

Naoko Ishii CEO and Chairperson

August 04, 2014

Dear Council Member:

UNEP as the Implementing Agency for the project entitled: *Global: Technology Needs Assessment*, has submitted the attached proposed project document for CEO endorsement prior to final approval of the project document in accordance with UNEP procedures.

The Secretariat has reviewed the project document. It is consistent with the proposal approved by Council in April 2013 and the proposed project remains consistent with the Instrument and GEF policies and procedures. The attached explanation prepared by UNEP satisfactorily details how Council's comments and those of the STAP have been addressed. I am, therefore, endorsing the project document.

We have today posted the proposed project document on the GEF website at <u>www.TheGEF.org</u>. If you do not have access to the Web, you may request the local field office of UNDP or the World Bank to download the document for you. Alternatively, you may request a copy of the document from the Secretariat. If you make such a request, please confirm for us your current mailing address.

Sincerely,

Naoko Ishii Chief Executive Officer and Chairperson

Attachment: Copy to: GEFSEC Project Review Document Country Operational Focal Point, GEF Agencies, STAP, Trustee

> 1818 H Street, NW • Washington, DC 20433 • USA Tel: +1 (202) 473 3202 - Fax: +1 (202) 522 3240 E-mail: gefceo@thegef.org www.thegef.org



# **REQUEST FOR CEO ENDORSEMENT** PROJECT TYPE: FULL-SIZED PROJECT TYPE OF TRUST FUND: GEF TRUST FUND

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#### **PART I: PROJECT INFORMATION**

Project Title: Technology Needs Assessment – Phase II							
Country(ies):	Global (Armenia, Belize, Burkina	GEF Project ID: <sup>1</sup>	4948				
	Faso, Burundi, Bolivia, Egypt,	-					
	Gambia, Grenada, Guyana,						
	Honduras, Jordan, Madagascar,						
	Malaysia, Mauritania,						
	Mozambique, Panama,						
	Philippines, Seychelles,						
	Swaziland, Tanzania, Togo,						
	Tunisia, Turkmenistan, Uruguay,						
	Uzbekistan, Kazakhstan and Lao						
	PDR)						
GEF Agency(ies):	UNEP (select) (select)	GEF Agency Project ID:	00863				
Other Executing Partner(s):	UNEP RISØ CENTRE (URC),	Submission Date:	19/12/2013				
	National Executing Agencies						
GEF Focal Area (s):	Climate Change	Project Duration(Months) <sup>2</sup>	45				
Name of Parent Program (if	Poznan Strategic Program	Project Agency Fee (\$):	580,054				
applicable):							
► For SFM/REDD+							
For SGP							
For PPP							

# A. FOCAL AREA STRATEGY FRAMEWORK<sup>3</sup>

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount (\$)	Co-financing (\$)
CCM6 (select)	Adequate resources allocated to support enabling activities and capacity building related to the Convention	Twenty seven (27) eligible countries receive GEF funding for preparation of Technology Needs Assessments and /or Technology Action Plans Twenty five (25) TNAs completed and submitted to the UNFCCC Twenty seven (27) TAPs developed and endorsed by the countries	GEFTF	3,703,569	1,100,527
CCM6 (select)	Human and institutional capacity of recipient countries strengthened	Human and institutional capacities for preparation of Technology Needs Assessments and Action Plans enhanced	GEFTF	2,402,266	1,056,394
	-	Total project costs		6,105,835	2,156,921

<sup>&</sup>lt;sup>1</sup> Project ID number will be assigned by GEFSEC.

 $<sup>^{2}</sup>$  Country activities and substantial project activities are expected to be completed after 36 months, 9 additional months have been included for project closure processes (financial closure, final reporting).

<sup>&</sup>lt;sup>3</sup> Refer to the Focal Area Results Framework and LDCF/SCCF Framework when completing Table A.

