

Readiness Proposal

**with the Climate Technology Centre and Network (CTCN) through UNEP
for Republic of Malawi**

31 December 2019 | Strategic Frameworks



Readiness and Preparatory Support Proposal Template

Programme title:	National framework for leapfrogging to Energy Efficient Appliances and Equipment in Malawi (Refrigerators and Distribution Transformers) through regulatory and financing mechanism
Country:	Malawi
National Designated Authority:	ENVIRONMENTAL AFFAIRS DEPARTMENT
Implementing Institution:	UNEP – The Climate Technology Centre and Network (CTCN)
Date of first submission:	26 August 2019
Date of current submission / version number	26 August 2019 V.1





How to complete this document?

- Please visit the [Empowering Countries](#) page of the GCF website to download the Readiness Guidebook and learn how to access funding under the GCF Readiness and Preparatory Support Programme.
- This document should be completed by National Designated Authorities (NDA) or focal points with support from their Delivery Partners where relevant. Once completed, this document should be submitted to the GCF by the NDA or focal point to countries@gcfund.org.
- Please be concise. If you need to include any additional information, please attach it to the proposal.
- If the Delivery Partner implementing the Readiness support is not a GCF Accredited Entity for project Funding Proposals, please complete the Financial Management Capacity Assessment (FMCA) questionnaire and submit it prior to or with this Readiness proposal. The FMCA is available for download at the [Library](#) page of the GCF website.

Where to get support?

- If you are not sure how to complete this document, or require support, please send an e-mail to countries@gcfund.org.
- You can also complete as much of this document as you can and then send it to countries@gcfund.org, copying both the Readiness Delivery Partner and the relevant GCF Country Dialogue Specialist and Regional Advisor. Please refer to the [Country Profiles](#) page of the GCF website to identify the relevant GCF Country Dialogue Specialist and Regional Advisor.
- We will get back to you within five (5) working days to acknowledge receipt of your submission and discuss the way forward.

Note: Environmental and Social Safeguards and Gender

Throughout this document, when answering questions and providing details, please make sure to pay special attention to environmental, social and gender issues, particularly to the situation of vulnerable populations, including women and men. Please be specific about proposed actions to address these issues. Consult Annex IV of the Readiness Guidebook for more information.

Please submit the completed form to:

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List of Acronyms

Acronym	Description
BAT	Best Available Technologies
CTCN	Climate Technology Centre and Network
DoEA	Department of Environmental Affairs
DSM	Demand-Side Management
DTs	Distribution Transformers
EE	Energy Efficiency
ESCOM	Electricity Supply Corporation of Malawi
GCF	Green Climate Fund
GHG	Greenhouse Gas
HEPS	Higher Energy Performance Standard
IEC	International Electro-technical Commission
MEPS	Minimum Energy Performance Standard
MERA	Malawi Energy Regulatory Authority
MNREE	Ministry of Natural Resources, Energy and Environment
MV&E	Monitoring Verification and Enforcement
NDA	National Designated Authority
NDC	Nationally Determined Contributions
NDE	National Designated Entity
PCBs	Polychlorinated Biphenyls
PWG	Policy Working Group
SAPP	Southern African Power Pool
TC	Technical Committee
TC-DT	Technical Committee for DTs
TCO	Total Cost of Ownership
TC-Ref	Technical Committee for refrigerators
TORs	Terms of Reference
U4E	United for Efficiency
UNEP	United Nations Environment Programme



1. SUMMARY			
Country submitting the proposal	Country name: Malawi		
	Name of institution representing NDA or Focal Point: ENVIRONMENTAL AFFAIRS DEPARTMENT		
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Date of initial submission	31 August 2019		
Last date of resubmission	Click or tap to enter a date. (Please update for each resubmission.)	Version number	V.1
Which institution will implement the Readiness and Preparatory Support project?	<input type="checkbox"/> National designated authority		
	<input type="checkbox"/> Accredited entity		
	<input checked="" type="checkbox"/> Delivery partner		
	Please provide contact information if the implementing partner is not the NDA/focal point		
	United Nations Environment Programme (UNEP) on behalf of The Climate Technology Centre and Network (CTCN)		
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Title of the Readiness support proposal	National framework for leapfrogging to Energy Efficient Appliances and Equipment in Malawi (Refrigerators and Distribution Transformers) through regulatory and financing mechanism		



Type of Readiness support sought	Please select the relevant GCF Readiness activity area below (click on the box): <input type="checkbox"/> I. Country capacity for engagement with GCF <input checked="" type="checkbox"/> II. Country programming process <input type="checkbox"/> III. Direct access to climate finance <input type="checkbox"/> IV. Climate finance accessed <input type="checkbox"/> V. Formulation of national adaptation planning and/or other adaptation planning processes		
Brief summary of the request	<p>This readiness proposal will result in Malawi having a regulatory framework and an agreed MEPS and labelling scheme for Refrigerators and Distribution transformers. This would be legislated through a notification by the Ministry of Energy and the Malawi Bureau of Standards. With about only 12.7%¹ of the population having access to electricity, electrification is a priority for the Government of Malawi. With financial constraints and subsidized electricity, reducing electricity losses is the first and most economical measure to be adopted. Low efficient appliances and electricity-using equipment result in huge losses, which bring a heavy burden on the government's budget (electricity is subsidized) and hampers the country's electrification potential. The lack of information and awareness, lack of dedicated policies for energy efficient products and appliances including absence of minimum energy performance standards prevents Malawi from inducing a sustainable market transformation in favor of higher efficiency products. With improvement of the economic situation, demand for domestic refrigerators is increasing rapidly, and may already account for over 30% of domestic electricity consumption. Without the development of energy-efficient policies, inefficient products will continue to enter the market and would remain a strain on the grid for their useful life (approximately 10 years for refrigerators and 40 years for distribution transformers). This readiness proposal through notification of MEPS and labelling scheme will create an enabling policy and regulatory environment for refrigerators and distribution transformers to support market transformation. The project will reduce strain on the electricity grid and ability to extend the electricity grid, increase disposable income for households (reduced electricity bill), and potentially reduce GHG emissions, since it is anticipated that the planned increase in grid connections and electrification would move Malawi towards the use of fossil fuels for electricity generation (the efficient appliance use would offset that future emissions)²</p>		
Total requested amount and currency	USD 347,838	Anticipated duration	18 months
Has the country received or is expecting to receive other Readiness and Preparatory Support funding allocations (including adaptation planning) from GCF or other donors?	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Malawi received GCF readiness funding of USD 2,849,018 for adaptation planning in 2019 (UNEP)</p>		

2. BACKGROUND

¹ World Bank Data , <https://data.worldbank.org/indicator/EG.ELC.ACCE.ZS?locations=MW&view=chart>

² “The largest sectoral increase will likely take place in the energy sector as new coal-based generation capacity by independent power producers (IPPs) comes on line to meet immediate energy deficits currently being experienced in Malawi.” : Page 3, last para

<https://www4.unfccc.int/sites/ndestaging/PublishedDocuments/Malawi%20First/MALAWI%20INDC%20SUBMITTED%20TO%20UNFCCC%20REV.pdf>



Malawi is a landlocked country in southeast Africa and is bordered by Tanzania to the Northeast, Zambia to the Northwest, and Mozambique to the east, south, and west. Lake Malawi separates the country from most of Mozambique



Malawi's total installed capacity is about 302 MW, of which 94% is generated by hydropower and the remaining 6% is thermal. The Electricity Supply Corporation of Malawi (ESCOM) is effectively a government-owned institution and is the main generator, distributor and retailer of electricity. It currently owns all of the main Malawian power plants and the national transmission grid. The national energy policy is focused on shifting energy use away from the current heavy reliance on traditional biomass to modern sources of energy like electricity, fossil fuels and renewable sources. As this shift begins to happen there would be a larger network of grid and more demand of electricity. Energy efficient appliances would help in reducing this demand, contribute to greater electricity outreach to the population and less distribution losses in the grid.

In this context, Malawi has much to gain by adopting energy efficient standards and technologies. The preliminary market research, data collection and analysis conducted by CTCN³ has been able to provide insights into some of the primary energy-consuming appliances and equipment. (lighting, air conditioning, refrigerators, motors and transformers). The findings of this preliminary assessment was discussed with the major stakeholders from Malawi and looking at future trends and potential energy efficiency savings of the five leading energy consuming products the stakeholders prioritized refrigerators and distribution transformers as focus products for the development of national framework. Distribution transformers were selected considering the growth of the electrification rate in Malawi, while refrigerators were selected due to their higher growth in the market compared to air conditioners.

