

Terms of Reference

Terminal Evaluation

China-Ghana and China-Zambia Renewable Energy Technology Transfer Projects implemented by UNDP and funded by the Government of Denmark

1. Background:

In order to enable coherent cooperation between China and countries in Africa, in particular around the promotion of the UN's Sustainable Energy for All (SE4ALL) initiative, UNDP China has been funded by the Government of Denmark to develop a South-South cooperation programme. The programme includes two separate projects in collaboration with the Energy Commission in Ghana and the Ministry of Science and Technology in China, as well as the Department of Energy in Zambia and Ministry of Science and Technology in China. UNDP Country Offices in Accra, Beijing and Lusaka support the programme through funding allocation and management.

The programme facilitates exchanges of expertise and technology between China and Ghana and Zambia, building on China's experience within renewable energy deployment, as well as planning and technology development. The programme takes a multi-pronged approach by demonstrating the use of various technology in different contexts and environments. The approach includes: 1) demonstration of renewable energy technology (RET) in various rural and productive sector contexts, 2) building technical capacity and lessons learned with key stakeholders, 3) support legislative and policy processes to reduce barriers to transfer, adoption, and use of RETs, and 4) provide support and mechanisms for South-South cooperation partner governments, private sector and research institutions to create alliances for renewable energy technology transfer.

China Component: One of the project's objectives is to enhance the capacity for South-South development cooperation between China and countries in Africa within renewable energy transfer that has been developed and tested. The project supports the review and updating of South-South cooperation policies and guidelines. Moreover, a key focus area is to build capacity, enabling China to engage more systematically in South-South cooperation. In addition, the project contributes to climate change mitigation and reduction of poverty by increasing access to renewable energy solutions through enhanced investment and production of RET in Ghana and Zambia within the South-South cooperation framework.

Ghana Component: The project aims to effect off-grid community-based electrification, increase the share of renewable energy and promote the productive uses of energy. At the same time, the project supports broader socio-economic and environmental objectives, most notably poverty reduction through employment generation as well as action on climate change mitigation. The project will create an enabling environment - in Ghana for absorbing new technology and in China for providing it appropriately through South-South cooperation. The project also promotes the production of renewable energy technologies in Ghana with a strong focus on private sector development and inclusion. This is conducive to Ghana's national development goals and priorities for poverty reduction and provision of energy.

Zambia Component: The project supports access to electricity for rural communities through the creation of an enabling environment to up-scale renewable energy technology deployment by removing market barriers for introduction of improved renewable energy technologies and the strengthening of South-South cooperation between Zambia and China. Zambia has the second largest potential for solar power in the world, currently virtually unused, and an abundance of rivers and water resources in the rural areas. Building on this potential, solar- and hydropower are identified as the most appropriate renewable energy technologies for Zambia and thus consistent with the Chinese development experience. The project will include support for the development of an appropriate regulatory framework for promoting renewable energy in Zambia, the development of financing options for renewable

energy, the establishment of demonstration and testing facilities to showcase RET and build capacity.

For specific output and outcome descriptions please see annex 1.

2. Terminal Evaluation – Rationale and Purpose

The RET transfer programme involves many actors and stakeholders, who operate through, and are affected by, individual national contexts. As the project operates in different local settings, elements of the context is likely to affect outcomes. Due to the different contexts, complexity and evolving nature of the project, it is agreed by all primary stakeholders that the project will benefit from a terminal evaluation before full implementation finishes on December 31st 2019.

The main purpose of this Terminal Evaluation is to assess the project's successes and failures, lesson learned, and to produce recommendations for the future. As the project's aim is designed to ensure *capacity development*, creating partnerships and testing a new approach to South-South cooperation, the review will focus on these outcomes, rather than long-term impact.

The review will therefore assess key achievements and contributions of the project to building capacity of key partner institutions and organisations. Capacity building refers to a number of different aspects including for example 1) China's ability to engage in demand driven South-South cooperation, 2) Ghana's ability to develop a renewable energy master plan, and 3) Zambia's ability to oversee key planning processes for construction of mini-hydro power plants.