## **B. PROJECT FRAMEWORK**

**Project Objective:** As part of the GEF Strategic Programme on Technology Transfer, the project will provide targeted financial and technical support to assist twenty five developing countries carry out improved Technology Needs Assessments (TNAs) within the framework of Article 4.5 of the UNFCCC. Assisted countries, plus Khazakstan and Lao PDR<sup>4</sup>, will also develop national Technology Action Plans (TAPs) for prioritized technologies that reduce greenhouse gas emissions, support adaptation to climate change, and are consistent with national sustainable development objectives.

Project Component	Grant			Trust	Grant	Confirmed
Note: for detailed	Туре	Expected Outcomes	Expected Outputs	Fund	Amount	Cofinancing (\$)
ANNEX H					(Φ)	(Φ)
1. Facilitating the preparation of Technology Needs Assessments (TNAs) in twenty five (25) developing countries - or, where these have already been prepared/started, making them more strategic and useful in an operational sense - and Technology Action Plans (TAPs) in twenty seven (27) developing acuttice	ТА	National consensus on technologies in priority sectors established, compatible with Nationally Appropriate Mitigation and Adaptation Actions Plans, and/or National Climate Change Strategies	An institutional structure for TNA-TAP process implementation put in place New or in some cases updated/strengthened TNAs in 25 countries and TAPs in 27 countries	GEF TF	4,228,041	1,061,165
2. Developing tools and providing capacity building and information on methodologies to support preparation of Technology Needs Assessments (TNAs) and Technology Action Plans (TAPs)	TA	Capabilities of key national actors/players in developing TNAs and TAPs built and/or strengthened	New tools to identify and assess adaptation technology needs are developed Capacity building tools and methodologies covering adaptation and mitigation technology needs assessments and action planning are further improved/updated to address gaps identified during implementation of the TNA Phase I project Tools and methodologies are widely disseminated and made available, where needed, to support technology identification and prioritization work in closely related initiatives, such as the CTCN and the pilot regional climate technology networks/finance centers funded by the GEF	GEFTF	740,748	458,111
3. Strengthening	TA	Networks and	Thematic Networks	GEF TF	538,674	478,645
outreach, dissemination		partnerships are	strengthened, with strong			

<sup>&</sup>lt;sup>4</sup> Kazakhstan and Lao PDR only completed their TNA during TNA Phase I, therefore both countries will receive additional support to develop their TAPs under this new TNA Phase.

and networking activities to promote use and funding of TNAs and TAPs priorities	strengthened for the uptake of TAPs and project ideas	links to Regional Centers, GEF and UNFCCC networking initiatives (technology transfer focused), and involving regional and global stakeholders such as regional development banks, business associations, academic institutions, Chambers of Commerce			
		5,507,463	1,997,921		
Project management Cost (PMC) <sup>5</sup>				598,372	159,000
		6,105,835	2,156,921		

#### C. SOURCES OF CONFIRMED COFINANCING FOR THE PROJECT BY SOURCE AND BY NAME (\$)

Please include letters confirming cofinancing for the project with this form

Sources of Co-financing	Name of Co-financier (source)	Type of Cofinancing	Cofinancing Amount (\$)
National government	Twenty seven National Governments	In-kind	1,361,921
	Contribution (to be determined at Country level) <sup>6</sup>		
Implementing Agency	UNEP	In-kind	307,889
Executing Agency	URC	In-kind	487,111
Total Co-financing	2,156,921		

## **D.** TRUST FUND RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY<sup>1</sup>

	Type of		Country Name/	(in \$)			
GEF Agency	Trust Fund	Focal Area	Global	Grant	Agency Fee	Total	
			Giobai	Amount (a)	$(b)^{2}$	c=a+b	
UNEP	GEF TF	Climate Change	Global	6,105,835	580,054	6,685,889	
Total Grant Reso	6,105,835	580,054	6,685,889				

<sup>1</sup> In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table. PMC amount from Table B should be included proportionately to the focal area amount in this table.

 $^{2}$  Indicate fees related to this project.