Given the impetus by the government to increase access to electricity it is foreseen that the use of appliances and equipment will continue to increase in Malawi. The use of inefficient appliances would lead to higher electricity demand. This demand can be suppressed by an increase in the efficiency of the appliances and the equipment used in Malawi. Based on the preliminary analysis conducted by CTCN, the projected energy savings for Malawi when moving from the current state of technologies to Minimum Energy Performance Standards (MEPS) or to the Best Available Technologies (BAT) are shown below (for the two products of focus in this project):

³ <https://www.ctc-n.org/technical-assistance/projects/development-regional-efficient-appliance-and-equipment-strategy>



Malawi	GWh savings (2025)	GWh savings (2030)	MUSD savings (2025)	MUSD savings (2030)	GHG savings (2030) (tCO2/y)
Projected MEPS					
Refrigeration	16	41	1	5	41
Transformers	31	64	5	18	63
Projected BAT					
Refrigeration	22	53	2	7	53
Transformers	63	177	11	49	175

The adoption of BAT for those two products would lead to reduction in the GHG emissions to the tune of 228 tons per year by 2030 and contribute towards achievement of the NDC targets⁴.

The oversight, development and delivery of energy policy in Malawi fall within the realm of the DoEA, which sits within the Ministry of Natural Resources, Energy and Environment (MNREE). The Malawi Energy Regulatory Authority (MERA) was established in December 2007. MERA regulates all the energy players (production and supply) in the country in collaboration with the Department of Energy Affairs and both entities report to the Ministry of Energy and Mines. MERA's work is predominantly focussed on oversight of generation, transmission and retail of electricity within the national grid. The only policy measures implemented by Malawi relating to energy efficiency are limited to efficient cooking and heating, as well as support to biofuel production. Energy Efficiency is perceived as a conflict of interest for utilities. Reducing the sales of electricity by promoting energy efficiency effectively reduces some potential revenue from the utility. In contrast, the current lack of enough capacity results in regular power outages, so reduced consumption could be redistributed. Since the utility is state owned, this enables the state to use the utility to drive energy efficiency roll outs despite the apparent conflict. Malawi electric charges are subsidized, which result in longer payback periods for energy savings projects or energy efficient technologies than if full utility costs were charged. Malawi has an energy policy in draft, but this is at a very broad level, does not address any technologies, does not have any regulations, and provides no enforcement mandate. The MEPS and the labelling scheme framework established as a part of this readiness project, together with supporting policy measures (in the national policy roadmap to be developed) will provide the necessary means to Malawi to effectively implement this policy to induce a market transformation in favour of higher efficiency products.

However, the main barriers to achieve this are the lack of institutional capacity and regulatory frameworks. Financing is also a barrier to the deployment of energy efficient technologies. The project will address this by working with the government and utility to investigate the feasibility of fiscal measures (such as import duty reduction) and financing mechanisms (such as on-the-bill payment), but also provide support to liaise with international finance (potentially bulk procurement programs, loan for DT procurement, ...).

The key deliverables from the project would be:

- Mandatory Minimum energy performance standards and labeling schemes for refrigerators and distribution transformers
- National policy roadmap and enabling environment for implementation of standards and label for refrigerators and distribution transformers
- Appropriate financing mechanisms to accelerate deployment of energy efficient refrigerators and distribution transformers.
- Strengthened national capacity to develop standards and labels for other appliances in future.

Key deliverables produced within the project duration of 18 months will strengthen the existing policies and regulatory frameworks through the adoption of national testing standards (testing method, to be adapted from the international IEC standards and translated into national standards) for refrigerators and DTs, the adoption of mandatory Minimum Energy Performance Standards (MEPS), as well as adoption of High Energy Performance Standards (HEPS) and labelling scheme, the design of consumer awareness campaigns, and capacity building on finance mechanisms. Tools and resources from other initiatives such as United for Efficiency (U4E)⁵ initiative, Montreal protocol, Kigali Cooling Efficiency programme and Stockholm convention (for PCBs in transformers), will be used as a starting point for development of the policy framework at the national level. This includes: adapting the U4E Model Regulations for refrigerators and for distribution transformers to national specificities, and using the U4E complete policy guides for capacity building and guidance to develop the national policy



⁴ Malawi First NDC, Page 3 “ Estimates suggest that between 14,000 and 16,000 Gg of CO2 equivalent will be saved per year by 2030 if a robust low emission development path is adopted.” ;
<https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Malawi%20First/MALAWI%20INDC%20SUBMITTED%20TO%20UNFCCC%20REV.pdf>

⁵ Accelerating the Global Adoption of ENERGY-EFFICIENT TRANSFORMERS Policy Guide series ,
<https://united4efficiency.org/wp-content/uploads/2017/11/Transformers-Policy-Brief.pdf> and
Accelerating the Global Adoption of CLIMATE-FRIENDLY AND ENERGY-EFFICIENT , <https://united4efficiency.org/wp-content/uploads/2017/11/U4E-RefrigerationGuide-201801-Final-R1-1.pdf>REFRIGERATORS,
MANUAL OF FINANCING MECHANISMS AND BUSINESS MODELS FOR ENERGY EFFICIENCY,
https://united4efficiency.org/wp-content/uploads/2019/06/MANUAL-FINANCING-MECHANISMS_25-06-19_WEB.pdf



roadmap, which have been developed with the inputs from a range of experts, including governments, international organizations, manufacturers and technical institutions.

Methodology:**Outcome 1: Country Programming process**

The project will contribute to improve the country programming process by:

1. Conducting a comprehensive market analysis for higher efficiency refrigerators and distribution transformers (DTs) – output 1. This study will include a gap and barriers analysis, as well as a detailed technico-economic analysis and evaluation of the impacts of adopting pro-active policies to promote higher efficiency equipment. This will properly inform decision-making by the Policy Working Group (PWG) and Technical Committees to determine the most appropriate standard to avoid or minimize impact on the market, and maximize energy savings.	Sub Outcome 1: Appropriate climate technology solutions identified and prioritised in accordance with national strategies and plans for climate adaptation and mitigation
2. Assembling key stakeholders in the Policy Working Group (PWG) for the design and future implementation of the national policy roadmaps for the promotion of higher efficiency refrigerators and DTs – output 2. The regular meetings of the PWG will contribute to stakeholders' consultation as well as capacity building through: technical assistance by international expert and learning-by-doing since the policy measures will be designed by the PWG (with assistance by the international expert).	Sub Outcome 2: Stakeholder engagement consultative processes
3. Enabling periodic review of the outcomes produced by the project through active stakeholders' engagement in the technical Committees, as well as public consultation – output 3. The PWG will be chaired by the Department of Energy Affairs and the TC by the Bureau of Standards. They will ensure alignment with the National Steering Committee on Climate Change. The development of the key deliverables (national testing standards, MEPS, MV&E framework) will be done by engaging all the strategic stakeholders (PWG and TC), and the national policy roadmap will undergo public consultation. The project will help the country review and adopt their national testing standard in a way acceptable to the country in terms of cost-effectiveness of measurement and market verification.	Sub outcome 3: Periodic participatory review and updating of the climate finance Country Programme
Note on PWG: it will assemble representatives from Department of Energy Affairs, Energy Regulatory Authority, Revenue Authority, Bureau of Standards, Electricity Supply Commission (ESCOM, power distribution utility), local DT assemblers, consumer groups and distributors/importers of refrigerators, NGOs	

Multiplier effects: while the project will help Malawi develop and adopt its policy and regulatory framework for DTs and refrigerators, it will build the capacity of the policy makers and other stakeholders to adopt the same approach for the development of the same for other appliances and equipment, including ACs, lighting, industrial electric motors, etc. This will be made possible thanks to the approach adopted which builds on enabling local policy makers, standard-making bodies, and other key stakeholders through capacity building and international expert's assistance in developing national standards and policy measures. Their experience, gained during the project's implementation, will help them initiate a similar process for other technologies.

Outcome 2: Climate finance strategies and project pipeline strengthened.

This will be achieved by:

1. Developing national policy roadmaps for 1) refrigerators and 2) DTs. Such policy roadmaps will contain detailed, actionable and measurable policy measures for the promotion of higher efficiency appliances – outputs 4.1 and 4.2. Such roadmaps will include: higher energy performance standards (HEPS) and labelling scheme, end-users awareness campaigns, MV&E framework, capacity building for local manufacturers, importers and distributors, fiscal and financial incentives	Sub Outcome 4: Market preparation and business planning for deployment and scale-up of prioritised climate technology solutions
2. Facilitating the design of financing mechanisms for the promotion of higher efficiency refrigerators and DTs through capacity building, sharing of experience and technical assistance from international finance expert – outputs 5.1 and 5.2	Sub Outcome 5: Climate finance strategy defines the potential use of a combination of funding options from public resources; tariffs, and international cooperation; financing instruments such as loans, bonds, equity and others; private investment; and the