The evaluation will serve the dual objectives of accountability and learning. Accordingly, the evaluation will assess and report on the performance and results of project activities; determine the reasons for observed success/failure; and draw lessons learned to produce evidence-based findings to allow the respective participating institutions in China, Ghana and Zambia as well as UNDP to make informed strategic decisions for future trilateral cooperation projects.

Knowledge and information obtained from the evaluation will be used as a basis for designing future interventions as well as for better management for results by the IPs and UNDP and support public accountability of the project vis-à-vis the Government of China, Ghana and Zambia, UNDP and DANIDA.

3. Scope of Work and Objectives:

The Terminal Evaluation shall examine progress, achievements, critical shortcomings, good practices and lessons learned from the project including project structures and setup. The review shall cover all activities in all participating countries undertaken by the project since its launch in January 2015.

Objectives

The broad objectives of the Terminal Evaluation are as follows:

1. Assess if the level of ownership of the project by partners and the level of commitment from participating institutions to engage in i.e. capacity development activities. Assess the relevance and effectiveness of strategies and interventions applied by the project.

2. What have been the nature and quality of exchanges between the partner countries under this project, and which specific capacities have partners learnt and adopted from each other?
3. What have national institutions in each country learned from the project? Is there any evidence of the project facilitating any change in ways of engaging in South-South cooperation, and if so, how?
4. As the project lays emphasis on capacity development, transfer of technology and skills development, assess 1) to what extent capacity development and technology transfer has taken place, and 2) the effectiveness of the strategies and methods it has developed so far.
5. Assess the contribution made - and its potential - by the project – to a developing a successful model for South-South cooperation and trilateral cooperation on renewable energy technology transfer and capacity development.
6. An assessment or overview of the created enabling environment for future renewable energy technology investments in Ghana and Zambia.
7. An assessment of the benefits and disadvantages of this type of development cooperation model, particularly in relation to the wider impact/inspiration for China's future development cooperation engagements in third countries within internationally established standards and procedures.

Assessment of the sustainability of the programme both in a narrow sense focusing on the continuation of the on-ground developments in Ghana and Zambia and in a broader sense on South-South cooperation.

4. Preliminary Review Framework, Criteria and Questions:

4.1 Review framework

NB! The following sections 4 and 5 are preliminary suggested by the project team. Alternative frameworks **OR** an elaboration of the below should be included in the technical proposal.

Instead of conventional experimental design or quasi-experimental design, which has established counterfactuals to compare against, the review will use non-experimental methods and seek to analyse multiple qualitative factors and spheres of control that influence the project's outputs in four dimensions (Figure 1 below), namely:

- (a) Capability – structures and experience for RE transfer and absorption, financing mechanism;
- (b) Capacity – to provide and to receive capacity development;
- (c) Practices – technical skills and technology that contribute to achieving RETT; and
- (d) Effects – demonstration value in terms of access to energy provided and potential for upscaling