#### F. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Grant Amount (\$)	Cofinancing (\$)	Project Total (\$)
International Consultants	148,000	-	148,000
National/Local Consultants	-	-	-

#### G. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT? (Select)

N/A

# PART II: PROJECT JUSTIFICATION

<sup>&</sup>lt;sup>5</sup> PMC should be charged proportionately to focal areas based on focal area project grant amount in Table D below.

<sup>&</sup>lt;sup>6</sup> The in-kind contributions from National Governments amount to about 50,000 USD/country and corresponds mainly to Government staff time (i.e. National TNA coordinator, members of sectoral/technology expert groups and TNA/TAP related committees) as well as financing logistics for stakeholder consultation, national SC and WG meetings.

#### A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN OF THE ORIGINAL PIF<sup>7</sup>

A.1 <u>National strategies and plans</u> or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NCSA, NIPs, PRSPs, NPFE, Biennial Update Reports, etc.

The UNFCCC process defines technology needs assessment (TNA) as a set of country-driven activities that identify and determine the mitigation and adaptation technology priorities of developing country Parties. The purpose of TNA is therefore to assist developing country Parties to the UNFCCC identify and analyse priority technology needs, which can form the basis for a portfolio of environmentally sound technology (EST) projects and programmes to facilitate the transfer of, and access to, the ESTs and know-how in the implementation of Article 4.5 of the Convention. Hence TNAs are central to the work of Parties to the Convention on technology transfer and present an opportunity to track an evolving need for new equipment, techniques, practical knowledge and skills, which are necessary to mitigate GHG emissions and/or reduce the vulnerability of sectors and livelihoods to the adverse impacts of climate change.

Since 2001, developing country Parties to the UNFCCC have been assessing their technology needs in the areas of climate change mitigation and adaptation within the framework of their national development plans and strategies. Through its interim financing for capacity-building in priority areas – enabling activities phase II (also known as "top-ups") – the Global Environment Facility (GEF) provided funding to 94 eligible countries to enable them to conduct TNAs.

Parties made available information on the results of their needs assessments either as separate documents or as part of their national communications. In December 2007, COP 13 requested the GEF, in consultation with interested Parties, international financial institutions, other relevant multilateral institutions and representatives of the private financial community, to elaborate a strategic programme to scale up the level of investment for technology transfer to help developing countries address their needs for environmentally sound technologies. In response to this guidance, the LDC/SCCF Council approved in November 2008 its strategy presented in the document: "Elaboration of a Strategic program to scale up the level of Investment in the Transfer of Environmentally Sound Technologies.". This strategy paper which was submitted to COP 14 in December 2008, was overwhelming endorsed by Parties and renamed Poznan Strategic Program to scale up the level of Investment in the Transfer of Environmentally Sound Technologies. At the 16th session of the Conference of the Parties to the UNFCCC, the parties requested the GEF to consider the long-term implementation of the strategic program. (Decision 2/CP.14 of the COP to the UNFCCC) The GEF Secretariat established 5 elements to further scale up investment in ESTs in developing countries and to enhance technology transfer activities under the Convention, and hee are listed in section A.2.1. below.

A.2. <u>GEF focal area</u> and/or fund(s) strategies, eligibility criteria and priorities.

A.2.1 The <u>GEF focal area/LDCF/SCCF</u> strategies <u>/NPIF</u> Initiative:

The accelerated adoption of advanced technologies in developing countries is now recognized as essential to both achieving the global goal of reducing emission of greenhouse gases into the atmosphere and allowing those countries to adapt to the consequences of a changing climate. Support for enhanced TNAs was included in the Poznan Strategic Program on Technology Transfer approved by the GEF Council in November 2008. This was endorsed by Parties to the UNFCCC at COP14 in Poznan. Moreover the establishment of the UNFCCC Technology Mechanism at COP16 in Cancun aims to accelerate climate technology transfer and assist countries in identifying technology needs and removing barriers to climate technology transfer.

