Terms of reference for the Project Working Group (PWG) for the implementation of the SF6 Project Kenya

1. TERMS OF REFERENCE (TOR)

1.1 This TOR establishes the purpose and responsibilities of the Project Working Group (henceforth called "PWG") of the Climate Technology Centre and Network (henceforth called "CTCN") funded project titled "***Development of a Sulphur Hexafluoride (SF6) Phase-out Roadmap and Pilot Projects for Kenya***", henceforth referred to as the "SF6_Kenya Project".

1.2 The SF6_Kenya Project is implemented by a Consortium consisting of two companies – **HEAT GmbH,** as project lead, in partnership with **Nam Lolwe Environmental Consulting Services**.

1.3 The PWG is the key body within the project governance structure that is responsible for high level inputs and guidance to the Consortium, so that the project meets its objectives as stated in the Proposal Document and as per the Contract document. In addition, the PWG plays a key role in anchoring the project targets and deliverables in day-to-day business of all relevant stakeholders.

2. BACKGROUND INFORMATION

2.1 One of the most potent greenhouse gases, sulfur hexafluoride (SF_6), due to its unique dielectric properties, is used extensively by electric utilities in electric power systems.

2.2 The electric power industry uses SF_6 to manage the high voltages carried between generating stations and customer load centers. This primarily includes:

- Circuit breakers/high-voltage circuit breakers, gas-insulated substations and other switchgear used in the transmission system
- Insulation in disconnectors and ground switches. These devices are used to isolate portions of the transmission system where current flow has been interrupted.

2.3 Several factors affect SF6 emissions from electric power systems, such as the type and age of the SF_6-containing equipment (for example, old circuit breakers may contain up to 100kg pounds of SF_6, while modern breakers usually contain less than 50kg) and the handling and maintenance procedures practiced by electric utilities. Because of its long-life span and high global warming potential (GWP) of over 23.000, even a relatively small amount of SF_6 can have significant impact on the climate.

2.4 Sulphur hexafluoride can pose occupational health and safety concerns, whereby, under conditions such as the presence of an electric arc, spark or corona, decomposition of the gas into toxic chemically active products may be released.

2.5 The electric power industry has been seeking to reduce SF_6 emissions through cost-effective operational improvements as well as equipment upgrades. Through improvements in the leak rate of equipment, refurbishing older equipment, the use of SF_6-free alternatives for new installations as well as more efficient operation and maintenance techniques, utilities may find economical solutions and means of mitigating health and safety risks and reducing SF_6 emissions.

3. ROLES AND RESPONSIBILITIES OF THE PROJECT WORKING GROUP

3.1 Primary objective of the National Project Working Group is

- To provide strategic direction, vision and guidance on the implementation of the SF6_Kenya Project.

3.2 Specifically, the PWG will have the following key responsibilities:

- Provide overall guidance and direction to the entire project implementation.
- Support the success of the project via enhancing data collection, stakeholder collaboration and local knowledge.
- Provide guidance on policy and legislative challenges impacting on implementation of SF6-free technologies/alternatives.
- Facilitate knowledge sharing within and among key players in the electricity sector including ministries, regulators, policy makers, companies and other relevant institutions.
- Monitor progress of the evaluation, reviewing updates from the Consortium, and if needed, address any emerging issues.
- Review the draft Closure and Data Collection Report and provide written feedback and comments, with the view to ensure a high-quality report and that that the report adheres to ethical principles and professional standards.
- Review and comment on the roadmap development, including taking part in a workshop on the roadmap as well as providing guidance and feedback.
- Review and give guidance on pilot projects including contributing to identifying suitable site(s).
- Contribute to the dissemination of the results and learning and knowledge sharing.

4. COMPOSITION OF THE PROJECT STEERING GROUP

4.1 The PWG will be established and consist of the key institutions in the electric power sector.

4.2 The PWG will be chaired by Peter Maneno, with membership of the PWG including 14 named representatives of stakeholders in the power sector, as listed below. Gender balance will be considered, targeting 30 % of the PWG being female.

1. Ministry of Energy and Petroleum (x2)
2. Kenya Industrial Research and Development Institute (KIRDI)
3. The Energy and Petroleum Regulatory Authority (EPRA)
4. KETRACO (Kenya Electricity Transmission Company Limited)
5. Kenya Power and Lighting Company (KPLC)
6. Kenya Electricity Generating Company (KENGEN)
7. Rural Electrification and Renewable Energy Corporation (REREC)
8. Kenya Bureau of Standards (KEBS)
9. National Environment Management Authority (NEMA)
10. Electricity Sector Association of Kenya (ESAK)
11. Directorate of Climate Change
12. Nam Lolwe
13. HEAT

5. MEETINGS AND PROCEDURES

5.1 The Steering Committee meetings will be coordinated by the Consortium with Nam Lolwe as the lead/facilitator.

5.2 There will be a 2-day project kick-off meeting

- Day 1 -will consist of the 14 PWG members as well as members of the electricity sector. This should include ministry officials, financiers, independent power providers, suppliers, academics among others. The number of attendees will be capped at 50.
- Day 2 will include PWG members as well as members of the Consortium.

5.3 The Project Working Group will meet at key points during the project. The Consortium may also call ad hoc meetings, if needed. The PWG will be notified of meeting date, place and time, as well as the agenda at least one week in advance.

Meetings are planned to take place as follows:

- Nov 2024
- Feb 2025
- May 2025

However, there will be flexibility regarding the dates, depending on the progress of the project.

5.5 Any relevant documents for meetings will be shared amongst the group members.

5.6 Should members of the PWG not be able to attend a meeting, they must inform Nam Lolwe via email in a timely manner.

5.7 There will be regular consultation with the PWG to provide input, feedback and approval of deliverables.

5.8 The Project Working Group will provide feedback on their engagement in the evaluation, ex post, to support the documentation of lessons learned of their engagement for internal learning and capacity building.

5.9 **Documents review**. The PWG members will provide substantive technical inputs and ensure the high technical quality of the project documents. Their comments and feedback will be provided by the indicated deadline. Comments and feedback that will not be submitted within the period allocated for the committee review will not be considered by the evaluation team (to ensure timely progression of the evaluation process). The consultation process will be an iterative one to ensure that the concerns or issues raised by the PWG members are discussed, reflected and agreed upon between the PWG and the project team.

6. TIMELINE

6.1 The PWG is established for the entire period of the project. The table below presents a tentative timeline for the work of the steering committee over the course of the project.

PROJECT TIMELINE	**Jul ´24**	**Aug ´24**	**Sep ´24**	**Oct ´24**	**Nov ´24**	**Dec ´24**	**Jan ´25**	**Feb ´25**	**Mar ´25**	**Apr ´25**	**May ´25**	**Jun ´25**
Proposed PSG meetings			x		x			x			x	