



UNITED NATIONS INDUSTRIAL

DEVELOPMENT ORGANIZATION

TERMS OF REFERENCE

Independent terminal evaluation of the project:

Upgrading of China Small Hydropower (SHP) Capacity

**UNIDO ID: 140196
GEF Project ID: 6919**

August 2023

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I. PROJECT BACKGROUND AND CONTEXT

1. Project factsheet¹

Project title	Upgrading of China SHP Capacity Project
UNIDO ID	140916
GEF Project ID	6919
Country(ies)	China, PR
Project donor(s)	GEF
Project approval date/GEF CEO endorsement date	05 May 2016
Planned project start date (as indicated in project document/or GEF CEO endorsement document)	
Actual project start date (First PAD issuance date)	22 May 2017
Planned project completion date (as indicated in project document/or GEF CEO endorsement document)	21 May 2022
Actual project completion date (as indicated in UNIDO ERP system)	31 December 2023
Project duration (year): Planned: Actual:	5 years 6 years and 7 months
GEF Focal Areas and Operational Programme	Climate Change
Implementing agency(ies)	UNIDO
Government coordinating agency	Ministry of Water Resources (MWR) & Ministry of Finance (MOF), China P.R.
Executing Partners	International Center on Small Hydropower (ICSHP)
Donor funding	USD 8,925,000
UNIDO input (in kind, USD)	USD 375,000
Co-financing at CEO Endorsement, as applicable	USD 74,578,448
Total project cost (USD), excluding support costs	USD 83,503,448
Mid-term review date	1 Feb 2020
Planned terminal evaluation date	August 2023

(Source: Project document, UNIDO ERP system)

¹ Data to be validated by the Consultant

2. Project context

UNIDO, in association with the Ministry of Water Resources (MWR), is currently implementing the project entitled Upgrading of China Small Hydropower (SHP) Capacity (hereinafter referred to as 'the Project'). The Project will focus on environmental upgrading of rural SHP stations in China, in line with the priorities of the Chinese Government, as outlined in its 13th National Five-Year Plan (FYP) 2016-2020.

China sees hydropower as an important option to decarbonise its energy portfolio. In 2011, the country set a binding target of reducing CO₂ emissions per unit GDP by 17% in its 12th FYP. The bar was raised further to 18% in the subsequent 13th FYP. By the end of 2020, the plan aimed to increase the non-fossil proportion of primary energy consumption of the country to 15%. To realize this, the plan gave hydropower a prominent role, but also stipulated that its development should "prioritize ecological wellbeing". Since 2004, small hydropower, also known as rural hydropower in China for being overwhelmingly located in rural areas, has been a pivot point in China's rural development programmes for its contribution to renewable energy supply and poverty alleviation.

The Project was initiated in 2015 in alignment with China's efforts to refurbish its existing SHP projects across the country under its 13th FYP. With most of the country's SHP projects operating with ageing infrastructure and dwindling efficiency, in 2011 under its 12th FYP, China started its SHP Capacity Expansion and Efficiency Improvements Programme for SHP refurbishment. SHP plants built before 1995 were eligible for governmental subsidies for expanding their installed capacity and improving their efficiencies. The positive outcomes from the programme prompted the central government to continue funding SHP capacity expansion under its 13th FYP and include more SHP plants (built before 2000). Similar to the previous period, eligible SHP plants were partially subsidised for costs of capacity expansion and efficiency improvement. Moreover, the renewed programme built upon the 12th FYP experience to highlight environmental integrity at river basin scales. Therefore, the Project leverages the opportunities presented by this 13th FYP programme and addresses the need to improve the environmental and social sustainability of increased SHP development in China.

The Project generates significant environmental and social benefits that span across a spectrum of stakeholders. Additional outputs of renewable energy would meet energy demands that otherwise had to be met by fossil fuels and therefore contribute to GHG emission cuts. By managing the environmental impacts from SHP development that allows for the recovery and restoration of ecological services of the rivers, the benefits spill over to other stake-holding sectors that are reliant on these valuable services. Moreover, the success stories and improved policies and institutions that the Project contributed to are going to bolster confidence in green and sustainable SHP development, and hence allow replication and proliferation of similar practices across the country. The knowledge and experiences accumulated through the implementation of the Project will also be beneficial to other developing countries undergoing similar transitions.

3. Project objective and expected outcomes

The Project aims to support the SHP Capacity Expansion and Efficiency Improvements Programme of the Ministry of Water Resources (MWR), by reducing the environmental impact of SHP plants to better meet the challenges imposed by climate change. The objective of this project is to reduce GHG emissions and dependence on fossil fuels through the promotion of upgrading, greening and improving the management of existing SHP stations, contributing to the competitiveness of China's industries. Alongside important social and economic benefits, the project will improve local river ecology, hence contributing to adaptation of SHP plants to climate change. It is estimated that additional electricity of about 133,585

MWh will be obtained through the project activities, resulting in emission reductions of 1.87m tCO₂e. The project will transfer knowledge and technology in the field of green hydropower within China, leading to positive environmental impacts.

More specifically, the project is structured in three technical components, plus a monitoring and evaluation component, as set out below:

Component 1: Policy and institutional framework. This component will strengthen the policy and regulatory framework to effectively promote and support green SHP upgrading by the development of a Ministerial Standard on green SHP, through support for incentive measures as well as assisting in the roll out of the Safe Production SHP standards.

Component 2: Technology Demonstration. This component will demonstrate technical feasibility and commercial viability of green and safe upgraded SHPs (see the name list below) at different capacities demonstrating a variety of environmental and safe production measures. Technical assistance and grants will be provided to facilitate the project's development. These will build the confidence of both industry and the finance sector, create best practice examples to pave the way for replication on the basis of experience gained, reduce (perceived) risk and increase capacity and awareness at multiple levels, i.e. industry (both at operational and decision-making level) and finance.

Component 3: Capacity building and increasing knowledge base. This component will strengthen the institutional capacity as well as address the insufficient technical capacity training, awareness and the development of knowledge products. Activities under this component will be implemented in parallel with components 1 and 2 on policy framework and technology demonstration in order to prepare for the scale up / mainstreaming of green and safe SHP within and beyond the project.

Component 4: Monitoring and Evaluation. A two-pronged approach will be followed: 1) monitoring and evaluation against the GEF's strategic indicators, and 2) monitoring and evaluation of project specific technical indicators for outputs per component (components 1-3 as listed above). Ultimately, this will provide an indication of the achievement of the goals that the project has set out to achieve.