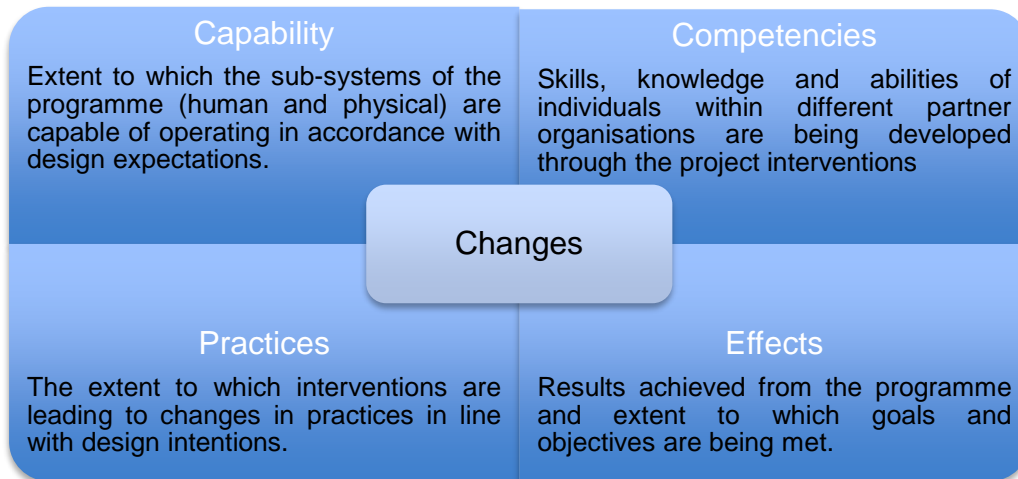


Figure 1: Review Framework

4.2 Criteria

The Terminal Evaluation shall use core components of the standard OECD/DAC Evaluation Criteria for Evaluation of Development Assistance namely: relevance, effectiveness, efficiency, and sustainability. At this stage, the criterion on impact, which is a core component of OECD/DAC criteria, is not envisaged for use in this review, although any relevant findings in this regard will be welcome. While the review team will develop and refine detailed questions after an initial briefing at the inception stage, some of the guiding questions that the review ought to take into account will be as follows:

4.2.1 Relevance

1. To what extent do the intended outcome and relevant outputs address the central purpose of this project as articulated in the business case, and to what extent are these aligned with priorities of key stakeholders of the Governments of China, Zambia and Ghana?
2. Has the project been able to respond to the priority needs in relation to RETT in China, Zambia and Ghana, and if so, how?
3. Is there a need and demand for the kind of capacity building, knowledge sharing and exchange at the level of communities and institutions offered by this project in the participating countries? To what extent do the research, knowledge products, tools, guidance and practices developed under this project render themselves to use acceptance and replication at national and regional levels?

4.2.2 Effectiveness

4. Is there a clear implementation logic and theory of change underpinning the project that inform outcome, output and activities under this project?
5. To what extent has or is the planned outcome being achieved? Are there any additional outcome(s) being achieved beyond the intended outcome?
6. How have corresponding results at the output level delivered by the project affected the outcome? What are the challenges to achieving the outcome?
7. Has partnership strategy between the countries been effective in contributing to the outcome?
8. Is there evidence of South-South exchange and learning from each other through this project within each country (with research institutes for example) and between countries? And what, if any, potential exist for further development in this regard?
9. Is the current set of indicators for both outcome and output effective in informing the progress made towards the outcomes? If not, what indicators should be used? Are the progress reports evidence-based and do these track outcomes?
10. Assess the knowledge management platforms and initiatives developed so far, and comment on their contribution to the project outcome.

4.2.3 Efficiency

11. Were programme resources/funds efficiently applied? What internal factors (design, management, human and financial resources, field delivery capacity etc) and what external factors are affecting achievement of planned results?
12. The project has several 'customers'/primary stakeholders whose active participation and engagement is central to the success of the initiative. Does the project have a system of seeking feedback and views to help it tailor its offerings to different customer needs?
13. What M&E system/strategy and quality assurance system have been put in place and how effective are these?

4.2.4 Sustainability

14. How strong is the level of ownership of the results by the relevant government entities and other stakeholders?

15. What is the level of capacity and commitment from the Government and other stakeholders to ensure sustainability of the results achieved? Has partnership strategy enabled integration and embedding of programme implementation in the government system?
16. Does the project have an exit strategy? What will happen at the end of the project with assets such as the demonstration sites and key structures established such as the South-South Centre? What could be done to strengthen sustainability?