	blending of financial instruments
Multiplier effects: the national policy roadmaps will include: detailed action plan, budget and sources of finance, stakeholders' mapping and engagement strategy, tools, communications strategy and plan. Stakeholders to be engaged in the implementation of the policy measures will be associated in the design and development process, which will enable their active and effective engagement for the actual implementation of the policy measures.	
<p>Similar readiness proposals are being prepared for Botswana, Eswatini, Lesotho, Zambia, Namibia, Tanzania, and Zimbabwe. The countries have shown willingness to adopt a common approach during the implementation of the project, which will result in having these countries adopt national policy roadmaps on Energy Efficiency (EE) for refrigerators and distribution transformers (DTs), ultimately leading to the harmonization of the standards at a sub-regional level. In Malawi, this work will be aligned with the national EE&C policy currently being developed. The standards to be adopted will be in line with best practices in international standards to remove non-tariff barriers to trade and facilitate intra-regional trade.</p>	
<p>CTCN is the implementation arm of the UNFCCC technology mechanism and has been mandated by the successive COP decisions to provide technical assistance to the developing countries on their request. The countries in the southern Africa region have requested CTCN to provide support in developing assessments to provide the financial, energy, and climate potential of accelerating a market transformation for each of the prioritized products (lighting, air conditioning, refrigerators, motors, transformers). The country assessments developed in the framework of CTCN technical assistance were discussed during a 3 day workshop attended by representatives of the ministry of energy and national utility companies as well as CTCN NDEs. Participating countries reviewed the use, future trends and energy efficiency savings of the five leading energy consuming products and prioritized refrigerators and distribution transformers as focus products for the development of policy framework. Distribution transformers were selected in light of the growth of the electrification rate in these countries, while refrigerators were selected due to the higher growth in the market compared to air conditioners.</p>	
<p>National stakeholder consultations were held in each of the target countries and thereafter the GCF readiness proposal were framed in consultations with the NDA, the NDE, Ministry of Energy and the respective electricity utility companies. The beneficiaries of this project include Department of energy, Utility companies, Standard formulation body, energy regulatory authority, local manufacturers private sector engaged in wholesale and retail of appliances and electricity consumers.</p>	



3. LOGICAL FRAMEWORK AND IMPLEMENTATION SCHEDULE







				consultation outcomes; a report will be prepared and submitted to the TC-DT prior to the meeting.										
				Deliverable 3.2.4: National standard adopted and published										
Outcome 2 Climate finance strategies and project pipeline strengthened	Sub Outcome 4: Market preparation and business planning for deployment and scale-up of prioritised climate technology solutions	0 No purposeful efforts have been made to catalyse investment in the deployment and scale-up of prioritised technology solutions.	2 A comprehensive strategy has been developed and is being implemented to catalyse investment in the deployment and scale-up of prioritised climate technology solution, including market preparation and business planning	Output 4.1: The national policy roadmap for the promotion of higher efficiency refrigerators, including MEPS-HEPS, labelling scheme, consumer awareness, capacity building for custom officials, and MV&E framework) adopted by the government Activity 4.1.1: Develop minimum energy performance standards (MEPS) and highest energy performance standards (HEPS) for refrigerators based on the existing work under different initiatives. This work will be conducted by the PWG during its quarterly meetings (see activity 2.2) with support from an international policy expert and U4E. The policy expert will be sub-contracted and guide the work of the PWG. A critical element of the work of the PWG will be to determine the appropriate level of MEPS and HEPS in order to achieve the efficiency level objectives in line with local manufacturers ability to manufacture higher efficiency refrigerators at competitive price, as well as with the consumers' ability to purchase higher priced refrigerators. The policy expert will prepare the relevant preparatory studies and documents, and conduct training during the PWG meetings, as appropriate. In addition to the PWG quarterly meetings, provision is made to organize two (2) additional 2-day meetings if deemed necessary Deliverable 4.1.1: Draft MEPS for refrigerators ready for public consultation						X				





			on: capacity reinforcement of custom officials since most refrigerators are imported; design of non-compliance measures. This activity will be conducted through the work of the PWG during its regular meetings. It will be supported by the policy expert.											
			Deliverable 4.1.7: National MV&E plan for refrigerators											
			Activity 4.1.8: Design training curriculum and materials on MEPS for refrigerators for custom officials. Control at the border will be central in the country's MV&E plan since most refrigerators are imported. The training curriculum will be developed through capacity building needs assessments.								X			
			Deliverable 4.1.8: Training curriculum and training materials on MEPS for refrigerators for custom officials and retail market inspectors											
			Activity 4.1.9: Organize training of trainers. Local trainers will be selected and trained so they can deliver training of custom officials on a long-term basis.										X	
			Deliverable 4.1.9: 15 local trainers trained on MEPS for refrigerators											
			Output 4.2: The national policy roadmap for the promotion of higher efficiency DTs, including MEPS-HEPS, end-users education, capacity building on TCO, and MV&E framework) adopted by the government											
			Activity 4.2.1: Develop MEPS and HEPS for DTs. This work will be conducted by the PWG during its quarterly meetings with support from the international policy expert (see activity 2.2). The policy expert will be sub-contracted and guide the work of the PWG. A critical element of the work of the PWG will be to determine the appropriate level of MEPS and HEPS in order to achieve the efficiency level objectives in line with local manufacturer's ability to manufacture higher efficiency DTs at competitive price, as well as with the impact on the power development plan. The policy expert will prepare the relevant preparatory studies and documents, and conduct training during the PWG meetings, as appropriate. In addition to the PWG quarterly meetings, provision is								X			



			made to organize two (2) additional 2-day meetings if deemed necessary																				
			Deliverable 4.2.1: Draft MEPS for DTs ready for public consultation																				
			Activity 4.2.2: Conduct training workshop for procurement officers on Total Cost of Ownership (TCO). The procurement of higher efficiency DTs, which come at a higher initial cost, must take into consideration the total operating and maintenance cost of a DT, as well as the corresponding reduction in electricity losses (TCO). Training will be organized for procurement officers from the public electric utility as well as for non-utility market players.													X							
			Deliverable 4.2.2: 2-day training workshop for procurement officers of TCO for DTs																				
			Activity 4.2.3: Organize public consultation on the recommended national policy roadmap (including recommended levels of MEPS and HEPS). This consultation will bring together representatives from the consumer groups, public electric utility, non-utility market player, and academia. The consultation will last three (3) months, including a national stakeholders consultation workshop																	X			
			Deliverable 4.2.3: National stakeholders consultation workshop and consultation on national policy roadmap for DTs report																				
			Activity 4.2.4: Finalization of the national policy roadmap by the PWG. This will include the preparation of a report on the outcomes of the public consultation with recommendations for finalization of the roadmap. The finalization of the roadmap will be done by the PWG.																				
			Deliverable 4.2.4: National policy roadmap for DTs. Indicative content: 1) MEPS and HEPS levels, and schedule for increase over time; 2) Regulations on labelling; 3) end-users awareness plan; 4) communication plan; 5) MV&E framework and measures; 6) Overall action plan and budget																			X	
			Activity 4.2.5: Development of national MV&E plan for DTs. Initial consultation conducted during proposal preparation highlighted that DTs are purchased by a restricted number of players (mostly the												X								



				public electric utility, and few energy-intensive customers). Non-utility market players must request the approval of the technical specifications from the public electric utility for the DTs they intend to purchase. The national MV&E framework will be designed through consultation with the relevant organizations and carried out under the supervision of the PWG.											
				Deliverable 4.2.5: National MV&E plan for DTs											
				Output 4.3: Technology upgrade options identified for DTs and capacity building of local DT manufacturers implemented						X					
				Activity 4.3.1: Conduct site visit at DT manufacturers. An international DT expert will carry out technical site visit to assess technology improvement needs and capacity building needs											
				Deliverable 4.3.1: Report on technology and capacity building needs analysis for DTs technology upgrade											
				Activity 4.3.2: Develop training program and conduct feasibility study for technology improvement. The international expert will then develop a training program to build the capacity of engineers and designers to improve the design and manufacturing of DTs in line with international best practices. Based on the outcomes of the site visit, the international expert will prepare a feasibility study for investment in new technology (manufacturing, recycling).							X				
				Deliverable 4.3.2: Training program, training materials; feasibility study for DT technology upgrade											
				Activity 4.3.3: Conduct capacity building training workshop for local DT manufacturers. A training workshop will then be organized for local DT manufacturers (on-site). The feasibility study report will also be presented to and discuss with DT manufacturer's management.									X		
				Deliverable 4.3.3: Training (on-site) for engineers and designers of DT manufacturers on technology upgrade											
	Sub Outcome 5: Climate finance	0 No climate finance strategy exists.	2 A climate finance strategy has been	Output 5.1: Financing mechanisms and options identified and developed for the promotion of higher efficiency refrigerators					X						



Strategic Objective	Indicator	Target	Activity	Deliverable	Timeline									
					Q1	Q2	Q3	Q4	Y1	Y2	Y3	Y4	Y5	Y6
strategy defines the potential use of a combination of funding options from public resources; tariffs, and international cooperation; financing instruments such as loans, bonds, equity and others; private investment; and or the blending of financial instruments		developed and is being used to define efforts to access a range of financing instruments for prioritised climate action.	Activity 5.1.1: Review international experience, analyze national conditions and prepare recommendations in terms of finance mechanisms, including fiscal incentives, utility take-back options, and utility financing schemes for refrigerators. This review will be conducted by the policy and finance experts.	Deliverable 5.1.1: Report on finance mechanisms										
			Activity 5.1.2: Organize capacity building workshop on finance mechanisms and options for refrigerators. Based on the outcomes of the PWG meeting on finance mechanisms, a training workshop will be organized on the selected options. A capacity building needs analysis will be conducted and a training workshop organized to build the capacity of relevant stakeholders to equip them with the necessary skills and tools for the future design of finance mechanisms	Deliverable 5.1.2: Training workshop on finance mechanisms and options for refrigerators							X			
			Activity 5.1.3: Preparation of recommendations for finance mechanisms and options for refrigerators. These recommendations will be based on the outcomes of activities 5.1.1 and 5.1.2 and prepared by policy and finance expert. These recommendations will include detailed implementation plans and be forwarded to the relevant authorities (Ministry of Energy, Ministry of Finance, etc.)	Deliverable 5.1.3: Detailed implementation plan for selected finance mechanisms and options for refrigerators								X		
			Output 5.2: Financing mechanisms and options identified and developed for the promotion of higher efficiency DTs	Activity 5.2.1: Review international experience, analyze national conditions and prepare recommendations in terms of finance mechanisms, including fiscal incentives, bulk procurement programs, and international finance for DTs. This review will be conducted by the policy expert.						X				