The GEF Poznan Strategic Program on Technology Transfer consists of three windows: (1) technology needs assessments (TNAs); (2) piloting priority technology projects; and (3) dissemination of successfully demonstrated technologies. The TNA phases I and II support implementation of the first window of the Poznan Strategic Program on Technology Transfer At the 16th session of the Conference of the Parties to the UNFCCC, the parties requested the GEF to consider the long-term implementation of the strategic program. (Decision 2/CP.14 of the COP to the UNFCCC) The GEF Secretariat has established the following elements to further scale up investment in ESTs in developing countries and to enhance technology transfer activities under the Convention. (1) Support

<sup>&</sup>lt;sup>7</sup> For questions A.1 –A.7 in Part II, if there are no changes since PIF and if not specifically requested in the review sheet at PIF stage, then no need to respond, please enter "NA" after the respective question.

for Climate Technology Centers and a Climate Technology Network; (2) Piloting Priority Technology Projects to Foster Innovation and Investments; (3): Public-Private Partnership (PPP) for Technology Transfer; (4) Technology Needs Assessment (TNAs); (5) GEF as a Catalytic Supporting Institution for Technology Transfer. TNA Phase I was deriving from window (1) of the Poznan Strategic Program on Technology Transfer and supported 36 countries to carry out improved Technology Needs Assessments within the framework of the UNFCCC. This new phase "TNA Phase II" is designed to support 25 additional countries to conduct TNAs building on the experience, lessons learnt and best practices from TNA Phase I (see Annexes H-2, H-3 and H-4), and responds to element 4 of GEF the long term implementation of the Poznan strategic program.

It should be noted that the number of participating countries and GEF budget were increased compared to the initial numbers indicated in the approved PIF. The GEF agreed to include additional countries provided that the total GEF budget would not increase by more than 5%. The five per cent increase in GEF budget allowed for the inclusion of:

- Belize which is the first of the additional countries that contacted UNEP to participate in the TNA project.
- Kazakhstan and Laos (Phase I countries) that were not able to complete their TAPs in Phase I and expressed their interest in completing their TAPs during phase II.

The above also explains the difference in the number of TAPs (27) to be developed in contrast to the number of TNAs (25).

The project is in conformity with the GEF's strategy to support enabling activities and capacity development in climate change and is fully consistent with GEF 5 priorities of enhancing national ownership of climate change activities and to strengthen countries' capacities to fulfill their reporting commitments under the Convention. The project is aligned to GEF-5 climate change strategic objective 6 (CCM-6) which targets to support enabling activities and capacity building for Convention obligations.

A.2.2. For projects funded from LDCF/SCCF: the LDCF/SCCF eligibility criteria and priorities: N/A

A.2.3. For projects funded from NPIF, relevant eligibility criteria and priorities of the Fund: N/A

#### A.3 The <u>GEF Agency's comparative advantage</u>:

UNEP has a strong position on climate technology transfer based on more than a decade of promoting markets for green technologies such as renewable energy and energy-efficiency in developing countries, often with a focus on removing policy and finance barriers that hinder the uptake of new technologies. This project will contribute to Sub-programme 1: Climate Change of UNEP's Programme of Work 2014-2015; Expected Accomplishment (b): Energy efficiency is improved and the use of renewable energy is increased in partner countries to help reduce greenhouse gas emissions and other pollutants as part of their low emission development pathways; Output 3: Tools and approaches designed and piloted in countries to develop mitigation plans, policies, measures, and low-emission development strategies, and spur investment and innovation within selected sectors in a manner that can be monitored, reported on and verified.

Together with its skill in analyzing how clean technologies contribute to macroeconomic growth, this experience base gives UNEP a sound foundation from which to help developing countries manage the challenging transition to a low carbon climate resilient development path. UNEP has also implemented a number of adaptation projects worldwide, including: AdaptCost -- Analysis of the Economic Costs of Climate Change Adaptation in Africa; Adapting to climate change induced water stress in the Nile River Basin; CC DARE: Climate Change Adaptation and Development Initiative; and a growing number of country-specific adaptation-focused Assessment Reports on Climate Change.