The following are, in brief, some of the expected results of the project:

- Policy and institutional framework:
 - Green SHP Assessment Standard and aligned technical standards formulated and revised
 - Preferential green SHP policies developed and recommended
 - Safe Production standard criteria rolled out nationwide
- Technical demonstration:
 - Business plans and feasibility studies finalised for upgrading SHP demonstration plants
 - SHP plants rehabilitated and upgraded at demonstration sites with additional installed capacity and power output
 - Socio-economic and environmental impact of green SHP rehabilitation recorded
- Capacity and knowledge sharing:
 - Capacity building programme for SHP project owners, developers and technicians delivered
 - Capacity building programme for officials on green SHP and Safety and Protection regulation
 - Inception awareness raising workshop held
 - Technical support provided to SHP plants for passing green SHP certification of MWR
 - Technical support provided to SHP plants for passing accreditation of operational safety

4. Project implementation arrangements

Implementation of the Project is under a partnership between UNIDO and China's Ministry of Water Resources (MWR) and Ministry of Finance (MOF), with additional partners including the International Center on Small Hydropower (ICSHP, an affiliated institution to MWR) and provincial water departments in 8 provinces where demonstration plants are located (see Figure 1). The partnership forms the basis of the Project Steering Committee (PSC), which meets annually for decisions in project implementation targets, milestones, and budgets. Additional meetings could be called for in case of need.

UNIDO, as the GEF Implementation Agency, is responsible for the overall supervision, monitoring, evaluation and implementation of the Project, in accordance with Project Documents, UNIDO-GEF Memorandum of Understanding, UNIDO-IBRD (GEF Trustee) Financial Procedures Agreement, and applicable GEF policies and procedures.

MOF, the national GEF Focal Point, is in a Project Implementation Agreement with UNIDO for an oversight role over the Project, and confirmed MWR as the Executing Entity to manage activities under the Project. MWR, China's highest SHP regulator, has a Project Execution Agreement with UNIDO, according to which MWR is responsible for setting up and maintaining the Project Steering Committee for the duration of the Project consisting of senior MWR and GEF officials and UNIDO representatives. MWR appointed ICSHP as its Delegated Executing Entity to carry out the activities of the Project on its behalf.

As the Delegated Executing Entity agreed with MWR, ICSHP is responsible for the execution and day-to-day management of the Project. Under guidance of UNIDO and MWR, and direct supervision of the Project Steering Committee (PSC), ICSHP consults on all aspects of the execution of the Project as appropriate. ICSHP also hosts the Project Management Office (PMO) for management and execution of all national-level technical assistance and day-to-day Project coordination and monitoring.

See Figure 1 below for the management structure of the Project:

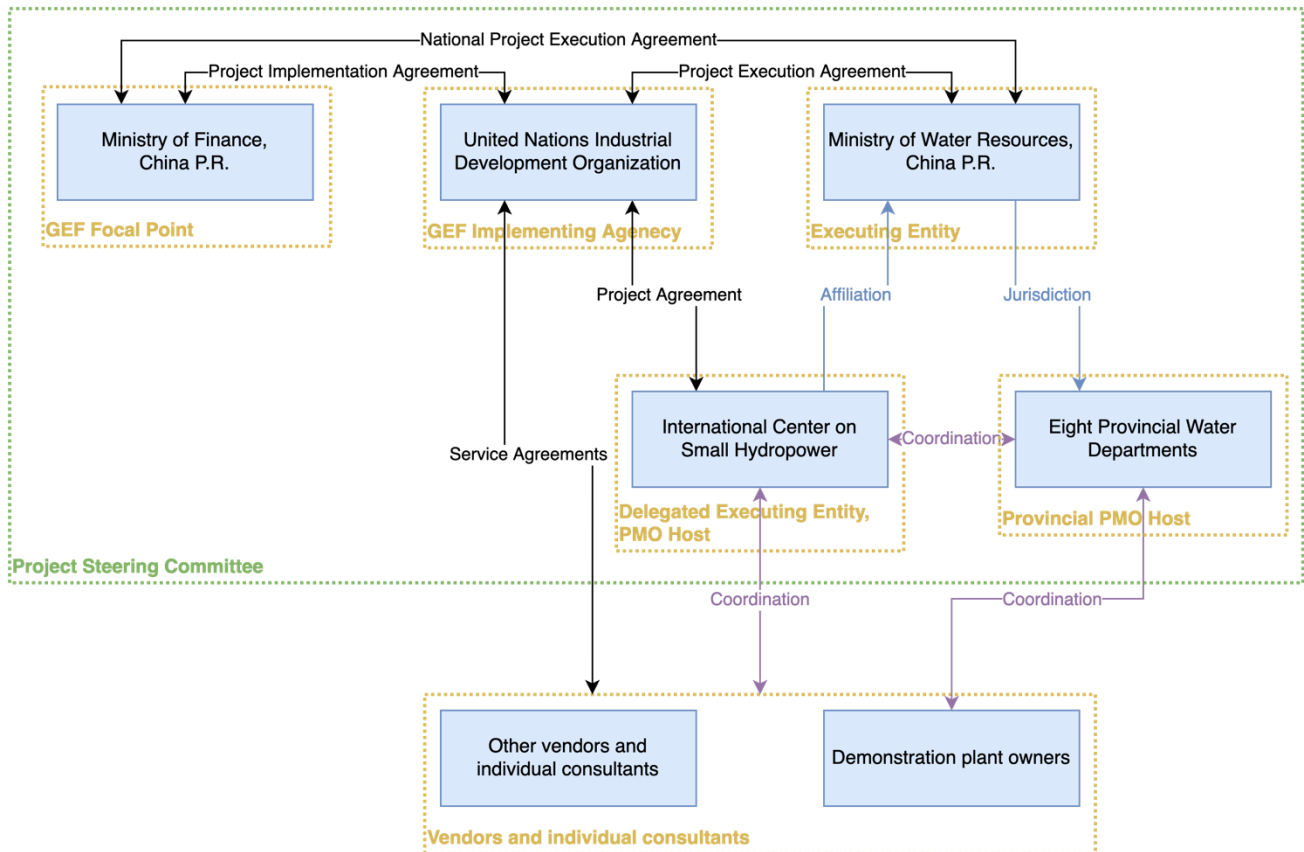


Figure 1. Project Management Structure

5. Main findings of the Mid-term review (MTR)

An Interim Performance Evaluation (IPE) was organised by the Project Management Office (PMO) between September 2019 and January 2020, in compliance with MOF's evaluation requirements for projects funded through international financing institutions. Due to the outbreak of the Covid-19 pandemic and restrictions of international travel, UNIDO was not able to organise a separate Mid-Term Review (MTR), which was also in repetition of the IPE. It was therefore agreed through the PSC and UNIDO that the findings and recommendations from IPE would be adopted for MTR.