5. Methodology

5.1 Overall approach

The RETT project is focused on renewable energy transfer, knowledge sharing and developing capacity at different levels. Unlike in conventional projects which focus on *change in state* (for example, reducing poverty or infant mortality from X per cent to Y per cent) as the ultimate objective of a project, establishing a baseline for a capacity building project can be challenging. This was no exception with RETT project – as there is no baseline data.

Capacity development projects like this are complex, and monitoring and evaluating such complex changes therefore require capturing behavioural changes which are often difficult to quantify and outcomes are not always known in advance. ‘Change’ in such projects are not linear and cannot be easily attributed to one specific intervention, but rather is the culmination of multiple interacting factors, some may be project-related, others may not.

It is therefore suggested that the evaluation uses a Contribution Analysis approach to evaluating the project. The purpose of contribution analysis is to assess the contribution that the project /partner has made to achieve the overall project outcome. Contribution analysis will assess the contribution the project is making to observed results. It will set out to verify the theory of change behind the project logframe and, at the same time, take into consideration other influencing factors. Causality will be inferred from the following evidence:

1. The project design is based on a reasoned theory of change: the assumptions behind why the programme is expected to work are sound, are plausible, and are agreed upon by the key players (besides UNDP, the three partner countries) and key supporting organisations to the project.
2. The theory of change is verified by evidence: the chain of expected results occurred.
3. Other factors influencing the project were assessed and were either shown not to have made a significant contribution or, if they did, the relative contribution was recognized.

In simple terms, contribution analysis will involve the following:

- Assemble and assess the contribution story – what have taken place or are taking place, why did they take place and what were the contributions of the partner(s)/project;
- Identify and assess challenges to this story (for example some stakeholders or informants may not accept the claims made by an agency about their role in the changes, and may have a different version of the story);
- As detailed in the logframe, changes may be at the level of various government institutions in the partner countries, and/or at the level of communities and local authorities with which the project works, as well as changes in partner institutions – contribution analysis needs to gather stories/data at all levels;
- Seek out additional information that both supports, and if necessary, challenges the contribution story;
- Record contribution(s) that may not necessarily have been part of the logframe but evolving knowledge and experience which indicate that such changes/contributions have an overall effect on the outcome;

- Revise and strengthen the contribution story.

5.2 Method

The evaluation will use a mixed-method approach, which is suited for a qualitative review like this. The evaluation team will undertake collection of primary quantitative and qualitative data and conduct its analysis in such a way as to complement the information and analysis available from secondary sources (reports, plans and related documents made available by UNDP, ACCA21, Department of Energy and Energy Commission).

In specific terms, the evaluation method will include the following as a minimum:

5.2.1 Desk review

The key documents that will provide secondary data are: business case, project document including logframe (original and revised), M&E framework; etc.

5.2.2 Structured questionnaire

It is envisaged that for all interviewees, a structured questionnaire will be designed and administered to gather relevant data on the project's contributions in the their country context before they are interviewed. Based on an analysis of feedback received through the questionnaires, further key informant interviews (over phone) will be carried out by the review team.

5.2.3 Key informant interviews

- ACCA21, ICSHP, CAU, Lanzhou Solar Centre, Sichuan CDM
- Participating agencies and participants in training and exchange visits from Ghana and Zambia under this project¹
- UNDP/Denmark focal points China, Ghana and Zambia (as per 5.2.2 above)

5.2.4 Site visits

Field visits to selected project locations will be undertaken, during which the evaluator will use direct observations, semi-structured individual interviews and focus group discussions with community members, local government officials and other relevant stakeholders to elicit information and data relevant to the questions of this review.

6. Organization of the Terminal Evaluation

The review will be carried out by an independent consultant who will be managed by UNDP China's project focal point.

Advisory support will be provided from a steering committee comprising of representatives from the Embassy of Denmark to China, Embassy of Ghana to China, Embassy of Zambia to China, ACCA21/MOST, Department of Energy of Zambia, Energy Commission of Ghana, UNDP Ghana, UNDP Zambia and UNDP China who will convene the steering committee. The UNDP China Team leader for South South Cooperation will also act as the first point of quality assurance for the evaluation.

