

## Terms of Reference (ToR) (ANNEX 1)

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### Contract 83424222

## Advice to Learning Energy Efficiency Network in the Tourism Sector

### 1 Background

Private enterprises are often relying on outdated energy-inefficient technologies, which do not respond to the latest standards in terms of energy-consumption and environmental sustainability. In times of steeply rising prices for electricity and fuel, the energy expenditures become an increasingly important part of operational cost. This makes modern energy-efficient or renewable solutions economically but also environmentally increasingly attractive. Especially in the tourism sector the environmental aspect is important and can increase attractiveness of a tourism enterprise to its clients. However, identifying the best and most profitable energy efficiency measures is challenging for companies.

Learning Energy Efficiency Networks (LEENs) are networks of ca. 15 enterprises willing to cooperate for improved energy efficiency to save money, energy resources and emissions. Energy audits are carried out in all enterprises of the Network to identify possible efficiency measures, to evaluate their profitability, implement these measures and monitor their effects. Experiences are shared amongst LEEN members.

The LEEN is supported by a so-called moderator who takes care of the organization of the network and public relations. A consultant engineer conducts the energy audits in the enterprises, develops profitable options for energy efficiency and advises LEEN members.

A LEEN typically operates in 3 phases: (i) Information of enterprises and acquisition of network members, (ii) site inspections and energy audits to identify profitable energy savings, and (iii) implementation of measures and exchange of experiences and knowledge.

Through this call for tender GIZ is seeking for a consultant engineer (CE) to advise and guide the members of a LEEN in possible viable energy efficiency options.

## 2 Objectives and outputs

GIZ in cooperation with the KAZA Secretariat as institutional partner will set-up a pilot LEEN in the KAZA region in Botswana and Namibia around Kasane/Botswana and Katima Mulilo/Namibia. The LEEN will consist of up to 15 participating tourism enterprises. Each of the enterprises will be audited to identify suitable energy and carbon-dioxide saving technical solutions. The audit will include analyses of investment cost, potential energy- and CO<sub>2</sub>-savings, payback period and indication of suppliers and maintenance providers.

Out of the list of possible investment opportunities, the CE will support the tourism enterprises to set up a list of investment measures indicating the total investment volume, energy- and CO<sub>2</sub> savings and an investment schedule for implementation.

The project duration is two years with three network meetings per year, which will be organized by the moderator and attended by the CE. The CE will provide the LEEN with expert information on available energy-efficient and renewable energy solutions and give guidance with the implementation of measures. An international consultant will train, support and coach the moderator and CE in the approach and will provide guidance with regard to interesting technologies.

The CE will continuously screen the environment for possibilities to up-scale the pilot approach and for interesting additional partners and enterprises for the approach.

## 3 Tasks and Deliverables

No.	Activity	Days	Deliverable	Due ca.
1	Year 1: 2 days Kick-off and training meeting of consultant engineer with international consultant	3	Detailed work plan to build up pilot LEEN	Jan 2023
2	Support to moderator to identify 15 interested tourism enterprises	2	15 expressions of interest	Jan-Feb 2023
3	Year 1: 1 <sup>st</sup> Kick-off workshop with tourism enterprises (2-day meeting): explanation of LEEN approach, overview of technology solutions, planning of audits	3	Auditing plan	Feb 2023
4	Carry out audits of all tourism enterprises (5 days/enterprise)	45	One audit report per enterprise	Mar-Apr 2023
5	Year 1: 2 <sup>nd</sup> LEEN meeting with enterprises to present findings of audits and select investment opportunities to be implemented. Set up LEEN investment plan (1 day)	2	Investment plan	May 2023
6	Support to enterprises in developing ToR for the investment and setting up of monitoring system	15	ToR investments	Jun-Jul 2023
7	Year 1: 3 <sup>rd</sup> LEEN meeting (1 day)	2	Minutes of meeting	Jul 2023

No.	Activity	Days	Deliverable	Due ca.
8	Monitor energy and CO <sub>2</sub> savings	5	Real results of energy and CO <sub>2</sub> savings	Continuous after first installations
9	Year 2: 3 LEEN meetings (1 day each): share experiences among tourism enterprises, identify additional investments and adjustment of LEEN investment plan	6	Minutes of meetings, revised LEEN investment plan	Feb-Jun-Oct 2024
10	Support to enterprises in developing ToR for additional investments	5	ToR investments	Continuous
11	Maintaining hotline to respond to technical questions of the tourism enterprises	2		Continuous
12	Final report	3	Final report in PDF and word	November 2024
	<b>Total</b>	<b>93</b>		

#### 4 Qualifications and experience

The Consultant Engineer must have the following qualifications and skills:

- A BSc or MSc-degree in Electrical Engineering, Renewables or related field (2.1.1).
- Excellent English writing and speaking skills (2.1.2).
- High technical skills in implementing consulting projects in the private sector (2.1.3).
- Minimum of 10 years working experience in the SADC region on energy-savings and renewable projects (2.1.3 and 2.1.6).
- Proven experience in carrying out energy audits and analysing investment cost and pay-back periods for energy-saving solutions (2.1.4).
- Experience with electronic analysis of energy data and providing recommendations on total investment volume, energy- and CO<sub>2</sub> savings and an investment schedule for implementation (2.1.4).
- Strong interpersonal and leadership skills and the ability to communicate and work well with diverse people (2.1.5); and
- The Consultant Engineer must be based in Botswana with a valid work permit if required.

## **5 Equipment to be provided by the Consultant Engineer**

The Consultant Engineer must provide all equipment such as relevant test equipment to meet the consultancy objectives (e.g., multi-meter, data logger).

## **6 Duty Station & travel**

The Consultant Engineer will work from Botswana. Travel to the LEEN area in Botswana and Namibia will be required when and as the need arises. For this travel, the Consultant Engineer is expected to make his/her own logistical arrangements (including for transport, accommodation, visas and permits, etc.). A fixed travel provision of EUR 12.000 (BWP160,000.00) included in the financial bid form which is the same to everyone, out of which costs will be reimbursed against receipts of evidence of travels undertaken.

## **7 Reporting**

The Consultant Engineer will report to the SADC-GIZ C-NRM Programme in English language

## **8 Time schedule and period of the consultancy**

The Consultant Engineer will not exceed 93 working days spread over the period 03 January 2023 to 30 November 2024.