Independent national consultants were recruited for the IPE, who reviewed the Project's inputs, activities, outputs and outcomes from May 2016 to September 2019 and came to the following conclusions:

- The Project has **very high relevance** to the sustainable development of the SHP industry in China, including national strategies of the industry, and the needs of key beneficiaries.
- The Project has **high efficiency** in output delivery, budget management, quality control, economy of investment, and innovation.
- The Project has **high effectiveness** in achieving milestones of project components and benefiting target communities.
- The Project has **very high sustainability** in mechanisms of financing, relevance to socio-economic priorities, partnership building, managing organisations and personnel.
- The overall implementation of the Project has been **smooth**.

The Project was included in MOF's report for the "2019 Case Study of Performance Evaluation of IFI and Foreign Governmental Loan Projects in China", and was the only project implemented by central government agencies of China included in the report.

The IPE also made these recommendations for the following implementation of the Project:

- **Communication with UNIDO:** As the Project is managed directly through the UNIDO SAP system, PMO should make more communication with UNIDO departments to streamline processes such as procurement, budgeting and recruitment.
- **Support for financial management:** PMO and provincial PMOs should provide more help for owners of the demonstration plants to be more familiarised with GEF policies and financial management rules of UNIDO, and improve reporting qualities.
- **Knowledge sharing and awareness raising:** The Project has accumulated valuable experience and knowledge through its implementation, which should be organised for more dissemination through opportunities such as seminars, media and research to disseminate, and awareness-raising to win more general support.
- **Tracking and supporting local policy formulation:** The Project needs to pay more attention to the formulated and opportunities of formulating local policies supporting green SHP, including those for payment for ecosystem services, government subsidies, tax discounts or refund, etc.

The above recommendations were integrated in the second half of the implementation. Additional UNIDO personnel joined the Project team to stay closely connected to the PMO and offer assistance. The PMO paid special attention to the financial management with regular practical support provided to plant owners in demonstration. As more tasks completed under the Project, knowledge sharing and awareness raising became a growing focus as Component 3 picked up. The tracking and supporting of local policies were incorporated into the development of recommendations for national and local policies under Component 1.

6. Budget information

Table 1. Financing plan summary - Outcome breakdown

Project outcomes/components	Donor (GEF) (\$)	Co-Financing (\$)	Total (\$)
Project Preparation	\$200,000	--	\$200,000
Policy and institutional framework	\$1,200,000	\$1,685,000	\$2,885,000
Technology Demonstration	\$6,000,000	\$66,614,448	\$72,614,448
Capacity building and increasing knowledge base	\$1,150,000	\$3,694,000	\$4,844,000
Monitoring and evaluation	\$150,000	\$700,000	\$850,000
Project management cost	\$425,000	\$1,885,000	\$2,310,000
Total (\$)	\$8,925,000	\$74,578,448	\$83,503,448

Source: Project document

Table 2. Co-Financing source breakdown

Name of Co-financier (source)	In-kind	Cash	Total Amount (\$)
Recipient national government (MWR / MOF)	3,709,000	22,956,835	26,665,835
Recipient local government (provincial and lower)	6,000,000	9,909,759	15,909,759
Beneficiary SHP plant owners	19,250,782	--	19,250,782
National and provincial bank loans	--	12,377,072	12,377,072
UNIDO (GEF Agency)	300,000	75,000	375,000
Total Co-financing (\$)	29,259,782	45,318,666	74,578,448

Source : Project document

Table 3. UNIDO budget allocation and expenditure by budget line

Budget line	Items by budget line	2017*	2018*	2019*	2020*	2021*	2022*	2023*	Total expenditure (at completion)		Total allocation (at approval)	
									(USD)	%	(USD)	%
1100	Staff & Intern Consultants	70,455.60	51,836.67	6,025.16	86,071.84	13,592.51	4,959.91	55,108.80	288,050.49	3.55	593,922.57	6.65
1500	Local Travel	0.00	0.00	38,003.27	-35.94	0.00	0.00	2,034.55	40,001.88	0.49	52,967.33	0.59
1700	Nat.Consult./ Staff	0.00	0.00	28,640.33	52,804.39	20,415.91	121,141.39	208,130.70	431,132.72	5.31	739,355.78	8.28
2100	Contractual Services	0.00	0.00	90,000.00	736,179.00	323,249.70	246,556.31	90,689.41	1,486,674.42	18.31	1,180,546.11	13.23
3000	Train/Fellowship/Study	0.00	0.00	58,000.00	109,970.00	370,456.20	-76.56	-36.78	538,312.86	6.63	614,970.00	6.89
3500	International Meetings	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	22,693.04	0.25
4300	Premises	0.00	361,250.00	0.00	-252,875.00	0.00	0.00	0.00	108,375.00	1.33	307,447.00	3.44
4500	Equipment	0.00	4,714,568.52	126.42	91,957.24	-19,904.64	-107,941.57	-182,209.47	4,496,596.50	55.38	5,400,605.42	60.51
5100	Other Direct Costs	-11.74	4,553.46	-373.38	6,930.30	-35.95	368.13	13,915.15	25,345.97	0.31	12,492.75	0.14
9300	Support Cost IDC	6,692.16	487,559.82	20,940.04	78,945.26	67,238.51	18,841.50	24,159.25	704,376.54	8.68	0.00	0.00
Total		77,136.02	5,619,768.47	241,361.84	909,947.09	775,012.24	283,849.11	211,791.61	8,118,866.38	100	8,925,000.00	100

Source: Project document and UNIDO Project Management ERP database as of 30 June 2023.

* in fiscal years (1 July to 30 June), and excluding project preparation costs. Information for fiscal year 2024 (1 July 2023 to 30 June 2024) is to be completed.

Table 4. UNIDO budget allocation and expenditure by component

#	Project components	Total allocation (at approval)		Total expenditure (at completion)	
		USD	%	USD	%
1	Component 1. Policy and institutions	1,200,000	13.45	1,153,230.88	14.20
2	Component 2. Technical demonstration	6,000,000	67.23	5,700,514.40	70.21
3	Component 3. Capacity building & knowledge sharing	1,150,000	12.89	920,773.06	11.34
4	Component 4. Monitoring & evaluation	150,000	1.68	15,073.40	0.19
5	Project management	425,000	4.76	329,274.64	4.06
	Total	8,925,000	100	8,118,866.38	100

Source: Project document and UNIDO Project Management ERP database as of 30 June 2023. Project preparation costs excluded. Information for fiscal year 2024 (1 July 2023 to 30 June 2024) is to be completed.

II. SCOPE AND PURPOSE OF THE EVALUATION

The purpose of the evaluation is to independently assess the project to help UNIDO improve performance and results of ongoing and future programmes and projects. The terminal evaluation (TE) will cover the whole duration of the project from its starting date in May 2017 to the estimated completion date in December 2023.