4. ADDITIONAL INFORMATION (ONLY FOR ADAPTATION PLANNING SUPPORT)

Not applicable



5. BUDGET, PROCUREMENT, IMPLEMENTATION, AND DISBURSEMENT

5.1 Budget plan



5.1 Budget Plan	Detailed Budget (in US\$)														Disbursement Plan		
Outcomes	Budget Categories choose from the drop-down list			Unit	# of Unit	Unit Cost	Total Budget (per budget category)	Total Budget (per sub-outcome)	Total Budget (per outcome)	3m	6m	9m	12m	15m	18m		
Sub Outcome 1: Appropriate climate technology solutions identified and prioritised in accordance with national strategies and plans for climate adaptation and mitigation	1.1 Detailed market assessment including current stock and future growth, energy saving potential, impact of electricity losses and energy savings on government budget (since electricity is subsidised)	Consultant - Individual - International	WDay	20	500.00	10,000.00											
		Consultant - Individual - Local	WDay	60	200.00	12,000.00											
		Travel - Local	Trip	5	150.00	750.00											
		Daily allowance - local consultants	Day	20	50.00	1,000.00	27,850.00										
		Travel - International	Trip	2	1,000.00	2,000.00											
		Per diem (for international expert)	Day	14	150.00	2,100.00											
	PWG - TC meeting	Meeting	1	1,500.00	1,500.00												
Sub Outcome 2: Stakeholder engagement consultative processes	2.1 Relevant stakeholders and experts are assembled in the Policy Working Group (PWG)	Daily allowance - workshop participants	PersDay	30	40.00	1,200.00	2,700.00										
	2.2 The PWG supervises the project implementation and successfully develop and adopts the national policy roadmaps	PWG - TC meeting	Meeting	4	1,500.00	6,000.00											
	Daily allowance - workshop participants	PersDay	120	40.00	4,800.00	10,800.00											
	PWG - TC meeting	Workshop	4	750.00	3,000.00												
	Daily allowance - workshop participants	PersDay	60	40.00	2,400.00												
	Consultant - Individual - International	WDay	15	500.00	7,500.00												
	Travel - International	Trip	2	1,000.00	2,000.00												
	Per diem (for international expert)	Day	10	150.00	1,500.00	23,600.00											
	Consultant - Individual - Local	WDay	20	200.00	4,000.00												
	Daily allowance - local consultants	Day	10	50.00	500.00												
	Workshop/Training	Workshop	1	1,500.00	1,500.00												
	Daily allowance - workshop participants	PersDay	30	40.00	1,200.00												
Sub outcome 3: Policy participatory review and updating of the climate finance Country Programme	PWG - TC meeting	Workshop	4	750.00	3,000.00												
	Daily allowance - workshop participants	PersDay	60	40.00	2,400.00												
	Consultant - Individual - International	WDay	15	500.00	7,500.00												
	Travel - International	Trip	2	1,000.00	2,000.00												
	Per diem (for international expert)	Day	10	150.00	1,500.00	23,600.00											
	Consultant - Individual - Local	WDay	20	200.00	4,000.00												
	Daily allowance - local consultants	Day	10	50.00	500.00												
	Workshop/Training	Workshop	1	1,500.00	1,500.00												
	Daily allowance - workshop participants	PersDay	30	40.00	1,200.00												
Sub Outcome 4: Market preparation and business planning for deployment and scale-up of pre-identified climate technology solutions	PWG - TC meeting	Meeting	2	750.00	1,500.00												
	Daily allowance - workshop participants	PersDay	30	40.00	1,200.00												
	Consultant - Individual - International	WDay	15	500.00	7,500.00												
	Travel - International	Trip	2	1,000.00	2,000.00												
	Per diem (for international expert)	Day	10	150.00	1,500.00	18,200.00											
	Consultant - Individual - Local	WDay	20	200.00	4,000.00												
	Daily allowance - local consultants	Day	10	50.00	500.00												
	Workshop/Training	Workshop	1	3,000.00	3,000.00												
	Daily allowance - workshop participants	PersDay	60	40.00	2,400.00												
	Consultant - Individual - Local	WDay	10	200.00	4,000.00												
	Daily allowance - local consultants	Day	10	50.00	500.00												
	Travel - Local	Trip	2	150.00	300.00												
	Daily allowance - local consultants	Day	10	50.00	500.00												
	Workshop/Training	Workshop	1	3,000.00	3,000.00												
	Daily allowance - workshop participants	PersDay	60	40.00	2,400.00												
	Consultant - Individual - Local	WDay	10	200.00	4,000.00												
	Daily allowance - local consultants	Day	10	50.00	500.00												
	Travel - International	Trip	1	1,000.00	1,000.00												
	Per diem (for international expert)	Day	5	150.00	750.00												
	PWG - TC meeting	Meeting	1	750.00	750.00												
	Daily allowance - workshop participants	PersDay	15	40.00	600.00												
	PWG - TC meeting	Meeting	2	750.00	1,500.00												
	Daily allowance - workshop participants	PersDay	30	40.00	1,200.00												
	Consultant - Individual - International	WDay	15	500.00	7,500.00												
	Travel - International	Trip	2	1,000.00	2,000.00												
	Per diem (for international expert)	Day	10	150.00	1,500.00	18,200.00											
	Consultant - Individual - Local	WDay	20	200.00	4,000.00												
	Daily allowance - local consultants	Day	10	50.00	500.00												
	Workshop/Training	Workshop	1	3,000.00	3,000.00												
	Daily allowance - workshop participants	PersDay	60	40.00	2,400.00												
	Consultant - Individual - Local	WDay	10	200.00	4,000.00												
	Daily allowance - local consultants	Day	10	50.00	500.00												
	Travel - International	Trip	1	1,000.00	1,000.00												
	Per diem (for international expert)	Day	5	150.00	750.00												
	PWG - TC meeting	Meeting	1	750.00	750.00												
	Daily allowance - workshop participants	PersDay	15	40.00	600.00												
	PWG - TC meeting	Meeting	2	750.00	1,500.00												
	Daily allowance - workshop participants	PersDay	30	40.00	1,200.00												
	Consultant - Individual - International	WDay	15	500.00	7,500.00												
	Travel - International	Trip	2	1,000.00	2,000.00												
	Per diem (for international expert)	Day	10	150.00	1,500.00	18,200.00											
	Consultant - Individual - Local	WDay	20	200.00	4,000.00												
	Daily allowance - local consultants	Day	10	50.00	500.00												
	Workshop/Training	Workshop	1	3,000.00	3,000.00												
	Daily allowance - workshop participants	PersDay	60	40.00	2,400.00												
	Consultant - Individual - Local	WDay	10	200.00	4,000.00												
	Daily allowance - local consultants	Day	10	50.00	500.00												
	Travel - International	Trip	1	1,000.00	1,000.00												
	Per diem (for international expert)	Day	5	150.00	750.00												
	PWG - TC meeting	Meeting	1	750.00	750.00												
	Daily allowance - workshop participants	PersDay	15	40.00	600.00												
	PWG - TC meeting	Meeting	2	750.00	1,500.00												
	Daily allowance - workshop participants	PersDay	30	40.00	1,200.00												
	Consultant - Individual - International	WDay	15	500.00	7,500.00												
	Travel - International	Trip	2	1,000.00	2,000.00												
	Per diem (for international expert)	Day	10	150.00	1,500.00	18,200.00											
	Consultant - Individual - Local	WDay	20	200.00	4,000.00												
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	Daily allowance - workshop participants	PersDay	60	40.00	2,400.00												
	Consultant - Individual - Local	WDay	10	200.00	4,000.00												
	Daily allowance - local consultants	Day	10	50.00	500.00												
	Travel - International	Trip	1	1,000.00	1,000.00												
	Per diem (for international expert)	Day	5	150.00	750.00												
	PWG - TC meeting	Meeting	1	750.00	750.00												
	Daily allowance - workshop participants	PersDay	15	40.00	600.00												
	PWG - TC meeting	Meeting	2	750.00	1,500.00												
	Daily allowance - workshop participants	PersDay	30	40.00	1,200.00												
	Consultant - Individual - International	WDay	15	500.00	7,500.00												
	Travel - International	Trip	2	1,000.00	2,000.00												
	Per diem (for international expert)	Day	10	150.00	1,500.00	18,200.00											
	Consultant - Individual - Local	WDay	20	200.00	4,000.00												
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	Workshop/Training	Workshop	1	3,000.00	3,000.00												
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	Daily allowance - local consultants	Day	10	50.00	500.00												
	Travel - International	Trip	1	1,000.00	1,000.00												
	Per diem (for international expert)	Day	5	150.00	750.00												
	PWG - TC meeting	Meeting	1	750.00	750.00												
	Daily allowance - workshop participants	PersDay	15	40.00	600.00												
	PWG - TC meeting	Meeting	2	750.00	1,500.00												
	Daily allowance - workshop participants	PersDay	30	40.00	1,200.00												



CTCN will be selecting the executing agency through a competitive tender process, evaluating complete technical and financial offers for the execution of the technical assistance. Due to the tendering process, the total budget might be different compared to the one approved by the GCF, being the latter the upper limit.