In addition to working closely with public sector agencies, UNEP's activities have generally had a strong focus on private sector engagement. Close collaboration with national and regional centers of excellence and related networks are at the heart of UNEP's approach in delivering support to countries, and represent key tools to address the challenges of technology transfer for sustainable development through South-South and North-South cooperation. Over the years, a number of these UNEP led Centres of Excellence and Networks have targeted various aspects of climate change as well as the promotion and transfer of clean technologies to developing countries.

UNEP with the support from Finland, Spain, Norway and Korea already established sub-regional Climate Change networks in Latin America, Southeast Asia and Central Asia. These networks are based on country/region-driven and multi-sector processes, serving the specific needs indicated by participating countries and integrate national focal points as well as other relevant national officials dealing with climate change issues. These networks are backed by a number of sector/technology specific or thematic initiatives and related centres of excellence and they contribute directly to the development of capacity and capabilities while supporting regional and national activities.

UNEP brings extensive experience to this body of work, having been involved with UNIDO in creating and helps oversee a network of almost 40 National Cleaner Production Centers that continue to promote cleaner, more efficient industrial production and build capacities to select, finance, and operate better technologies, including their management. Some of these centers could be invited to expand their roles to perform many, if not all the functions of the ISAs envisaged under the project. The evidence from past experience supports this argument: the GEF has supported projects that have been undertaken in part through these NCPCs, including one that strengthened their capacity to include energy efficiency as a component in their support to industry.

Finally, the Climate Technology Center and Network (CTCN), which is the operational arm of the UNFCCC Technology Mechanism, is hosted and managed by UNEP in collaboration with UNIDO and with the support of 11 Centres of Excellence located both in developing and developed countries (including URC, Fundacion Bariloche, ENDA and AIT). It is expected to be fully operational by the end of 2013. The CTCN will provide technical support to countries at their request to build or strengthen their capacity to identify technology needs, and facilitate the preparation and implementation of technology projects and strategies to support action on mitigation and adaptation. The TNA countries will therefore be able to request the CTCN for activities that will complement and follow-up on the TNA project activities – especially if the National Designated Entities (NDEs) of these countries strongly support and engage in the TNA/TAP process since TNA/TAPs represent excellent tools to support the mandate of NDEs. In addition, by linking and collaborating with the CTCN, the project will enhance its knowledge sharing and Networking activities.

A.4. The <u>baseline project and the problem</u> that it seeks to address:

Out of the 25 new TNA countries, 15 have conducted TNAs between 2001 and 2007. These countries participated in the initial series of TNAs supported by GEF and implemented by UNDP or UNEP. While the quality and scope of information provided in the submitted reports varied widely, many countries did not present a clear set of criteria for the prioritization of technologies nor applied the suggested methodologies in a consistent manner. In addition to this, the stakeholder participation when it comes to the identification of next steps and prioritizations of methodologies was limited.

As a result, the main gaps identified in the reports included: (i) poor justification of selected sectors of the national economy; (ii) lack of justification for the choice of technologies; (iii) poor description of the assessment methodology and process; (iv) lack of clarity on stakeholder engagement, contribution and involvement; (iv) lack of clarity on identified barriers and capacity building needs and; (vi) lack of follow-up action plans. In addition, it should be noted that these initial TNAs were more focused towards mitigation. Countries indicated the need for further refinement and updates of the guidance for preparing the TNA and further elaboration of the approaches and methodologies used to conduct TNAs, notably for adaptation.

In this context, a clear improvement can be observed in the recently implemented TNA Phase I project when it comes to quality of submitted reports (notably on sector and technology prioritization, on barrier analysis and on the follow-up plan with the elaboration of TAPs). But also, when it comes to the involvement of stakeholders, this being something UNEP/URC has strongly focused on; giving special attention to the establishment of clear implementation arrangements and institutional structures for TNA-TAP implementation at country level. The stakeholder involvement is expected to improve even further in this new phase since a dedicated guidebook to facilitate the process will be developed by URC.

All the 25 new TNA countries have submitted National Communications on Climate Change that include a national inventory on GHG emissions and a general description of measures taken, or to be taken, by the country with respect to climate change mitigation and adaptation. There are several factors that determine whether a country may have more measures regarding mitigation versus adaptation and vice versa, such as access to energy sources, agricultural diversification, sea level rise, and water scarcity.