The evaluation has two specific objectives:

- (i) Assess the project performance in terms of relevance, effectiveness, efficiency, sustainability, coherence, and progress to impact; and
- (ii) Develop a series of findings, lessons and recommendations for enhancing the design of new and implementation of ongoing projects by UNIDO.

III. EVALUATION APPROACH AND METHODOLOGY

The TE will be conducted in accordance with the UNIDO Evaluation Policy,² the UNIDO Guidelines for the Technical Cooperation Project and Project Cycle,³ and UNIDO [Evaluation Manual](#). In addition, the GEF Guidelines for GEF Agencies in Conducting Terminal Evaluations, the GEF Monitoring and Evaluation Policy and the GEF Minimum Fiduciary Standards for GEF Implementing and Executing Agencies will be applied. The evaluation will be carried out as an independent in-depth exercise using a participatory approach whereby all key parties associated with the project will be informed and consulted throughout the process. The evaluation team leader will liaise with the UNIDO Independent Evaluation Unit (EIO/IEU) on the conduct of the evaluation and methodological issues.

The evaluation will use a theory of change approach⁴ and mixed methods to collect data and information from a range of sources and informants. It will pay attention to triangulating the data and information collected before forming its assessment. This is essential to ensure an evidence-based and credible evaluation, with robust analytical underpinning.

The theory of change will depict the causal and transformational pathways from project outputs to outcomes and longer-term impacts. It also identifies the drivers and barriers to achieving results. Learning from this analysis will be useful for the design of future projects so that the management team can effectively use the theory of change to manage the project based on results.

1. Data collection methods

Following are the main instruments for data collection:

- (a) **Desk and literature review** of documents related to the project, including but not limited to:
 - The original project document, monitoring reports (such as progress and financial reports, mid-term review report, technical reports, back-to-office mission report(s), end-of-contract report(s) and relevant correspondence.
 - Notes from the meetings of committees involved in the project.
- (b) **Stakeholder consultations** will be conducted through structured and semi-structured interviews and focus group discussions. Key stakeholders to be interviewed include:
 - UNIDO Management and staff involved in the project; and
 - Representatives of donors, counterparts, and other stakeholders.

² UNIDO. (2021). Director General's Bulletin: Evaluation Policy (UNIDO/DGB/2021/11)

³ UNIDO. (2006). Director-General's Administrative Instruction No. 17/Rev.1: Guidelines for the Technical Cooperation Programme and Project Cycle (DGAI.17/Rev.1, 24 August 2006)

⁴ For more information on Theory of Change, please see chapter 3.4 of UNIDO [Evaluation Manual](#).

- (c) **Field visit** to project sites in China.
- On-site observation of results achieved by the project, including interviews of actual and potential project beneficiaries.
 - Interviews with the relevant UN Resident Coordinator and UNIDO Country offices' representative to the extent that he/she was involved in the project and the project's management members and the various national [and sub-regional] authorities dealing with project activities as necessary.
- (d) **Online data collection** methods will be used to the extent possible.

2. Key evaluation questions and criteria

The key evaluation questions (corresponding to the six OECD/DAC criteria) are the following:

- 1) **Relevance**: Is the intervention doing the right things for the upgrading and value adding of SHP development in China? To what extent do the project's objectives respond to national needs, policies, and priorities, and continue to do so under continued global warming and ecosystem degradation?
- 2) **Coherence**: How well does the intervention fit into China's development goals in decarbonising its energy portfolio and sustaining growth in an ecologically sustainable way? How compatible is the project with other interventions in the country for these national goals?
- 3) **Effectiveness**: Is the project achieving its objectives in environmental upgrading of SHP development in China? What additionalities has the project generated?
- 4) **Efficiency**: How well are resources being used for achieving the project's objectives? Has the project delivered results in an economic and timely manner?
- 5) **Impact**: What difference does the intervention make in China's SHP sector? To what extent has the project generated significant positive or negative, intended or unintended, higher-level effects? Has the project had transformative effects in the SHP sector in China? What impact is the project expected to have on SHP development elsewhere in the world?
- 6) **Sustainability**: Will the benefits last? To what extent will the net benefits of the project continue, or are likely to continue?

The evaluation team should prepare a detailed questionnaire/interview guide based on the above items for individual communication.

The table below provides the key evaluation criteria to be assessed by the evaluation. The detailed questions to assess each evaluation criterion are in Annex 2 of UNIDO [Evaluation Manual](#).

Table 5. Project evaluation criteria

#	Evaluation criteria	Mandatory rating
A	Progress to Impact	Yes
B	Project design	Yes
1	• Overall design	Yes
2	• Project results framework/log frame	Yes
C	Project performance and progress towards results	Yes
1	• Relevance	Yes
2	• Coherence	Yes
3	• Effectiveness	Yes
4	• Efficiency	Yes
5	• Sustainability of benefits	Yes

D	Gender mainstreaming	Yes
E	Project implementation management	Yes
1	• Results-based management (RBM)	Yes
2	• Monitoring and Evaluation, Reporting	Yes
F	Performance of partners	
1	• UNIDO	Yes
2	• National counterparts	Yes
3	• Donor	Yes
G	Environmental and Social Safeguards (ESS), Disability and Human Rights	Yes
1	• Environmental Safeguards	Yes
2	• Social Safeguards, Disability and Human Rights	Yes
H	Overall Assessment	Yes

Other assessments required by the GEF for GEF-funded projects, for non GEF projects these topics should be covered as applicable:

The terminal evaluation will assess the following topics, for which **ratings are not required**:

- a. **Need for follow-up:** e.g. in instances of financial mismanagement, unintended negative impacts or risks.
- b. **Materialization of co-financing:** e.g. the extent to which the expected co-financing materialized, whether co-financing was administered by the project management or by some other organization; whether and how shortfall or excess in co-financing affected project results. At the terminal evaluation point, the Project Manager will update table 3 on co-financing and add two more columns to submit to the evaluation team: 1) Amount of co-financing materialized at mid-term review (MTR); and 2) Amount of co-financing materialized at terminal evaluation (TE). The evaluation team has the responsibility to validate and verify the co-financing amount materialized during the evaluation process. This table MUST BE included in the terminal evaluation report, as per requirement by the GEF.
- c. **Environmental and Social Safeguards⁵:** appropriate environmental and social safeguards were addressed in the project’s design and implementation, e.g. preventive or mitigation measures for any foreseeable adverse effects and/or harm to environment or to any stakeholder.
- d. **Updated Monitoring and Assessment tool of core-indicators:** The project management team will submit to the evaluation team the up-to-date core-indicators or tracking tool (for older projects) whereby all the information on the project results and benefits promised at approval and actually achieved at completion point must be presented. The evaluation team has the responsibility to validate and verify updated core-indicators during the evaluation process. This table MUST BE included in the terminal evaluation report, as per requirement by the GEF.
- e. **Knowledge Management Approach:** Information on the project’s completed Knowledge Management Approach that was approved at CEO Endorsement/Approval.