Within CTCN technical assistance a minimum amount of 1% of total budget is dedicated to gender mainstreaming, assuring that the gender topic is properly embedded into the technical analysis.

5.2 Procurement plan

Please see Excel file attached.

5.2 Procurement Plan						
For goods, services, and consultancies to be procured, please list the items, descriptions in relation to the activities in Section 3, estimated cost, procurement method, relevant threshold, and the estimated dates. Please include the procurement plan for at least the first tranche of disbursement requested below and provide a full procurement plan for the entire duration of the implementation period if available at this stage.						
Item	Item Description	Estimated Cost (US\$)	Procurement Method	Thresholds (Min-Max monetary value for which indicated procurement method must be used)	Estimated Start Date	Projected Contracting Date
Goods and Non-Consulting Services						
		Sub-Total (US\$)	\$ -			
Consultancy Services						
Contract of services to implement the technical assistance	Technical Assistance "National framework for leapfrogging to Energy Efficient Appliances and Equipment in Malawi (Refrigerators and Distribution Transformers) through regulatory and financing mechanism"	289,250.00 * see notes		\$289,250.00	01.09.2019	15.11.2019
		Sub-Total (US\$)	\$ 289,250.00			
Estimated cost equivalent to total outcome budget + audit fee Overall financial management and procurement of goods and services under this readiness and preparatory support proposal will be guided by UN regulations, rules, policies and procedures. UNEP will be responsible for the implementation of the readiness actions and for procurement and contractual services, as well as reporting on the progress of this implementation in close coordination and strategic guidance from the NDA/FP. The procurement actions of the NDA/FP will be coordinated and in accordance with UN policies and guidelines. CTCN processes for procurement. For requests that are eligible and prioritized, the Climate Technology Managers in charge of the respective request sources the appropriate expertise to develop the Terms of Reference of the assistance (called 'Response Plan' as per CTCN procedures). The response plan provides specific information on the technical assistance to be delivered, including activities, outputs, expected outcomes and impacts, timeline, indicators or measuring assistance progress and success, stakeholders to be involved, etc. The response plan, once finalized, is signed by the national focal point of the CTCN in the concerned country (National Designated Entity), the institution which originated the CTCN request for technical assistance and the CTCN Director and constitutes the basis of the assistance to be implemented and monitored upon the approval and in cooperation with the NDA. Once the response plan is signed, the contracting of the implementer starts.						

Overall financial management and procurement of goods and services under this readiness and preparatory support proposal will be guided by UN regulations, rules, policies and procedures. Further, procurement of goods and services will follow the general principles stated under clause 7 of Framework Readiness and Preparatory Support Grant Agreement (Framework Agreement) between Green Climate Fund (GCF) and UN Environment. UN Environment will comply with its obligation under clause 7(a) of the Framework Agreement, which states "The procurement of Goods and Services for Approved Readiness Support Proposals, whether by the Delivery Partner or by a third party, shall be done in accordance with the rules, policies and procedures of the Delivery Partner.

UN Environment will be responsible for the implementation of the readiness activities and for procurement and contractual services, as well as reporting on the progress of this implementation in close coordination and strategic guidance from the NDA/FP. The procurement actions and the operational services will be carried forward in accordance with UN Environment policies and procurement guidelines as agreed under the Framework Readiness and Preparatory Support Grant Agreement (Framework Agreement) between Green Climate Fund (GCF) and the UN Environment.

The specific procedures for procurement through the CTCN are as follows:

For requests that are eligible and prioritized, the Climate Technology Managers in charge of the respective requests select one or several organizations from the CTCN Consortium to develop the Terms of Reference of the assistance (called 'Response Plan' as per CTCN procedures). The response plan provides specific information on the assistance to be conducted, including activities, outputs, expected outcomes and impacts, timeline, indicators or measuring assistance progress and success, stakeholders to be involved, etc.

The response plan, once finalized, is signed by the national focal point of the CTCN in the concerned country (National Designated Entity), the requesting organization and the CTCN Director, and constitutes the basis of the assistance to be implemented and monitored. Based on the needs and expertise required in the response plan, a Network Member will be selected to implement it. The selection of organizations from the Network is conducted through a procurement process, as per UN rules and regulations, in order to select the best proposals, based on expertise, experience and cost-effectiveness. For this, the following four principles shall be given due consideration when undertaking the procurement functions:

- a) i. Best value for money principle;
- b) ii. Fairness, accountability, integrity and transparency of the procurement process;



- c) iii. Effective competition;
- d) iv. The best interest of the CTCN.

5.3 Disbursement schedule

Please specify the proposed schedule for requesting disbursements from the GCF. For periodicity, specify whether it's quarterly, bi-annually or annually only.

UNEP as the Delivery Partner for this Readiness and Preparatory Support Proposal will submit requests for disbursement for approved proposals to the GCF in accordance with the Framework Readiness and Preparatory Support Grant Agreement between the GCF and UNEP. Disbursement requests will be signed by the authorised representative of the UNEP and will include details of the bank account into which the grant will be deposited. UNEP, the Delivery Partner for this R&P Support Proposal for Malawi, will administer the grant disbursed by the GCF in accordance with UNEP's regulations, rules, and procedures including maintenance of records of grant, disbursements and expenditure.

Please choose one option among the two below and delete the one that does not apply to you. Please fill in information under brackets:

Readiness Proposal that falls within a Framework Agreement with the GCF

Disbursements will be made in accordance to Clause 4 "Disbursement of Grants" and Clause 5 "Use of Grant Proceeds by the Delivery Partner" of the Framework Readiness and Preparatory Support Grant Agreement entered into between GCF and Un Environment Programme on *11 October 2016*. And amended on 13 December 2017. The Delivery Partner is entitled to submit 2 request(s) for disbursement each year, and is also entitled to request one interim request for disbursement within 30 days of notification of approval.

Readiness Proposal that requires a bilateral Grant Agreement to be signed with the GCF (please add more disbursement as needed)

- The first disbursement *amounting [Choose Currency] [Type the amount]* will be transferred upon approval of the readiness request and effectiveness of the Grant Agreement;
- The second disbursement *amounting [Choose Currency] [Type the amount]* will be transferred upon submission of an interim progress report [and audited financial report]⁶, in form and substance acceptable to the Fund, [including an audited expenditure statement]; and
- The third disbursement *amounting [Choose Currency] [Type the amount]* will be made upon submission of a completion report and financial report, in form and substance acceptable to the Fund, including an audited expenditure statement.

Please include an indicative disbursement table showing the expected amounts to be requested and keep to multiples of USD 5,000.

⁶ For second disbursement, audited financial report and audited expenditure statement are only required for readiness and preparatory support proposals expected to last over 12 months.



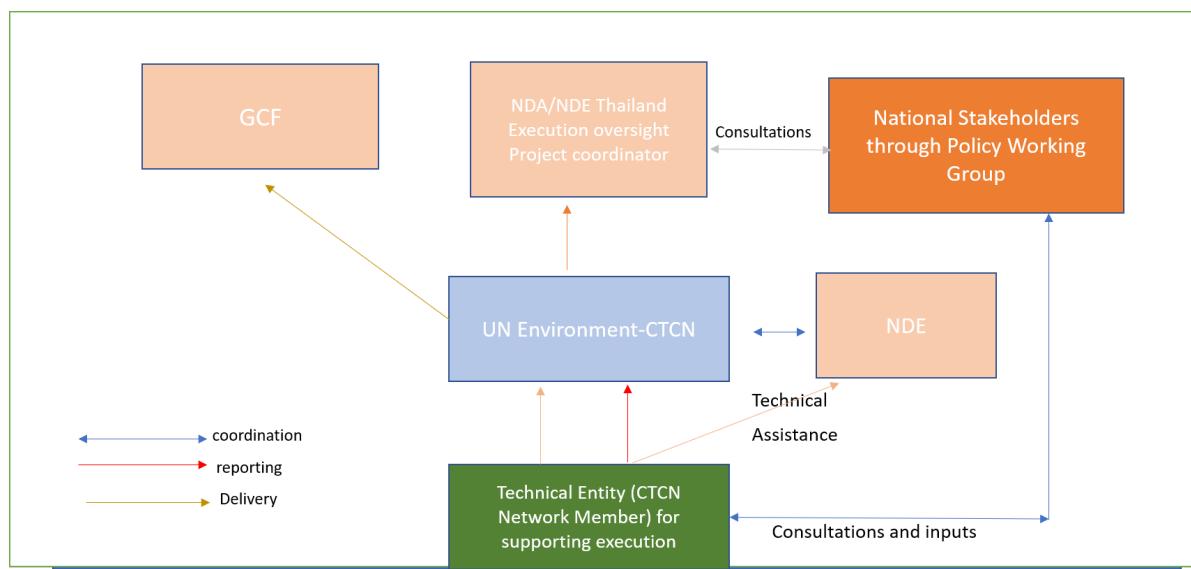
6. IMPLEMENTATION ARRANGEMENTS AND OTHER INFORMATION

6.1 Implementation map

UNEP will manage the funds for the activities under this readiness agreement. UNEP will agree on a plan with the NDA of Malawi to monitor the implementation of the activities using the grant proceeds. However, UNEP through the CTCN will be responsible for the implementation of the activities under this readiness and preparatory support proposal.

