Requesting country or countries:	Tanzania (on behalf of the Energy Regulators Association of Eastern Africa – EREA, representing 8 member states: Tanzania, Kenya, Uganda, Rwanda, Burundi, DR Congo, Somalia, South Sudan)
Request title:	Technical Assistance for Feasibility Study and Master Plan Development for the Energy Technopark, Sports, and Tourism Centre for Clean Energy Innovation and Climate Action in Eastern Africa
NDE	Dr. Gerald Majella Kafuku, Manager of Innovation and Technology Tanzania Commission for Science and Technology (COSTECH) P.O. Box 4302, Dar-Es-Salaam, United Republic of Tanzania Emails: gerald.kafuku@costech.or.tz, and kafukugm@gmail.com
Request Applicant:	Energy Regulators Association of Eastern Africa (EREA) Prof. Askwar Hilonga – Executive Secretary Arusha, Tanzania Email: hilonga@energyregulators.org

Climate objective:

☐ Adaptation to climate change
☐ Mitigation of climate change
☒ Combination of adaptation and mitigation of climate change

Geographical scope:

☐ Community level
☐ Sub-national
☒ National
☐ Multi-country

Problem statement related to climate change (up to one page):

Eastern Africa is among the most energy-deprived regions globally, where more than 270 million people lack access to reliable electricity and over 400 million rely on unsustainable biomass fuels. This drives deforestation, carbon emissions, and indoor air pollution, disproportionately affecting women and children. The situation is compounded by climate-induced droughts, erratic rainfall, and floods that undermine food, water, and energy security.

While member states have developed Nationally Determined Contributions (NDCs) and national energy strategies, there remains a challenge of coordinated regional platforms to translate these policies into measurable climate technology outcomes. Fragmented efforts and limited capacity have slowed progress toward achieving low-carbon, climate-resilient growth across the Eastern Africa region.

The proposed Energy Technopark, Sports, and Tourism Centre will fill this strategic gap by serving as a

regional demonstration, training, and replication hub under the Energy Regulators Association of Eastern Africa (EREA). It will foster technology transfer, knowledge sharing, and institutional capacity building aligned with GCF Readiness and CTCN Technology Transfer frameworks, providing a scalable and replicable model for all eight member states.

Past and on-going efforts to address the problem (up to half a page):

EREA and its Energy Regulators Centre of Excellence (ERCE) have developed training and regulatory harmonization programs including the Ordinary Diploma in Energy Economics and Regulation (ODEER), benefiting over 200 professionals. Member states are implementing national projects such as Kenya's geothermal expansion, Uganda's mini-grid development, Rwanda's e-mobility advancement, and Tanzania's solar corridor programs.

However, these remain fragmented and lack a unifying platform for joint implementation, monitoring, and replication. The Technopark responds to this need by providing a regional facility for collaborative innovation.

Specific technology[1] barriers (up to one page):

1. Absence of integrated demonstration and testing centres linking technology and regulation.
2. Weak regional mechanisms for innovation exchange and regulatory coherence.
3. Insufficient infrastructure for applied research and technology validation.
4. Limited capacity of national institutions to scale renewable energy and clean cooking technologies.
5. Absence of frameworks for joint access to international climate finance such as GCF Readiness funding.

CTCN assistance, in coordination with COSTECH as the NDE and GCF NDA partner, will address these barriers by designing and validating the Technopark model, building regional institutional capacity, and preparing a bankable pipeline for GCF and other financiers.

Contribution to Programme of Work 2023-2027:

System Transformation Areas:

☒ Water-Energy-Food Nexus
☒ Sustainable Mobility
☒ Energy Systems
☐ Buildings and Infrastructure
☐ Business and Industry

Key enablers (optional)

[1] *"**any equipment, techniques, practical knowledge and skills** needed for reducing greenhouse gas emissions and adapting to climate change" (Special Report on Technology Transfer, IPCC, 2000)*

☒ National Systems of Innovation ☒ Digitalization

Cross-sectoral themes (optional)

☒ Gender ☒ Youth ☒ Indigenous Peoples

Sectors:

Please indicate the main sectors related to the request:

☐ Coastal zones ☐ Early Warning and Environmental Assessment ☐ Human Health ☒ Infrastructure and Urban planning

☐ Marine and Fisheries ☒ Water ☒ Agriculture ☐ Carbon fixation

☒ Energy Efficiency ☐ Forestry ☒ Industry ☒ Renewable energy

☐ Transport ☒ Waste management

Additional Sectors (Cross-sectional):

Technical assistance requested (up to one page):

Objective:
To establish and operationalize a regional Energy Technopark as a model hub for clean energy innovation, training, and demonstration—integrated within the GCF Readiness and CTCN Technical Assistance frameworks.