⁵ Refer to GEF/C.41/10/Rev.1 available at: http://www.thegef.org/sites/default/files/council-meetingdocuments/C.41.10.Rev_1.Policy_on_Environmental_and_Social_Safeguards.Final%20of%20Nov%202018.pdf

3. Rating system

In line with the practice adopted by many development agencies, the UNIDO Independent Evaluation Unit uses a six-point rating system, where 6 is the highest score (highly satisfactory) and 1 is the lowest (highly unsatisfactory) as per the table below.

Table 6. Project rating criteria

Score		Definition
6	Highly satisfactory	Level of achievement presents no shortcomings (90% - 100% achievement rate of planned expectations and targets).
5	Satisfactory	Level of achievement presents minor shortcomings (70% - 89% achievement rate of planned expectations and targets).
4	Moderately satisfactory	Level of achievement presents moderate shortcomings (50% - 69% achievement rate of planned expectations and targets).
3	Moderately unsatisfactory	Level of achievement presents some significant shortcomings (30% - 49% achievement rate of planned expectations and targets).
2	Unsatisfactory	Level of achievement presents major shortcomings (10% - 29% achievement rate of planned expectations and targets).
1	Highly unsatisfactory	Level of achievement presents severe shortcomings (0% - 9% achievement rate of planned expectations and targets).

IV. EVALUATION PROCESS

The evaluation will be conducted from August 2023 to December 2023. The evaluation will be implemented in five phases, which are not strictly sequential, but in many cases iterative, conducted in parallel and partly overlapping:

- 1) Inception phase: The evaluation team will prepare the inception report providing details on the evaluation methodology and include an evaluation matrix with specific issues for the evaluation to address; the specific site visits will be determined during the inception phase, taking into consideration the findings and recommendations of the mid-term review.
- 2) Desk review and data analysis;
- 3) Interviews, survey and literature review;
- 4) Country visits (whenever possible) and debriefing to key relevant stakeholders in the field;
- 5) Data analysis, report writing and debriefing to UNIDO staff at the Headquarters; and
- 6) Final report issuance and distribution with management response sheet, and publication of the final evaluation report in UNIDO website.

V. TIME SCHEDULE AND DELIVERABLES

The evaluation is scheduled to take place from September 2023 to December 2023. The evaluation field mission is tentatively planned for 11/2023. At the end of the field mission, the evaluation team will present the preliminary findings for key relevant stakeholders involved in this project in the country. The tentative timelines are provided in the table below.

After the evaluation field mission, the evaluation team leader will arrange a virtual debriefing and presentation of the preliminary findings of the terminal evaluation with UNIDO Headquarters. The draft TE report will be submitted 4 weeks after the end of the mission. The draft TE report is to be shared with the UNIDO Project Manager (PM), UNIDO Independent Evaluation Unit, the UNIDO GEF Coordinator and GEF OFP and other stakeholders for comments. The Evaluation team leader is expected to revise the draft TE report based on the comments received, edit the language and submit the final version of the TE report in accordance with UNIDO EIO/IEU standards.

Table 7. Tentative timelines

Timelines	Tasks
Sep 2023	Desk review and writing of inception report
Oct 2023	Online briefing with UNIDO project manager and the project team based in Vienna.
Nov 2023	Field visit to China.
Nov/Dec 2023	Online debriefing Preparation of first draft evaluation report
Dec 2023	Internal peer review of the report by UNIDO's Independent Evaluation Division and other stakeholder comments to draft evaluation report
Dec 2023	Final evaluation report

VI. EVALUATION TEAM COMPOSITION

The evaluation team will be composed of one international evaluation consultant acting as the team leader and one national evaluation consultant. The evaluation team members will possess a mixed skill set and experience including evaluation, relevant technical expertise, social and environmental safeguards and gender. Both consultants will be contracted by UNIDO.

The tasks of each team member are specified in the job descriptions annexed to these terms of reference. The evaluation team is required to provide information relevant for follow-up studies, including terminal evaluation verification on request to the GEF partnership up to three years after completion of the terminal evaluation.

According to UNIDO Evaluation Policy, members of the evaluation team must not have been directly involved in the design and/or implementation of the project under evaluation. The UNIDO Project Manager and the project management team in China will support the evaluation team. The UNIDO GEF Coordinator and GEF Operational Focal Point (OFP) will be briefed on the evaluation and provide support to its conduct. GEF OFP(s) will, where applicable and feasible, also be briefed and debriefed at the start and end of the evaluation mission.

An evaluation manager from UNIDO Independent Evaluation Unit will provide technical backstopping to the evaluation team and ensure the quality of the evaluation. The UNIDO Project Manager and national

project teams will act as resource persons and provide support to the evaluation team and the evaluation manager.

VII. REPORTING

Inception report

These Terms of Reference (TOR) provide some information on the evaluation methodology, but this should not be regarded as exhaustive. After reviewing the project documentation and initial interviews with the project manager, the Team Leader will prepare, in collaboration with the team member, a short inception report that will operationalize the TOR relating to the evaluation questions and provide information on what type and how the evidence will be collected (methodology). It will be discussed with and approved by the responsible UNIDO Evaluation Manager.

The Inception Report will focus on the following elements: preliminary project theory model(s); elaboration of evaluation methodology including quantitative and qualitative approaches through an evaluation framework (“evaluation matrix”); Unit of work between the evaluation team members; field mission plan, including places to be visited, people to be interviewed and possible surveys to be conducted; and a debriefing and reporting timetable.

Evaluation report format and review procedures

The draft report will be delivered to UNIDO Independent Evaluation Unit (with a suggested report outline) and circulated to UNIDO staff and key stakeholders associated with the project for factual validation and comments. Any comments or responses, or feedback on any errors of fact to the draft report will be sent to UNIDO’s Independent Evaluation Unit for collation and onward transmission to the evaluation team who will be advised of any necessary revisions. On the basis of this feedback, and taking into consideration the comments received, the evaluation team will prepare the final version of the terminal evaluation report.

The evaluation team will present its preliminary findings to the local stakeholders at the end of the field visit and take into account their feedback in preparing the evaluation report. A presentation of preliminary findings will take place at UNIDO HQ afterwards (on-line).