Nationally Appropriate Mitigation Actions (NAMAs) have been designed by some of the countries including Armenia, Jordan, Madagascar, Mauritania, Togo and Tunisia. These NAMAs include policies, programmes and projects to be implemented by the countries with a view to contribute to global emissions reductions. Existing information and literature indicates that sectoral distribution of mitigation priorities is greatest in the energy sector, followed by transport, industry, waste, forestry, and agriculture. Within the energy sector, mitigation measures range from fuel switching, to energy efficiency and renewable energy programmes, to the distribution of improved cookstoves. For example, Egypt's Strategy for Energy Supply and Use is working on expanding access to renewable energy resources such as solar and wind. Transportation measures include alternative fuels, such as biodiesel, and railway projects. In Armenia, the National Program on Energy Saving and Renewable Energy includes expanding electrical transport and introducing natural gas into motor transport's fuel share. The industry and waste sectors consist of initiatives regarding environmental upgrading, water recycling and waste management. For instance, Jordan's NAMA states the country will utilize solar and wind energy to reduce emissions in its waste water treatment plants. Within the forestry sector, monitoring and management systems, and afforestation and reforestation programmes are being implemented. In Malaysia, the National Seed Bank is being enhanced and there are forest management and restoration projects such as the Deramakot Forest Reserve Project. In agricultural sectors, priorities lie with technologies relating to water harvesting, agro-forestry, irrigation practices, and biogas collection.

National Adaptation Programmes of Action (NAPAs) outline the priority activities of countries for adapting to their most urgent and immediate needs as a result of climate change. These have been developed by Burkina Faso, Burundi, Gambia, Madagascar, Mauritania, Mozambique, Tanzania, and Togo. Existing information and literature indicates that key sectors for technology needs with regards to adaptation are agriculture, water management, forestry, and coastal zones. In the agricultural sector, policies and projects include increasing irrigation, improving water use and efficiency, and agricultural diversification. For example, in the Philippines, the Climate Change Adaptation Program includes retrofitted irrigation systems and small water impounding projects, while Burkina Faso's National Action Adaptation to Climate Change Programme has a programme focused on soil protection techniques. Water harvesting and storage programmes, and desalination projects are vital for future water management. In Bolivia, adaptation measures to address glacial melting in the Andes includes an Integrated Pilot Catchment Management Plan for affected watersheds, while the country's forestry sector consists of measures for afforestation and early warning systems for community forest fire prevention. The construction of artificial structures and afforestation programmes in coastal areas are measures that can protect against sea level rise, such as the National Mangrove Management Action Plan in Guyana that is working to restore and protect mangrove ecosystems along the coast. Table 1 lists some of the actions and initiatives the countries have taken towards climate change mitigation and adaptation.

There is a general lack of sound institutional and policy frameworks that address the need to mainstream climate change mitigation and adaptation measures into national and sectoral programmes. In this context, realizing the potential of technology transfer is crucial. Such frameworks should also recognize parallels between projects and programmes in order to ensure efficient use of available resources. Steps should be taken in improving the coordination between sectors, departments and ministries; increasing funding and support to climate change research centers; including comprehensive monitoring mechanisms to evaluate strategies and action plans; providing tools for information sharing and decision making; and creating budgetary strategies or investment plans that prioritize mitigation and adaptation measures. Technology innovation is necessary for both mitigating and adapting to climate change, thus it is important that both financial and technical assistance are provided at the national level. International cooperation is vital in facilitating climate technology transfer to developing countries, the recent establishment of the UNFCCC Technology Mechanism and current operationalisation of its "operational arm" i.e. the Climate Technology Centre and Network (CTCN) is an important opportunity in this regard.