The evaluator will be expected to work closely with the project's focal point who will provide advice and support as needed.

Level of Effort (LoE) envisaged for the Terminal Evaluation:

¹ It is not envisaged for the evaluation team to visit each country, but telephone interviews and structured questionnaires are part of the intended plan.

Task	International Consultant	UNDP China
<i>Desk review and Preparations</i>	4	3
<i>Write Inception report</i>	2	1
<i>Mission Ghana and Zambia</i>	10	0
Data analysis and production of draft report, incorporating findings from questionnaire	8	2
QA and final report	2	1
total	26	10

7. Deliverables

- Inception report outlining the main areas of capacity development to be reviewed
- A draft evaluation report, not exceeding 20 A4 pages
- A lessons learnt and recommendations report
- A final review report not exceeding 24 pages including executive summary.

8. Evaluation Ethics

The Terminal Evaluation will be conducted in accordance with the principles outlined in the UNEG 'Ethical Guidelines for Evaluation'².

For this reason, UNDP staff members based in other country offices, the regional centres and Headquarters units should not be part of the evaluation team.

In order to safeguard the rights and confidentiality of information providers, during the design and implementation of the evaluation, compliance with legal codes governing areas such as provisions to collect and report data, particularly permissions needed to interview or obtain information about children and young people; provisions to store and maintain security of collected information; and protocols to ensure anonymity and confidentiality should be ensured.

9. Qualifications and Competencies required

One international consultant will conduct the Terminal Evaluation. The consultant needs prior experience and exposure to projects and evaluations and should not have participated in the project preparation, formulation, and/or implementation (including the writing of the Project Document) and should not have a conflict of interest with project's related activities.

The required qualifications for the **international consultant** include the following:

Competency:

- Experience with South-South cooperation and project monitoring and review;
- Good understanding of the socio-economic contexts and renewable energy sector of China/Ghana/Zambia;
- Ability and experience in conducting reviews, and delivering high quality reports;
- Familiarity with UNDP and its development projects;
- Excellent communication skills;
- Demonstrable analytical skills;
- Project evaluation/review experiences within United Nations system will be considered an asset;

² UNEG, 'Ethical Guidelines for Evaluation', June 2008. Available at <http://www.uneval.org/>

Education:

- An advanced degree in *energy, environmental science, public policy, international development* or other related field.

Experience:

- Work experience in relevant technical areas;
- Recent experience with result-based management evaluation methodologies;
- Experience applying SMART indicators and reconstructing or validating baseline scenarios;

Language:

- Fluency in written and spoken English is required;
- Knowledge of Chinese is an asset, but not required.

10. Payment Modalities and Specifications

10% upon presentation of initial findings after the Inception Report

30% upon submission of the draft evaluation report

60% upon approval of the Terminal Evaluation report

11. Application Process

Documents to be included when submitting your application:

- Please provide Offeror's Letter and proposal (as attached) together with your CV while submitting application;
- In the Offeror's Letter and proposal, you will be asked to confirm your interest and availability for the assignment, and provide technical and financial proposal.

Technical Proposal:

- Explaining why you are the most suitable for the work with example/former experience demonstrating your competencies;
- Provide a brief methodology on how you will approach and conduct the work (max 1 page).

Financial Proposal:

- Please propose the quantity of actual working days and quote the daily rate for professional fee and others related.

Selection criteria

- Technical evaluation (including written test, interview, desk review of technical proposal, if any): 70%(includes 20% of Job Related Technical Expertise; 25% of Relevant working experience; 25% of Methodology & Approach to Assignment)
- Financial Evaluation: 30%

UNDP applies a fair and transparent selection process that will take into account the competencies/skills of the applicants as well as their financial proposals. Qualified women and members of social minorities are encouraged to apply.

All application materials should be submitted by **April 5, 2019**. Incomplete applications will be excluded from further consideration.