The evaluation report should be brief, to the point and easy to understand. It must explain the purpose of the evaluation, what was evaluated, and the methods used. The report must highlight any methodological limitations, identify key concerns and present evidence-based findings, consequent conclusions, recommendations and lessons. The report should provide information on when the evaluation took place, the places visited, who was involved and be presented in a way that makes the information accessible and comprehensible. The report should include an executive summary that encapsulates the essence of the information contained in the report to facilitate dissemination and distillation of lessons.

Findings, conclusions and recommendations should be presented in a complete, logical and balanced manner. The evaluation report shall be written in English and follow the outline given by UNIDO Independent Evaluation Unit.

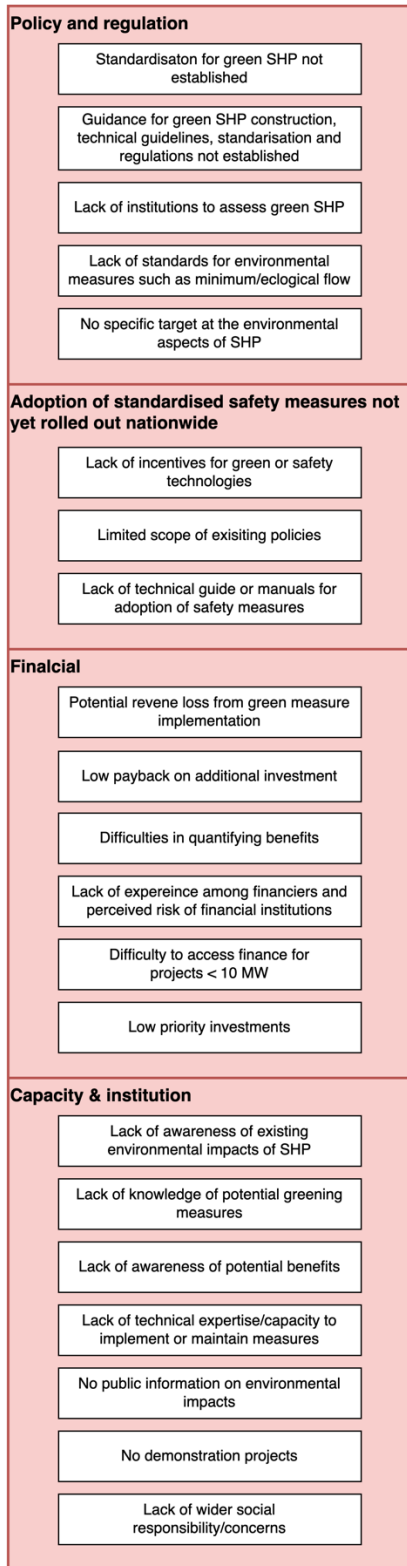
VIII. QUALITY ASSURANCE

All UNIDO evaluations are subject to quality assessments by UNIDO Independent Evaluation Unit. Quality assurance and control is exercised in different ways throughout the evaluation process (briefing of consultants on methodology and process of UNIDO Independent Evaluation Unit, providing inputs regarding findings, lessons learned and recommendations from other UNIDO evaluations, review of inception report and evaluation report by UNIDO's Independent Evaluation Unit).

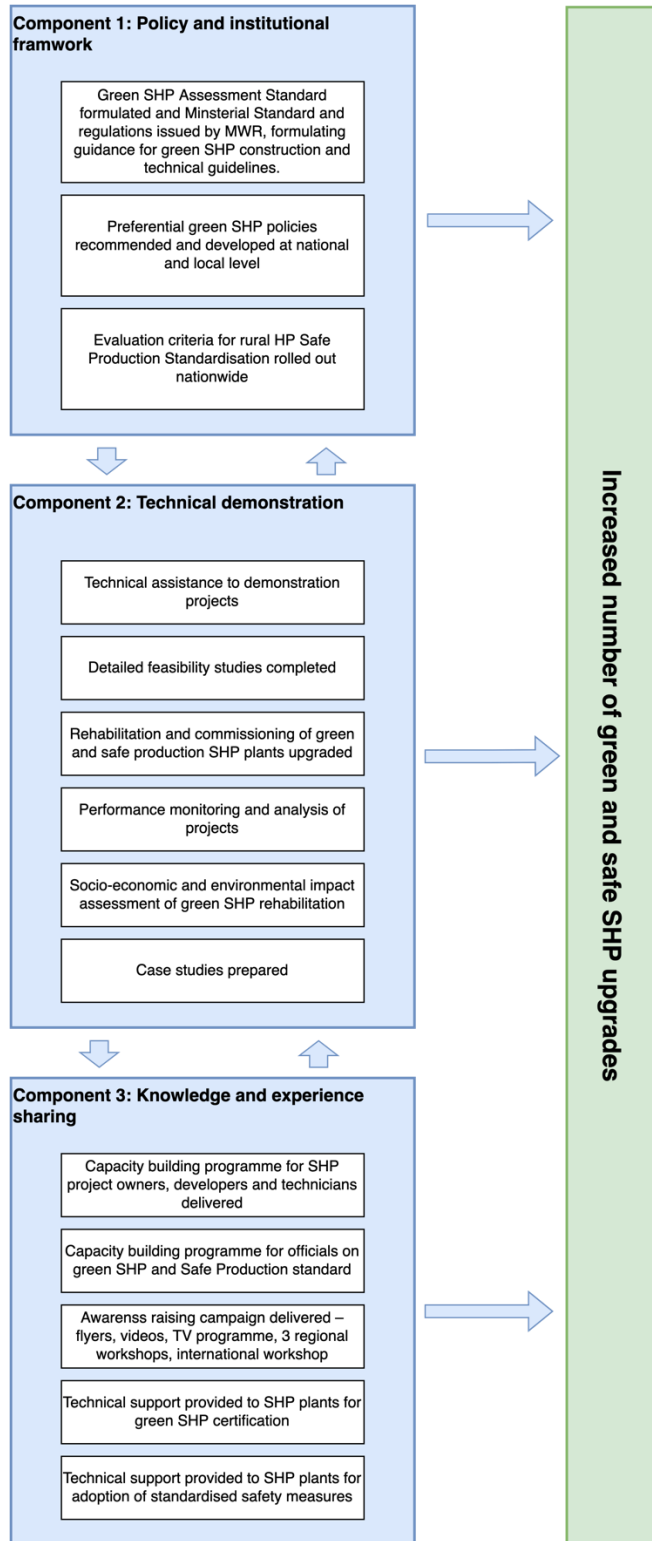
The quality of the evaluation report will be assessed and rated against the criteria set forth in the Checklist on evaluation report quality. The applied evaluation quality assessment criteria are used as a tool to provide structured feedback. UNIDO Independent Evaluation Unit should ensure that the evaluation report is useful for UNIDO in terms of organizational learning (recommendations and lessons learned) and is compliant with UNIDO's evaluation policy and these terms of reference. The draft and final evaluation report are reviewed by UNIDO Independent Evaluation Unit, which will submit the final report to the GEF Evaluation Office and circulate it within UNIDO together with a management response sheet.