#### Table 1 – National actions towards mitigation and adaptation to climate change<sup>8</sup>

Countries	TNA	National Communi	cations	NAMA	NAPA	Some examples of national initiatives towards climate change mitigation and adaptation
Armenia	2003	$2^{nd}$	2010	Х		National Program on Energy Saving and Renewable Energy

<sup>&</sup>lt;sup>8</sup> Kazakhstan and Lao PDR are TNA Phase I countries which completed their TNA but not their TAPs GEF5 CEO Endorsement

	1		1	1	1	
						Renewable Energy and Energy Saving Fund of Armenia
Belize	_	$2^{nd}$	2010			National Climate Change Committee
Denze		2	2010			National Energy Policy (NEP)
		nd				National Mechanism of Adaptation to Climate Change
Bolivia	2002	2 <sup>nd</sup>	2009			Pilot Program for Climate Resilience
						National Watershed Program (PNC)
Burkina Faso	2003	1 <sup>st</sup>	2002		Х	Plan National de Lutte contre la Désertification (PNLCD)
Burundi	2002	2 <sup>nd</sup>	2010		X	National Plan of Action to Combat Desertification (PAN-LCD)
2010101		_				Strategy for Energy Supply and Use
-		and				Agriculture Sustainable Development Strategy
Egypt	2001	2 <sup>nd</sup>	2010			Egyptian Designated National Authority for Clean Development
						Mechanism
C		and	2012		v	Gambia Environmental Action Plans
Gambia	-	2	2013		А	Gambia Renewable Energy Center
Grenada	-	1 <sup>st</sup>	2000			National Communication on Climate Change
						National Climate Change and
Guyana	2002	$2^{nd}$	2012			Adaption Policy and Implementation Plan
						The Low Carbon Development Strategy (LCDS)
Honduras	-		-			National Climate Change Program
Jordan	2005	$2^{nd}$	2009	x		The National Energy Strategy 2008-2020
Joruun	2000	-	2007			National Water Strategy 2008-2022
Madagascar	2007	$2^{nd}$	2010	Х	Х	Programme d'Action National d'Adaptation au Changement Climatique (PANA)
						The National Green Technology and Climate Change Council
Malaysia	-	$2^{nd}$	2011			National Policy on Climate Change
						National Green Technology Policy
Mauritania	2003	$2^{nd}$	2008	x	x	Le Projet Adaptation aux Changements Climatiques et Côtiers (ACCC)
	2000		2000			Le Programme Changements et Variabilité Climatiques
Mozambique	-	1 <sup>st</sup>	2006		Х	National Renewable Energies Directorate
1		and	2012			Mozambique Science, Technology, and Innovation Strategy (ECTIM)
Panama	-	2"	2012			National Climate Change Policy and Action Plan
Dhilinning	2004	1 st	2000			Presidential Lask Force on Climate Change
Philippines	2004	1	2000			The National Climate Change Action Plan 2011 2028
Sevchelles	2005	$2^{nd}$	2014			Sevehalles National Climate Change Strategy (NCCS)
Swaziland	-	$2^{nd}$	2012			
-			2012			National Strategy on Urgent Actions on Land Degradation and Water
Tanzania	-	1 <sup>st</sup>	2003		Х	Catchments
Тодо	2003	$2^{nd}$	2011	x	x	Programme National d'Investissement pour l'Environnement et les
1050	2003	-	2011	Λ	Δ	ressources Naturelles (PNIERN)
Tunisia	2001	1 <sup>st</sup>	2001	x		Comite National sur les Changements Climatiques
- umpiu	2001		2001			Tunisian National Agency for Energy Conservation (ANME)
Turkmenistan	2007	2 <sup>nd</sup>	2010			
Uruguay	-	3"	2010			National Plan for Response to Climate Change (PNRCC)
Uzbekistan	2001	2 <sup>nd</sup>	2008			State Committee for Nature Protection (SCNP)

A. 5. <u>Incremental</u> /<u>Additional cost reasoning</u>: describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated <u>global</u> <u>environmental benefits</u> (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

As part of the Poznan Strategic Program on Technology Transfer, the project will provide targeted financial and technical support to assist twenty five developing countries carry out improved Technology Needs Assessments (TNA) within the framework of Article 4.5 of the UNFCCC. Assisted countries, plus Khazakhstan and Lao PDR, will also develop national Technology Action Plans (TAPs) for prioritized technologies that reduce greenhouse gas emissions, support adaptation to climate change, and are consistent with national sustainable development objectives.