Proposed Activities:
1. Conduct technical and financial feasibility studies and develop detailed engineering designs for renewable systems (solar, biogas, hybrid wind-solar, and clean cooking technologies).
2. Develop a governance model for multi-country implementation ensuring NDE/NDA co-signature across member states for future GCF pipeline replication.
3. Establish feasibility and design of demonstration facilities in each member country to facilitate training, visibility, and private sector engagement.
4. Develop regional training curricula linked with the ODEER program and short-term certified technical courses.
5. Build gender-inclusive entrepreneurship programs for women and youth in renewable energy.
6. Establish a digital platform for innovation exchange and regulatory coordination across EREA states.

7. Design a replication and investment framework targeting GCF Readiness, AfDB SEFA, and KOICA green funding.

Outputs:
- A validated design package and business model for regional Technopark replication.
- Established feasibility and design for 8 national demonstration units with standardized operational guidelines.
- Regional training curriculum and digital innovation portal.
- Gender and youth empowerment strategy.
- Financial and policy roadmap linking EREA with GCF and other donors.

Expected timeframe:

15 months

Anticipated gender and other co-benefits from the technical assistance:

Gender, Youth, and Social Co-benefits:
The project will mainstream gender and youth in all components. At least 50% of trainees and entrepreneurs supported through the Technopark will be women and youth. Gender-responsive approaches will promote women's leadership in clean energy entrepreneurship and community-based energy management. Sports and tourism activities integrated into the Technopark will promote inclusive climate awareness, green jobs, and socio-economic participation.

Anticipated follow-up activities after this technical assistance are completed:

After completion of CTCN assistance, EREA—through COSTECH and national NDE/NDA offices—will mobilize regional and international financing partners, including the Green Climate Fund, AfDB, KOICA, and GIZ. Each member country's NDE will sign identical commitment forms confirming readiness to co-implement national demonstration units. This will strengthen multi-country coordination and ensure readiness for submission under GCF's Regional Readiness and Preparatory Support Programme.

The Arusha prototype will be the first regional demonstration, serving as a blueprint for replication in all eight EREA member states, thereby establishing a network of interconnected Technoparks driving regional energy transition.

Key stakeholders:

Stakeholders	Role to support the implementation of the technical assistance
COSTECH (NDE and GCF NDA Partner	Coordination of national endorsement, linkage to GCF Readiness Programme, and monitoring.

Request Applicant	Energy Regulators Association of East Africa (EREA): Regional coordination and technical leadership.
Please add as many stakeholders and lines as required.	Member Energy Regulators: Co-signature, implementation of national replication units, and data sharing.
	NM-AIST and Partner Universities: Applied research, training, and curriculum co-development.
	Private sector (Octant Energy, OYU Green, Pegasus): Technology supply, validation, and investment partnerships.
	Local communities: Beneficiary participation and gender inclusion.

Alignment with national priorities (up to 2000 characters including spaces):

The initiative operationalizes Tanzania's NDC (2021) priority for clean and modern energy and aligns with national policies across all EREA states. It supports Tanzania's National Energy Policy (2015), the Renewable Energy Roadmap, and EAC Vision 2050. The Technopark directly contributes to the AU Agenda 2063 target for industrialization powered by renewable energy.

This project also provides a structured regional platform for GCF pipeline development, ensuring that each member state is ready to implement national components through their own NDE and NDA offices.

Reference document (please include date of document)	1. Proposal for Energy Technopark in Arusha – Tanzania (2025) 2. EREA Strategic Plan 2025–2030 3. Tanzania NDC (2021) 4. EAC Energy Policy Framework (2020)
Nationally Determined Contribution (NDC)	This technical assistance is directly aligned with the United Republic of Tanzania's Updated Nationally Determined Contribution (NDC, submitted to UNFCCC on 30 July 2021). In the Foreword and Chapter 2 ("Mitigation Contributions," pages 8–12), Tanzania commits to reducing greenhouse gas emissions economy-wide by 30–35 percent below the Business-As-Usual (BAU) scenario by 2030. The NDC identifies energy, transport, forestry, and waste management as the key mitigation sectors (page 9). The proposed intervention directly supports the energy sector priority (Chapter 2, page 9) through promotion of clean energy technologies, renewable systems, and regional demonstration units — thereby contributing to the national mitigation target. In addition, the assistance addresses adaptation priorities outlined in Chapter 3 ("Adaptation Contributions," pages 13–20), which emphasize resilience in water, agriculture, tourism, infrastructure, and human settlements. By integrating energy access, capacity building, and climate-