Annex 1: Project Logical Framework

Barriers



Project components



Annex 2: Job descriptions



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION TERMS OF REFERENCE FOR PERSONNEL UNDER INDIVIDUAL SERVICE AGREEMENT (ISA)

Title:	Senior evaluation consultant, team leader
Main Duty Station and Location:	Home-based
Missions:	Missions to Vienna, Austria and China
Start of Contract (EOD):	September 2023
End of Contract (COB):	December 2023
Number of Working Days:	35 working days spread over the above mentioned period

1. ORGANIZATIONAL CONTEXT

The UNIDO Independent Evaluation Division (ODG/EIO/IED) is responsible for the independent evaluation function of UNIDO. It supports learning, continuous improvement and accountability, and provides evidence-based analysis and assessment on result and practices that feed into the programmatic and strategic decision-making processes. Independent evaluations provide credible, reliable and useful assessment that enables the timely incorporation of findings, recommendations and lessons learned into the decision-making processes at organization-wide, programme and project level. ODG/EIO/IED is guided by the UNIDO Evaluation Policy, which is aligned to the norms and standards for evaluation in the UN system.

2. PROJECT CONTEXT

Detailed background information of the project can be found the terms of reference (TOR) for the terminal evaluation.

The international evaluation consultant/team leader will evaluate the project in accordance with the evaluation-related terms of reference (TOR). S/he will perform, inter alia, the following main tasks:

MAIN DUTIES	Concrete/ Measurable Outputs to be achieved	Working Days	Location
<p>1. Review project documentation and relevant country background information (national policies and strategies, UN strategies and general economic data). Define technical issues and questions to be addressed by the national technical evaluator prior to the field visit. Determine key data to collect in the field and adjust the key data collection instrument if needed. In coordination with the project manager, the project management team and the national technical evaluator, determine the suitable sites to be visited and stakeholders to be interviewed.</p>	<ul style="list-style-type: none"> Adjusted table of evaluation questions, depending on country specific context; Draft list of stakeholders to interview during the field missions. Identify issues and questions to be addressed by the local technical expert 	4 days	Home-based
<p>2. Prepare an inception report which streamlines the specific questions to address the key issues in the TOR, specific methods that will be used and data to collect in the field visits, confirm the evaluation methodology, draft theory of change, and tentative agenda for field work. Provide guidance to the national evaluator to prepare initial draft of output analysis and review technical inputs prepared by national evaluator, prior to field mission.</p>	<ul style="list-style-type: none"> Draft theory of change and Evaluation framework to submit to the Evaluation Manager for clearance. Guidance to the national evaluator to prepare output analysis and technical reports 	2 days	Home based
<p>3. Briefing with the UNIDO Independent Evaluation Division, project managers and other key stakeholders at UNIDO HQ (included is preparation of presentation).</p>	<ul style="list-style-type: none"> Detailed evaluation schedule with tentative mission agenda (incl. list of stakeholders to interview and site visits); mission planning; Division of evaluation tasks with the National Consultant. 	1 day	Through skype
<p>4. Conduct field mission to China⁶.</p>	<ul style="list-style-type: none"> Conduct meetings with relevant project 	14 days	(specific project)

⁶ The exact mission dates will be decided in agreement with the Consultant, UNIDO HQ, and the country counterparts.

MAIN DUTIES	Concrete/ Measurable Outputs to be achieved	Working Days	Location
	stakeholders, beneficiaries, the GEF Operational Focal Point (OFP), etc. for the collection of data and clarifications; <ul style="list-style-type: none"> • Agreement with the National Consultant on the structure and content of the evaluation report and the distribution of writing tasks; • Evaluation presentation of the evaluation’s preliminary findings, conclusions and recommendations to stakeholders in the country, including the GEF OFP, at the end of the mission. 		site to be identified at inception phase)
5. Present overall findings and recommendations to the stakeholders at UNIDO HQ	<ul style="list-style-type: none"> • After field mission(s): Presentation slides, feedback from stakeholders obtained and discussed. 	1 day	Vienna, Austria
6. Prepare the evaluation report, with inputs from the National Consultant, according to the TOR; Coordinate the inputs from the National Consultant and combine with her/his own inputs into the draft evaluation report. Share the evaluation report with UNIDO HQ and national stakeholders for feedback and comments.	<ul style="list-style-type: none"> • Draft evaluation report. 	11 days	Home-based
7. Revise the draft project evaluation report based on comments from UNIDO Independent Evaluation Division and stakeholders and edit the language and form of the final version according to UNIDO standards.	<ul style="list-style-type: none"> • Final evaluation report. 	2 day	Home-based

MINIMUM ORGANIZATIONAL REQUIREMENTS

Education:

Advanced degree in environment, energy, engineering, development studies or related areas.

Technical and functional experience:

- Minimum of 15-20 years' experience in evaluation of development projects and programmes
- Good working knowledge in China.
- Knowledge about GEF operational programs and strategies and about relevant GEF policies such as those on project life cycle, M&E, incremental costs, and fiduciary standards
- Experience in the evaluation of GEF projects and knowledge of UNIDO activities an asset
- Knowledge about multilateral technical cooperation and the UN, international development priorities and frameworks
- Familiarity with gender analysis tools and methodologies an asset
- Working experience in developing countries

Languages:

Fluency in written and spoken English is required. All reports and related documents must be in English and presented in electronic format.

Absence of conflict of interest:

According to UNIDO rules, the consultant must not have been involved in the design and/or implementation, supervision and coordination of and/or have benefited from the programme/project (or theme) under evaluation. The consultant will be requested to sign a declaration that none of the above situations exists and that the consultants will not seek assignments with the manager/s in charge of the project before the completion of her/his contract with the UNIDO Independent Evaluation Division.

REQUIRED COMPETENCIES

Core values:

WE LIVE AND ACT WITH INTEGRITY: work honestly, openly and impartially.

WE SHOW PROFESSIONALISM: work hard and competently in a committed and responsible manner.

WE RESPECT DIVERSITY: work together effectively, respectfully and inclusively, regardless of our differences in culture and perspective.

Core competencies:

WE FOCUS ON PEOPLE: cooperate to fully reach our potential –and this is true for our colleagues as well as our clients. Emotional intelligence and receptiveness are vital parts of our UNIDO identity.

WE FOCUS ON RESULTS AND RESPONSIBILITIES: focus on planning, organizing and managing our work effectively and efficiently. We are responsible and accountable for achieving our results and meeting our performance standards. This accountability does not end with our colleagues and supervisors, but we also owe it to those we serve and who have trusted us to contribute to a better, safer and healthier world.