The selected implementer will report to CTCN as per their contractual arrangement and in line with UN rules and regulations. They will produce regular progress and financial reports and will submit deliverables to CTCN. Funds will only be released if and when the deliverables are satisfactory and cleared by CTCN. They will return any unspent funds within ninety days of expiry or notice of termination of the CTCN.

The UNFCCC country focal points for technology (NDE) and finance (NDA) will provide active support to the implementer in the execution of this technical assistance. Their roles as country focal points will include, but not be limited to: Ensuring the activities associated with the implementation of this technical assistance are aligned with national climate priorities; promote and engage with key stakeholders as identified by the implementer; promote and present this technical assistance in climate change-related events; and participate in CTCN events and in national workshops affiliated with this technical assistance, if required. They will also be expected to provide guidance and review any relevant documents produced and will be kept apprised of the progress of the technical assistance. The implementation map below summarizes the different interactions between the different parties involved in this technical assistance:



CTCN processes before the selection of the implementer (described in the implementation map)

The CTCN process for managing technical assistance is the following: Requests for technical assistance can be prepared by any applicant organization from a developing country, but all requests must be submitted by the CTCN NDE (national focal point in the concerned country). Once submitted, all requests submitted by developing countries are assessed as per eligibility, balancing and prioritization criteria approved by the CTCN Advisory Board. The three eligibility criteria are the following: 1) The support provided will contribute to increased resilience and/or mitigate emissions, and is aligned with national plans; 2) The support will enhance endogenous capacities; and; 3) Processes are in place in the requesting country to monitor and evaluate any support provided (that is, project accountability is ensured). Balancing criteria are looking at inter and intra-regional and geographical balance (with a preference for requests submitted by LDCs and other highly vulnerable and low capacity countries; balance between adaptation and mitigation objectives, and balance between various types of support spanning the technology cycle. Prioritization criteria consider a number of elements that demonstrate project strength and potential for success, including the promotion of endogenous capacities and appropriate



technologies, potential for scale up, for South-South cooperation, for leveraging public and private financing, for creating social, economic and social benefits, promoting gender equality etc.

Once a request is deemed eligible and prioritised, the CTCN selects the best expertise among its consortium partners to develop a response plan. The criteria for selection are: Relevant technical expertise, Experience and network in national context, Relevant language capacity, Response Planning track record, Representative use of the consortium partners in Response Planning and Feedback/ preference from the NDE.

Based on the discussion with the NDE, NDA and request proponent and feedback from the CTCN, the consortium partner develops the response plan. Once an advanced version is prepared, it is presented to CTCN's director NDE and NDA for signature. Once the response plan is signed, the contracting of the implementer starts.

The request proponent of this project is the Ministry of Natural Resources, Energy and Mining, Department of Energy Affairs. National stakeholder consultations were held in Malawi and in each of the other target countries and thereafter the GCF readiness proposal were framed in consultations with the NDA, the NDE, Ministry of Energy and the respective electricity utility companies.

The beneficiaries of this project include Department of energy, Utility companies, Standard formulation body, energy regulatory authority, local manufacturers private sector engaged in wholesale and retail of appliances and electricity consumers.

The CTCN (hosted by UNEP-UNIDO) is providing technical assistance to the Government of Malawi, as per its COP Mandate, and supporting Malawi to develop this readiness proposal. The CTCN Engagement with the Government of Malawi is mature with close co-operation between the NDA and NDE. The implementing partner will be procured through formal tendering procedures if the Readiness proposal is approved for implementation. The relevant COP decisions are provided below for easy reference:

Decision 14/CP.22: Linkages between the Technology Mechanism and the Financial Mechanism of the Convention

Para 4. Welcomes the increased engagement between the Green Climate Fund and the Climate Technology Centre and Network, particularly with respect to utilizing the Readiness and Preparatory Support Programme and the Project Preparation Facility of the fund, noting the potential of such engagement in supporting developing country Parties to build their capacity for implementing technology projects and programmes;

Para 6. Invites Green Climate Fund national designated authorities and focal points to use the support available to them under the Readiness and Preparatory Support Programme to, inter alia, conduct technology needs assessments and develop technology action plans;

Para 7. Also invites developing country Parties to develop and submit technology-related projects, including those resulting from technology needs assessments and from the technical assistance of the Climate Technology Centre and Network, to the operating entities of the Financial Mechanism for implementation, in accordance with their respective policies and processes;

Decision 15/CP.22: Enhancing climate technology development and transfer through the Technology Mechanism

Para 13. Underlines the importance of well-functioning and strengthened collaboration between the national designated authorities for the Green Climate Fund, the focal points for the Global Environment Facility and the national designated entities for technology development and transfer

Para 15. Welcomes the increased engagement between the Green Climate Fund and the Climate Technology Centre and Network, particularly with respect to utilizing the Readiness and Preparatory Support Programme and the Project Preparation Facility of the fund in order to respond to country-driven requests for technical assistance;

Para 16. Encourages the advancement of the engagement referred to in paragraph 15 above, including through the strengthening of collaboration between national designated authorities for the Green Climate Fund and national designated entities for technology development and transfer;

Para 17. Invites the Climate Technology Centre and Network to include the outcomes of the engagement referred to in paragraphs 15 and 16 above in its annual report to the Conference of the Parties at its twenty-third session."

6.2 Risks, monitoring and evaluation (M&E), and other relevant information



Risk	Rating for Likely hood of occurrence	Rating for Impact	Mitigation	Entity to manage Risk
Engagement risk: Lack of engagement from key stakeholders	<i>Low</i>	Low	The Policy Working Group (PWG) will be established to serve as the project's steering committee, and oversee the development of the national policy roadmaps on higher efficiency refrigerators and higher efficiency distribution transformers. It will comprise key stakeholders.	CTCN/ NDA; it's a country driven process and all stakeholders are on board
Delay risk: Delay in implementation of readiness programme	<i>Low</i>	Low	Project management procedures in place. UNEP actively engaged.	UNEP/CTCN
Recruitment risk: Delays due to inability to procure consultants	<i>Low</i>	Low	Dissemination of procurement process through CTCN network and channels which has undertaken similar work for more than 100 technical assistance	UNEP/CTCN
Involvement risk: Lack of interest by the public and private sector key stakeholders, resulting in limited interest of local players to scale up the results of this intervention	<i>Low</i>	Low	During project implementation a thorough consultative and participatory approach will be applied; key private sector and industry stakeholders have been identified and targeted.	CTCN/ NDA; it's a country driven process and all stakeholders are on board



Technical/Capacity risks: Lack of capacity by the national counterparts to use or implement the results and conclusions of this technical assistance.	Low	Low	The project is in line with national policies and the project will be executed in close coordination with the respective Ministry and authorities; PWG meetings and TC meetings are planned.	CTCN/NDA
Management Risk: Lack of effective coordination between various project partners	Low	Low	A proper coordination will be sought through the CTCN.	UNEP/CTCN
Ownership of the results: True ownership by the government and system operator to ensure results are used and up scaled accordingly	Low	Low	The ownership of the project has been secured by the Government given that it is in line with their national plans	
Access to data: Data accessibility, mainly from the Utility and other involved stakeholders	Medium	Medium	The sourcing of relevant data for the determination of the country baseline is critical to the success of the project. Inclusive engagement and consultation with national manufacturers and retailers will help obtain the necessary data quality. The representative of utility companies would be part of the PWG	CTCN/NDA/Utility company
Gender Risk: Resistance against or lack of interest	Low	Low	This Project will pursue thorough and gender	CTCN

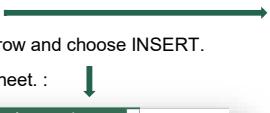


in, the project activities from stakeholders, especially with regard to the active promotion of gender equality.			responsive integration and ensure stakeholder involvement at all levels.	
Unethical Practices Opportunities for money laundering, terrorist financing, or other prohibited practices	<i>Low</i>	Low	The implementation body would be selected as per the UN procurement rules. There is no direct transfer of money to any private sector entity.	UNEP/CTCN

Readiness and Preparatory Support Budget and Procurement Plan

Readiness Grant Budget Preparation Guidelines

The following considerations are important when completing the budget:

1. Before preparing the Readiness and PPF budget, please read the full guidance on our website (<https://www.greenclimate.fund/how-we-work/empowering-countries>).
2. You can select the appropriate budget categories from the dropdown list in the budget plan: 
3. To insert additional rows, right click on the row number below where you wish to insert the new row and choose INSERT.
4. Additional budget categories may be added by manually typing them on the Budget Category sheet.: 

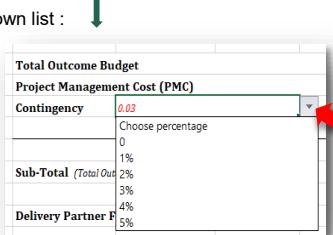
Project Management Cost:

Project management costs (PMC) are the direct administrative costs incurred to execute a project. They should cover only incremental costs incurred due to the GCF contribution. In most cases, these costs are directly related to the support of a dedicated project management unit (PMU) which manages the day to day execution related activities of the project.

