formulates *hypotheses* and possibly *mechanisms* to explain the causal links embodied in the results model and which can be investigated and assessed in the evaluation. Possible risks involved in implementing the project must also be taken into account.
- A *contribution story* that shows the observed changes and contribution made by the project to achieving results, evaluated on the basis of sound, verifiable and credible evidence. For this, alternative explanations (e.g. context factors or third-party measures) must also be analysed and the *theory of change* modified if necessary.

When selecting theory-based evaluation designs, the central project evaluations should give preference to those that match the information requirements and object of the evaluation. Based on the GIZ results model and RBM system, the indicators formulated in the offer and the hypotheses underlying the results model can be taken as a basis for assessment and examined for plausibility. Appropriate quantitative and qualitative methods are used for data collection, e.g. document analysis, exploratory individual and group interviews and standardised online questionnaires. Theory-based approaches must be supplemented by additional methods to document unintended results and to assess efficiency.

4.4 Participatory approach

Partner orientation is an important characteristic of central project evaluations. This is reflected in the different phases of project evaluation and evaluation management (e.g. by defining the partners' information requirements in the ToRs, briefing at the local start of evaluation, documentation of partner perspectives, debriefing).

5. Scope and content of the bid to be submitted

The Evaluation Unit would like to ensure that the choice of evaluators conforms to the need for their independence. As defined by the Evaluation Unit, this applies to all evaluators not involved in designing, planning, implementing, providing advisory services to or evaluating the project – this applies to both, the international and the regional/local evaluator. Only those bids are taken into account for assessment that fully meet the criterion of independence. If the criterion is not met, this results in exclusion of the bidder from the competition.

The bid should cover the following aspects and not exceed three to five pages (excluding CV).

- Outline of a methodologically sophisticated procedure including a theory-based approach. Both the design and data collection methodology should be appropriately presented. The Evaluation Unit wishes to see an increase in contribution analysis approaches in future project evaluations. Bids that consider the possibility of implementing this approach will be positively viewed in the assessment.
- Presentation of the division of labour within the evaluation team.
- Experience in German and international development cooperation/international cooperation, particularly with GIZ or its predecessor organisations.
- Extent and quality of evaluation experience
- Sectoral knowledge and experience, or other knowledge and experience relevant for evaluating the project
- Foreign experience (as evaluator or short-term/long-term expert) in the region
- Language skills
- References

Please use the CV template in the annex to this invitation to tender.

6. Specification of inputs

The specification of inputs should not exceed 60 expert-days in total

- Inception phase up to 18 expert-days
- Carrying out mission locally including preparation and travel days up to 26 expert-days
- Analysis and reporting up to 16 expert-days

The ratio of expert-days for the international expert and regional/local expert should be as follows:
International expert up to 38 expert-days (including travel days)
Regional expert up to 22 expert-days (including travel days)

As mentioned in chapter 4.2, the local evaluator doesn't have to be part of the bid and can be recruited after the acceptance of the bid. Please include the cost for the local expert in the budget with a flat sum of 13,000 EUR (position 5.9 in the price sheet).

Travel expenses
The financial bid should include air travel costs to Uganda.
Moreover, travel within Uganda should be costed at EUR 1,000 (reimbursement against evidence). Overnight costs and per diem allowances must also be costed.

Annex 4: Pictures of PREEEP Project Activities

PREEEP Workshop with key counterparts

PREEEP Workshop on policy development with key counterparts

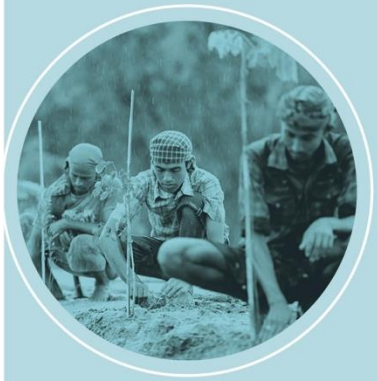
PREEEP Technical training

Photo credits and sources

Photo credits/sources:
© GIZ / Ranak Martin, Carlos Alba, Dirk Ostermeier, Ala Kheir

Disclaimer:
This publication contains links to external websites. Responsibility for the content not contain any URL links. of the listed external sites always lies with their respective publishers. When the links to these sites were first posted, GIZ checked the third-party content to establish whether it could give rise to civil or criminal liability. However, the constant review of the links to external sites cannot reasonably be expected without concrete indication of a violation of rights. If GIZ itself becomes aware or is notified by a third party that an external site it has provided a link to gives rise to civil or criminal liability, it will remove the link to this site immediately. GIZ expressly dissociates itself from such content.

Maps:
The maps printed here are intended only for information purposes and in no way constitute recognition under international law of boundaries and territories. GIZ accepts no responsibility for these maps being entirely up to date, correct or complete. All liability for any damage, direct or indirect, resulting from their use is excluded.



Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices
Bonn and Eschborn

Friedrich-Ebert-Allee 36 + 40
53113 Bonn, Germany
T +49 228 44 60-0
F +49 228 44 60-17 66

Dag-Hammarskjöld-Weg 1-5
65760 Eschborn, Germany
T +49 61 96 79-0
F +49 61 96 79-11 15

E info@giz.de
I www.giz.de