WE COMMUNICATE AND EARN TRUST: communicate effectively with one another and build an environment of trust where we can all excel in our work.

WE THINK OUTSIDE THE BOX AND INNOVATE: To stay relevant, we continuously improve, support innovation, share our knowledge and skills, and learn from one another.



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

TERMS OF REFERENCE FOR PERSONNEL UNDER INDIVIDUAL SERVICE AGREEMENT (ISA)

Title:	National evaluation consultant
Main Duty Station and Location:	Home-based
Mission/s to:	Travel to potential sites within China
Start of Contract:	September 2023
End of Contract:	December 2023
Number of Working Days:	35 days spread over the above mentioned period

ORGANIZATIONAL CONTEXT

The UNIDO Independent Evaluation Unit (EIO/IEU) is responsible for the independent evaluation function of UNIDO. It supports learning, continuous improvement and accountability, and provides evidence-based analysis and assessment on result and practices that feed into the programmatic and strategic decision-making processes. Independent evaluations provide credible, reliable and useful assessment that enables the timely incorporation of findings, recommendations and lessons learned into the decision-making processes at organization-wide, programme and project level. EIO/IEU is guided by the UNIDO Evaluation Policy, which is aligned to the norms and standards for evaluation in the UN system.

PROJECT CONTEXT

Detailed background information of the project can be found the terms of reference (TOR) for the terminal evaluation.

The national evaluation consultant will evaluate the projects according to the terms of reference (TOR) under the leadership of the team leader (international evaluation consultant). S/he will perform the following tasks:

<u>MAIN DUTIES</u>	Concrete/measurable outputs to be achieved	Expected duration	Location
Desk review Review and analyze project documentation and relevant country background information; in cooperation with the Team Leader, determine key data to collect in the field and prepare key instruments in English (questionnaires, logic models). If need be, recommend adjustments to the evaluation framework and Theory of Change in order to ensure their understanding in the local context.	Evaluation questions, questionnaires/interview guide, logic models adjusted to ensure understanding in the national context; A stakeholder mapping, in coordination with the project team.	4 days	Home-based
Carry out preliminary analysis of pertinent technical issues determined by the Team Leader.	• Report addressing technical issues and question previously	7 days	Home-based

MAIN DUTIES	Concrete/measurable outputs to be achieved	Expected duration	Location
In close coordination with the project team, verify the extent of achievement of project outputs prior to field visits. Develop a brief analysis of key contextual conditions relevant to the project.	<p>identified with the Team leader</p> <ul style="list-style-type: none"> • Tables that present extent of achievement of project outputs • Brief analysis of conditions relevant to the project 		
Coordinate the evaluation mission agenda, ensuring and setting up the required meetings with project partners and government counterparts, and organize and lead site visits, in close cooperation with project staff in the field.	<ul style="list-style-type: none"> • Detailed evaluation schedule. • List of stakeholders to interview during the field missions. 	3 days	Home-based
Coordinate and conduct the field mission with the team leader in cooperation with the Project Management Unit, where required. Consult with the Team Leader on the structure and content of the evaluation report and the distribution of writing tasks. Conduct the translation for the Team Leader, when needed.	<p>Presentations of the evaluation's initial findings, draft conclusions and recommendations to stakeholders in the country at the end of the mission.</p> <p>Agreement with the Team Leader on the structure and content of the evaluation report and the distribution of writing tasks.</p>	14 days (including travel days)	In
Follow up with stakeholders regarding additional information promised during interviews. Prepare inputs to help fill in information and analysis gaps (mostly related to technical issues) and to prepare tables to be included in the evaluation report as agreed with the Team Leader. Revise the draft project evaluation report based on comments from UNIDO Independent Evaluation Unit and stakeholders and proof read the final version.	Part of draft evaluation report prepared.	7 days	Home-based

MINIMUM ORGANIZATIONAL REQUIREMENTS

Education: Advanced university degree in environmental science, engineering or other relevant discipline like developmental studies with a specialization in industrial energy efficiency and/or climate change.

Technical and functional experience:

- Excellent knowledge and competency in the field of XXX
- Evaluation experience, including evaluation of development cooperation in developing countries is an asset

- Exposure to the development needs, conditions and challenges in their country and region.
- Familiarity with gender analysis tools and methodologies and asset
- Familiarity with the institutional context of the project is desirable.
-

Languages: Fluency in written and spoken English and in Chinese is required.

Absence of conflict of interest:

According to UNIDO rules, the consultant must not have been involved in the design and/or implementation, supervision and coordination of and/or have benefited from the programme/project (or theme) under evaluation. The consultant will be requested to sign a declaration that none of the above situations exists and that the consultants will not seek assignments with the manager/s in charge of the project before the completion of her/his contract with the UNIDO Independent Evaluation Unit.

REQUIRED COMPETENCIES

Core values:

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WE SHOW PROFESSIONALISM: work hard and competently in a committed and responsible manner.

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WE COMMUNICATE AND EARN TRUST: communicate effectively with one another and build an environment of trust where we can all excel in our work.

WE THINK OUTSIDE THE BOX AND INNOVATE: To stay relevant, we continuously improve, support innovation, share our knowledge and skills, and learn from one another.

Annex 3: Outline of an in-depth project evaluation report

Abstract

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Acknowledgements

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Annex 4: Quality checklist

Quality criteria		UNIDO EIO/IEU assessment notes	Rating
1	The inception report is well-structured, logical, clear, and complete.		
2	The evaluation report is well-structured, logical, clear, concise, complete and timely.		
3	The report presents a clear and full description of the 'object' of the evaluation.		
4	The evaluation's purpose, objectives, and scope are fully explained.		
5	The report presents a transparent description of the evaluation methodology and clearly explains how the evaluation was designed and implemented.		
6	Findings are based on evidence derived from data collection and analysis, and they respond directly to the evaluation criteria and questions.		
7	Conclusions are based on findings and substantiated by evidence and provide insights pertinent to the object of the evaluation.		
8	Recommendations are relevant to the object and purpose of the evaluation, supported by evidence and conclusions, and developed with the involvement of relevant stakeholders.		
9	Lessons learned are relevant, linked to specific findings, and replicable in the organizational context.		
10	The report illustrates the extent to which the evaluation addressed issues pertaining to a) gender mainstreaming, b) human rights, and c) environmental impact.		
<p><u>Rating system for quality of evaluation reports</u></p> <p>A number rating of 1-6 is used for each criterion: Highly satisfactory = 6, Satisfactory = 5, Moderately satisfactory = 4, Moderately unsatisfactory = 3, Unsatisfactory = 2, Highly unsatisfactory = 1, and unable to assess = 0.</p>			