General Principles for PMC costs:

1. The percentage of PMC financed by GCF should not be more than the percentage share of the overall budget financed by GCF
2. PMC budget thresholds: Up to 7.5 per cent of total activity budget.
 - > PMC exceeding 7.5 per cent for the readiness (including NAPs) proposals, and PPF proposals, up to \$ 3 million will require detailed documentation and justification supporting the entire PMC budget.
 - > The PMC should be shown as a separate component in the project budget. A detailed breakdown of PMC should be provided by budget category.
 - > Indicative list of eligible project management costs:
 - > **Project staffing and consultants:** Project manager, Project Assistant, Procurement personnel, Finance personnel & Support/admin. Personnel
 - > **Other direct costs:** Office equipment, Mission related travel cost of the PMU, Project management systems and information technology, Office supplies, Audit cost

Contingency :

1. Select the appropriate % of Contingency Budget from the dropdown list : 

2. **Contingency budget for unforeseen costs arising during the project implementation should not be included in the outcome budget separately.**
3. **Contingency budget must be used for any unforeseen programme (output level) cost that is unrelated to implementation/service fee.**
4. Any use of contingency must be reported to and agreed by the GCF Secretariat in writing in advance provided with justifications that are acceptable to the GCF
5. If you get to the end of the project and you haven't spent Contingency, you can't increase the scope of the project or buy some more equipment to use it up.
6. The Budget Notes sheet should be used to record explanations, further details or cost breakdowns for individual lines

5.1 Budget Plan

Please add rows for Outcomes, Outputs and Cost Categories as required. Additional budget categories may be added by manually typing them on the Budget Category sheet.

		Travel – Local	Trip	2	150.00	300.00				
		Daily allowance - local consultants	Day	10	50.00	500.00				
		Consultant - Individual - International	W/Day	10	500.00	5,000.00				
		Travel - International	Trip	2	1,000.00	2,000.00				
		Per diem (for international expert)	Day	10	150.00	1,500.00				
		Consultant - Individual - Local	W/Day	10	200.00	2,000.00				
Sub Outcome 4: Market preparation and business planning for deployment and scale-up of prioritised climate technology solutions	4.1.6 Finalization of the national policy roadmap for the promotion of higher efficiency refrigerators	Consultant - Individual - International	W/Day	10	500.00	5,000.00				
	4.1.7 Development of national MV&E plan for refrigerators - 4.1.8 & 4.1.9 Training of custom officials on MEPS for refrigerators	Travel - International	Trip	1	1,000.00	1,000.00				
		Per diem (for international expert)	Day	5	150.00	750.00				
		PWG - TC meeting	Meeting	1	750.00	750.00				
		Daily allowance - workshop participants	Pers/day	15	40.00	600.00				
		PWG - TC meeting	Meeting	2	750.00	1,500.00				
4.2.1: Development of MEPS and HEPS for DTs		Daily allowance - workshop participants	Pers/day	30	40.00	1,200.00				
		Consultant - Individual - International	W/Day	15	500.00	7,500.00				
		Travel - International	Trip	2	1,000.00	2,000.00				
		Per diem (for international expert)	Day	10	150.00	1,500.00				
		Consultant - Individual - Local	W/Day	20	200.00	4,000.00				
		Daily allowance - local consultants	Day	10	50.00	500.00				
4.2.2: Capacity building on Total Cost of Ownership for DTs for procurement officers		Consultant - Individual - International	W/Day	10	500.00	5,000.00				
		Travel - International	Trip	1	1,000.00	1,000.00				
		Per diem (for international expert)	Day	5	150.00	750.00				
		Workshop/Training	Workshop	1	1,500.00	1,500.00				
		Daily allowance - workshop participants	Day	30	40.00	1,200.00				
		Consultant - Individual - Local	W/Day	10	200.00	2,000.00				
4.2.3: Public consultation on the national policy roadmap for higher efficiency DTs		Workshop/Training	Workshop	1	3,000.00	3,000.00				
		Daily allowance - workshop participants	Pers/day	60	40.00	2,400.00				
		Consultant - Individual - Local	W/Day	20	200.00	4,000.00				
		Travel – Local	Trip	2	150.00	300.00				
		Daily allowance - local consultants	Day	10	50.00	500.00				
		Consultant - Individual - International	W/Day	10	500.00	5,000.00				
4.2.4: Finalization of the national policy roadmap for the promotion of higher efficiency DTs		Travel - International	Trip	2	1,000.00	2,000.00				
		Per diem (for international expert)	Day	10	150.00	1,500.00				
		Consultant - Individual - Local	W/Day	10	200.00	2,000.00				
		Consultant - Individual - International	W/Day	10	500.00	5,000.00				
		Travel - International	Trip	1	1,000.00	1,000.00				
		Per diem (for international expert)	Day	5	150.00	750.00				
4.2.5: Development of national MV&E plan for DTs		Per diem (for international expert)	Day	10	150.00	1,500.00				
		Consultant - Individual - Local	W/Day	10	200.00	2,000.00				
		Consultant - Individual - International	W/Day	10	500.00	5,000.00				
		Travel - International	Trip	1	1,000.00	1,000.00				
		Per diem (for international expert)	Day	5	150.00	750.00				
		Daily allowance - workshop participants	Pers/day	15	40.00	600.00				
4.3: Capacity building for local DT manufacturers on DT technology upgrade		Consultant - Individual - International	W/Day	25	500.00	12,500.00				
		Travel - International	Trip	2	1,000.00	2,000.00				
		Per diem (for international expert)	Day	15	150.00	2,250.00				
		Consultant - Individual - International	W/Day	20	500.00	10,000.00				
		Travel - International	Trip	2	1,000.00	2,000.00				
		Per diem (for international expert)	Day	10	150.00	1,500.00				
Sub Outcome 5: Climate finance strategy defines the potential use of a combination of funding options from public resources; tariffs, and international cooperation; financing instruments such as loans, bonds, equity and others; private investment; and/or the blending of financial instruments	5.1 Define options and mechanisms for national and international finance mechanisms for higher efficiency refrigerators	Workshop/Training	Workshop	1	2,000.00	2,000.00				
		Daily allowance - workshop participants	Pers/day	40	40.00	1,600.00				
		Consultant - Individual - International	W/Day	20	500.00	10,000.00				
		Travel - International	Trip	2	1,000.00	2,000.00				
		Per diem (for international expert)	Day	10	150.00	1,500.00				
		Daily allowance - workshop participants	Pers/day	40	40.00	1,600.00				
	5.2 Define options and mechanisms for national and international finance mechanisms for higher efficiency DTs	Consultant - Individual - International	W/Day	20	500.00	10,000.00				
		Travel - International	Trip	2	1,000.00	2,000.00				
		Per diem (for international expert)	Day	10	150.00	1,500.00				
		Workshop/Training	Workshop	1	2,000.00	2,000.00				
		Daily allowance - workshop participants	Pers/day	40	40.00	1,600.00				
		Consultant - Individual - International	W/Day	20	500.00	10,000.00				

Sub outcome 6 Effective coordination mechanism between NDA and NDE for the UNFCCC Technology Mechanism and other climate focal points	6.1.1: Coordination by the NDE. The NDE will be responsible for national level coordination for implementation of the activities. It will do so by calling meetings and following up on the schedule of activities.	Travel - Local	Trip	10	150.00	1,500.00	25,000.00	25,000.00						
		Daily allowance - local consultants	Day	30	50.00	1,500.00								
		Audio Visual & Printing	Lumpsum	1	5,000.00	5,000.00								
		Office Supplies	Lumpsum	1	2,000.00	2,000.00								
		Consultant - Individual - Local	W/day	100	150.00	15,000.00								
Total Outcome Budget							286,750.00	88,550.00	139,000.00	59,200.00	-	-	-	
Project Management Cost (PMC) Up to 7.5% of Total Activity Budget		Consultant - Individual - International	Days	32	500.00	16,000.00	Actual amount and % of PMC requested: do not change the formula	Maximum PMC that can be requested: do not change the formula						
		Travel - International	Lumpsum	1	1,000.00	1,000.00								
		Audit Fee	Lumpsum	1	2,500.00	2,500.00								
						-								
						-	<input checked="" type="checkbox"/> 19,500.00	21,506.25						
						-	<input checked="" type="checkbox"/> 6.80%	7.50%						