Criteria for Evaluation of Proposal: Only those applications which are responsive and compliant will be evaluated. Offers will be evaluated according to the Combined Scoring method – where the educational background and experience on similar assignments will be weighted at 70% and the price proposal will weigh as 30% of the total scoring. The applicant receiving the Highest Combined Score that has also accepted UNDP's General Terms and Conditions will be awarded the contract.

Annex 1

The specific outputs according to the expected outcomes for the project are as follows:

Zambia

Outcome 1: The enabling environment for the transfer and use of priority renewable technologies in Zambia strengthened

Output 1.1 Improved policies, legislation and standards for the transfer and use of project technologies for rural electrification

Output 1.2 Financial mechanism for RETs established

Outcome 2: Reduced barriers to the adoption of renewable technologies for the rural poor in Zambia

Output 2.1 Priority technologies tested and demonstrated at dedicated testing and training center and community of practice established

Output 2.2 Institutional and technological capacity among stakeholders built

Outcome 3: China has increased capacity to implement South-South Cooperation projects in relation to RET transfer

Output 3.1: Chinese stakeholders have increased understanding of the Zambian context and knowledge exchange with Zambian stakeholders initiated

Output 3.2 A Chinese Centre for South-South Cooperation within the Ministry of Science and Technology supported

Outcome 4: Project organization and coordination structures established

Output 4.1: Project Management Structures established

Output 4.2 Project Coordination Structures established

Ghana

Outcome 1: Ghana has an enabling environment in place for the transfer, production and regulation of the use of Renewable Energy Technologies in Ghana.

Output 1.1: Strategy and policies for enhanced use, regulation and promotion of RET in Ghana in place

Output 1.2 Barriers to effective transfer of Renewable Energy Technologies removed

Outcome 2: Access to and use of relevant Renewable Energy Technologies (RETs) increased in Ghana.

Output 2.1: Appropriateness of selected technologies (either biogas, improved cook stoves, solar PV, biogas power generation and mini hydro) for transfer demonstrated

Output 2.2 Increased use of Renewable Energy Technologies in Ghana supported through capacity building and financing mechanisms

Outcome 3: China's has strengthened capacity for South-South Cooperation in relation to RET transfer

Output 3.1: Knowledge base and China – Ghana networks for South-South Cooperation on technology transfers created

Output 3.2 Mechanisms for promoting RETT from China to Ghana established

Outcome 4: Project management and coordination structures established

Output 4.1: Project Management Structures established

Annex 2

Standard outline for an evaluation report overview

In brief the minimum contents of an evaluation report include:

1. **Title and opening pages** with details of the project/programme/outcome and of the evaluation team.
2. **Project and evaluation Information details:** project title, Atlas number, budgets and project dates and other key information.
3. **Table of contents.**
4. **List of acronyms and abbreviations**
5. **Executive summary:** a stand-alone section of maximum four pages including the quality standards and assurance ratings.
6. **Introduction and overview.** What is being evaluated and why?
7. **Description of the intervention being evaluated.** Provides the basis for report users to understand the logic and evaluability analysis result, assess the merits of the evaluation methodology and understand the applicability of the evaluation results.
8. **Evaluation scope and objectives.** The report should provide a clear explanation of the evaluation's scope, primary objectives and main questions.
9. **Evaluation approach and methods.** The evaluation report should describe in detail the selected methodological approaches, methods and analysis.
10. **Data analysis.** The report should describe the procedures used to analyse the data collected to answer the evaluation questions.
11. **Findings and conclusions.** Evaluation findings should be based on an analysis of the data collected and conclusions should be drawn from these findings.
12. **Recommendations.** The report should provide a reasonable number of practical, feasible recommendations directed to the intended users of the report about what actions to take or decisions to make.
13. **Lessons learned.** As appropriate and as requested in the TOR, the report should include discussion of lessons learned from the evaluation of the intervention.
14. **Annexes.**