	resilient livelihood measures, this project strengthens Tanzania's adaptive capacity consistent with NDC goals. Finally, in the section on Means of Implementation (page 21), the NDC underscores the need for "adequate and predictable financial and technological support" to achieve full implementation. This technical assistance responds directly to that call by providing catalytic technology transfer and readiness support for scaling up NDC implementation across the Eastern Africa region. Source: United Republic of Tanzania, Updated NDC, 30 July 2021 — UNFCCC NDC Registry, https://unfccc.int/sites/default/files/NDC/2022-06/TANZANIA_NDC_SUBMISSION_30%20JULY%202021.pdf
Technology Needs Assessment and Technology Action Plan	Tanzania's TNA (2018) identified renewable energy (solar PV, biogas, wind), efficient cookstoves, and climate-resilient agriculture as priority technologies for mitigation and adaptation. This Technical Assistance directly supports implementation of those priorities by establishing demonstration and training units at the Energy Technopark to promote local innovation, technology transfer, and capacity building across Eastern Africa.
National Adaptation Plans	Tanzania's NAP process—anchored in the National Climate Change Response Strategy (2021–2026)—emphasizes resilience in water, agriculture, energy, and infrastructure systems. The proposed Technopark and associated training programs will enhance adaptive capacity by showcasing climate-resilient energy solutions and supporting skills development for local technicians and regulators.
GCF Country Programme	The GCF Country Programme (2021) prioritizes projects in renewable energy, climate-resilient agriculture, water management, and institutional capacity building. This Technical Assistance complements that framework by providing readiness and preparatory support that can catalyze larger GCF investments through demonstration, training, and replication in EREA member states.
Long-term Low Emission Development Strategies (LT-LEDS)	Tanzania's LT-LEDS (under preparation) is guided by the National Climate Change Response Strategy and aims for a low-carbon, climate-resilient economy by mid-century. The Technopark initiative directly contributes by piloting green infrastructure, renewable energy, and carbon-credit generating models consistent with LT-LEDS principles.
Add others here as relevant	The Technical Assistance also aligns with the East African Community's Climate Change Policy and the EREA Strategic Plan, both emphasizing regional cooperation, renewable energy transition, and capacity building for regulators. The replication of Technopark models in all eight EREA member states will advance regional NDC implementation and cross-

	border technology learning.

Development of the request (up to 2000 characters including spaces):

This request was initiated by the Executive Secretary of EREA, endorsed by the NDE of Tanzania, and discussed with EREA's Liaison Officers. Consultations included various potential partners, Directors of EREA Member States, NM-AIST, and community stakeholders. It reflects consensus to use the Technopark as a regional training and demonstration centre.

Background documents and other information relevant for the request:

1. Proposal for Energy Technopark in Arusha – Tanzania (2025)
2. EREA Strategic Plan 2025–2030
3. Tanzania NDC (2021)
4. EAC Energy Policy Framework (2020)

This request has been developed in alignment with Tanzania's Green Climate Fund (GCF) Readiness and Preparatory Support Programme, through the coordination of the Tanzania Commission for Science and Technology (COSTECH), which serves as both the National Designated Entity (NDE) for the CTCN and the focal institution facilitating national access to climate technology innovation.

The proposed CTCN technical assistance on the Energy Technopark, Sports, and Tourism Centre directly supports Tanzania's readiness priorities by strengthening institutional capacity, advancing technology transfer, and preparing a pipeline of bankable projects for future GCF investment.

GCF Linkages and Readiness Support:
COSTECH, acting as both Tanzania's NDE and GCF NDA, confirms the proposal's eligibility for readiness collaboration. The CTCN assistance will be structured to facilitate direct access to GCF readiness funding for the subsequent implementation phase. Outputs will be aligned with GCF's investment criteria—impact potential, paradigm shift potential, and sustainable development co-benefits.

Through this partnership, the Technopark will serve as a regional demonstration of CTCN–GCF collaboration in accelerating technology transfer and climate innovation, offering a replicable pathway for other regional regulatory bodies.

Monitoring, Evaluation, and Reporting:
Monitoring and evaluation will follow CTCN and GCF standards, using gender-disaggregated data, baseline indicators, and outcome metrics. The NDE and EREA Secretariat will jointly coordinate quarterly progress reviews and annual reports, ensuring transparency and accountability. Lessons learned will feed into national and regional replication.

☐ Initial engagement: The GCF NDA of the requesting country has been engaged in the design of this request and the NDA will be involved in the further process leading to an official agreement for accessing GCF readiness support.

☐ Advanced engagement (preferred): The GCF NDA of the requesting country has been directly involved in the design of this request and is a co-signer of this request, the signature indicating provisional agreement to use readiness national funds to support the implementation of the technical

assistance.

NDA name:

Date:

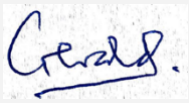
Signature:

Monitoring and impact of the assistance:

By signing this request, I affirm that processes are in place in the country to monitor and evaluate the technical assistance provided by the CTCN. I understand that these processes will be explicitly identified in the CTCN Response Plan and that they will be used in the country to monitor the implementation of the technical assistance following standard CTCN procedures. This includes the active engagement as NDE together with the key project proponent / beneficiary in regular project steering meetings.

I understand that, after the completion of the requested assistance, I shall support CTCN efforts to measure the success and effects of the support provided, including its short, medium and long-term impacts in the country. This includes the completion of NDE feedback and post-implementation forms.

Signature:

NDE name:	Dr. Gerald Majella Kafuku
Date:	October 16th 2025
Signature:	

THE COMPLETED FORM SHALL BE SENT TO THE CTCN@UNEP.ORG

The CTCN is available to answer all questions and provide guidance on the application process.