FOR GREEN CLIMATE FUND SECRETARIAT'S USE ONLY

Breakdown (per budget category)	Total (per budget category)
Audio Visual & Printing	5,000.00
Audit Fee	2,500.00
Consultant - Individual - International	123,500.00
Consultant - Individual - Local	63,000.00
Professional Services – Companies/Firm	-
IT Equipment	-
Office Supplies	2,000.00
Travel - International	24,000.00
Travel - Local	3,150.00
Workshop/Training	14,500.00
Per diem (for international expert)	18,600.00
Daily allowance - local consultants	6,000.00
Daily allowance - workshop participants	26,000.00
PWG - TC meeting	18,000.00
Total Outcome Budget + PMC	306,250.00

FOR GREEN CLIMATE FUND SECRETARIAT'S USE ONLY

Total Outcome Budget	286,750.00
Project Management Cost (PMC)	19,500.00
Contingency	14,337.50
Sub-Total (Total Outcome Budget + Contingency + PMC)	320,587.50
Delivery Partner Fee (DP) - Up to 8.5% of the Sub-Total	27,249.94
Total Project Budget (Total Activity Budget + Contingency + PMC + DP)	\$ 347,838.00

286750

19500

14337.5

Budget Note	Detailed Description
	'Daily allowance - local consultant" are to cover local transportation, sometimes to other cities for stakeholders consultation.
	'Daily allowance - workshop participants" is provided to workshop participants to cover their travel and accommodation cost
1.1	An international consultant (policy expert) will lead this task. He/she will be supported by two to three local consultants to be hired for data collection and liaison with strategic stakeholders. Provision is made for 60 working days for the local consultants and 20 for the international consultant. Provision is made for 2 international travels
2.1	Kick-off meeting of the PWG, 2 days, 15 pers. 50 USD per person/day, so 1500 USD per workshop (meetign room, tea breaks, lunch, logistics)
2.2	Quarterly meetings of the PWG, so 4 meetings in total. 2 days, 15 pers. 50 USD per person/day, so 1500 USD per workshop (meetign room, tea breaks, lunch, logistics)
3.1	Four meetings of the Technical Committee. 1 day, 15 pers, 50 USD per pers, so 750USD per workshop (meetign room, tea breaks, lunch, logistics) One national consultation workshop. 1 day, 30 part. 50USD per pers/day so 1500 per workshop (meetign room, tea breaks, lunch, logistics) A international technical expert on refrigerator will support the work of the Technical Committee. Provision is made for 15 working days and 2 international trips. The itnernational technical expert will be supported by a local technical consultant on refrigerators. Provision is made for 20 working days.
3.2	Work carried out by the PWG during its quarterly meetings. 2 additional PWG meetings will be organized for the specific purpose of developing MEPS/HEPS. Each meeting 1 day, 15 part, 50USD per part, so 750USD per meeting The international policy expert will support the work of the PWG, with an estimated 15 working days and 2 international trips. His/her work will be supported by a local policy expert, for whom a provision is amde for 20 working days.
3.3	Work carried out by the PWG during its quarterly meetings, and supported by the international policy expert and local policy expert.
3.4	Work carried out by the PWG during its quarterly meetings, and supported by the international policy expert and a local expert on communications.
3.5	A national public consultation workshop will be organized on the draft national policy roadmap. 2-day workshop, 30 parts, 50USD/pers/day, so 3000USD for the workshop (meetign room, tea breaks, lunch, logistics). The work will be supervised by the local policy expert.
3.6	The international policy expert will work with the PWG and the local policy expert to finalize the national policy roadmap.
3.7	An international finance expert will conduct this work. A analysis on suitable finance options will be carried and a report prepared. A training workshop will be organized for PWG members and strateigc stakeholders on suitable finance options. 2-day training workshop, 20 part, 50USD per pers/day, so 2000USD for the workshop (meetign room, tea breaks, lunch, logistics).
3.8	Work carried out by the PWG during its quarterly meetings. The work will be supported by the international policy expert. One additional PWG meeting will be organized for this purpose. 1-day, 15 part, 50USD per pers/day, so 750USD for the meeting (meetign room, tea breaks, lunch, logistics).
4.1	Four meetings of the Technical Committee. 1 day, 15 pers, 50 USD per pers, so 750USD per workshop (meetign room, tea breaks, lunch, logistics) One national consultation workshop. 1 day, 30 part. 50USD per pers/day so 1500 per workshop (meetign room, tea breaks, lunch, logistics) A international technical expert on DTs will support the work of the Technical Committee. Provision is made for 15 working days and 2 international trips. The international DT expert will be supported by a local technical consultant on DTs. Provision is made for 20 working days.
4.2	Work carried out by the PWG during its quarterly meetings. 2 additional PWG meetings will be organized for the specific purpose of developing MEPS/HEPS. Each meeting 1 day, 15 part, 50USD per part, so 750USD per meeting The international policy expert will support the work of the PWG, with an estimated 15 working days and 2 international trips. His/her work will be supported by a local policy expert, for whom a provision is amde for 20 working days.

4.3	Work carried out by the PWG during its quarterly meetings, and supported by the international DT expert and local DT expert. A 2-day training workshop for procurement officers (utility and non-utility) will also be organized, 15 pers, 50YSD/pers/day, so 1500USD for the workshop (meetign room, tea breaks, lunch, logistics).
4.4	A national public consutlation workshop will be organized on the draft national policy roadmap. 2-day workshop, 30 parts, 50USD/pers/day, so 3000USD for the workshop (meetign room, tea breaks, lunch, logistics). The work will be supervised by the local policy expert.
4.5	The international policy expert will work with the PWG and the local DT expert to finalize the national policy roadmap.
4.6	The international finance expert will conduct this work. A analysis on suitable finance options will be carried and a report prepared. A training workshop will be organized for PWG members and strategic stakeholders on suitable finance options. 2-day training workshop, 20 part, 50USD per pers/day, so 2000USD for the workshop (meetign room, tea breaks, lunch, logistics).
4.7	Work carried out by the PWG during its quarterly meetings. The work will be supported by the international policy expert. One additional PWG meeting will be organized for this purpose. 1-day, 15 part, 50USD per pers/day, so 750USD for the meeting (meetign room, tea breaks, lunch, logistics).
4.8	The international DT expert will carry out technical site visit to assess technology improvement needs and capacity building needs. He/she will develop the training program. A training workshop will then be organized for local DT manufacturers (on-site).

Budget Categories
Audio Visual & Printing
Audit Fee
Consultant - Individual - International
Consultant - Individual - Local
Professional Services – Companies/Firm
IT Equipment
Office Supplies
Travel - International
Travel – Local
Workshop/Training
Per diem (for international expert)
Daily allowance - local consultants
Daily allowance - workshop participants
PWG - TC meeting

*Indicate additional
budget categories*

5.2 Procurement Plan

For goods, services, and consultancies to be procured, please list the items, descriptions in relation to the activities in Section 3, estimated cost, procurement method, relevant threshold, and the estimated dates. Please include the procurement plan for at least the first tranche of disbursement requested below and provide a full procurement plan for the entire duration of the implementation period if available at this stage.

Item	Item Description	Estimated Cost (US\$)	Procurement Method	Thresholds (Min-Max monetary value for which indicated procurement method must be used)		Estimated Start Date	Projected Contracting Date
Goods and Non-Consulting Services							
Sub-Total (US\$)							
Consultancy Services							
Contract of services to implement the technical assistance	Technical Assistance 'National framework for leapfrogging to Energy Efficient Appliances and Equipment in Malawi (Refrigerators and Distribution Transformers) through regulatory and financing mechanism'	289,250.00	* see notes	\$289,250.00		01.09.2019	15.11.2019
Sub-Total (US\$)							

Estimated cost equivalent to total outcome budget + audit fee

Overall financial management and procurement of goods and services under this readiness and preparatory support proposal will be guided by UN regulations, rules, policies and procedures.

UNEP will be responsible for the implementation of the readiness activities and for procurement and contractual services, as well as reporting on the progress of this implementation in close coordination and strategic guidance from the NDA/FP. The procurement actions and the operational services will be carried forward in accordance with UN policies and procurement guidelines.

CTCN procedure for procurement: For a request that is eligible and prioritized, the Climate Technology Managers in charge of the respective request sources the appropriate expertise to develop the Terms of Reference of the assistance (called 'Response Plan' as per CTCN procedures). The response plan provides specific information on the technical assistance to be delivered, including activities, outputs, expected outcomes and impacts, timeline, indicators or measuring assistance progress and success, stakeholders to be involved, etc. The response plan, once finalized, is signed by the national focal point of the CTCN in the concerned country (National Designated Entity), the institution which originated the CTCN request for technical assistance and the CTCN Director and constitutes the basis of the assistance to be implemented and monitored upon the approval and in cooperation with the NDA. Once the response plan is signed, the contracting of the implementer starts.