The project will provide funding and technical assistance to countries to conduct their TNA/TAP process. The technical assistance will be provided from project start and will include guiding participating countries to: (i) set up their national TNA team and select appropriate local consultants to prepare the various reports, (ii) develop a

country tailored workplan and framework for conducting the TNA/TAP process, (iii) identify and engage all relevant stakeholders, as well as (iv) outreach, advocate and disseminate TNA/TAP results (including intermediary results along the process) to decision makers, donors, as well as national and international financial and business communities in the country.

The technical assistance, capacity building and guidance will be provided by UNEP/URC and the following partners referred to as regional centres (RCs): Asian Institute of Technology (AIT) in Asia, ENDA and Energy Research Centre (ERC) in Africa, and Fundacion Bariloche and Libelula in Latin America (see table below). The collaboration with Regional Centres of excellence has been crucial for the success of TNA Phase I. However, experience and feedback from participant countries tell us strengthening is required in the area of adaptation in the African and Asian regions. In a similar way, a need of strengthening language capabilities in Anglophone Africa as well as in the CIS region has been observed. To be able to address these needs and provide a better support to the new countries the existing Asian collaborating Centre (AIT) will subcontract an adaptation expert, namely Dr. Ala Druta. Besides being the Team Leader of Vulnerability and Adaptation at the Climate Change Office at the Agrarian State University of Moldova, Dr. Drupta is a Russian speaking person. Similarly, the African Regional Centre ENDA will be collaborating with the Energy Research Centre (ERC) which is based in South Africa and is hosted within the University of Cape Town. This way, the needs for strengthening the expertise in the area of adaptation as well as in language skills will be addressed. With these improvements we believe the support to participant countries will be significantly improved.

The table below shows the climate change expertise area and region for each RC collaborating with URC for the execution of the project.

REGIONAL CENTRE	MITIGATION	ADAPTATION	AFRICA AND MIDDLE EAST	ASIA AND THE CIS	LATIN AMERICA AND THE CARIBBEAN
ASIAN INSTITUTE OF					
TECHNOLOGY (AIT).	х			х	
BANGKOK, THAILAND					
DR. ALA DRUPTA.					
UNIVERSITY OF		x		x	
MOLDOVA					
ENDA, SENEGAL	х	х	х		
ENERGY RESEARCH	х	x	x		
CENTRE, SOUTH AFRICA					
FUNDACIÓN					
BARILOCHE,	x				х
ARGENTINA					
LIBÉLULA, PERU		х			x

#### Key success factors

Experience from the previous TNA phase confirms that countries are motivated to take ownership and participate in the activities when stakeholders see a strong possibility for the TNA-TAP process to enhance prospects for attracting investments from public and private sources. While this realization led to the addition of training modules for countries on proposal development and the production of an additional guidebook on proposal development and other resources that will be available for use in this new TNA Phase, additional strategies and sound planning practices are needed in the national TNA/TAP process to encourage the early engagement of the national and international financial and business communities and enhance their interest in supporting TAP implementation.

Proper stakeholder identification and engagement has also proved to be critical for conducting a successful TNA/TAP process since quality and success of the TNA-TAP process strongly depends on political will and

stakeholder engagement. More attention is therefore needed to ensure a rigorous stakeholder mapping and a more targeted selection of the stakeholders to engage in the process. The inception missions to the participating countries will aim to identify potential "TNA champions" - *notably to form the National TNA Committee<sup>9</sup> that provides leadership to the project in association with the National TNA coordinator* - among the decision makers and stakeholders that must be involved in the TNA-TAP process.

Finally, local capacities and data availability strongly influences the quality and success of the TNA-TAP process and its outputs. While the project is not in a position to improve local data and information availability, there is a need to ensure more scrutiny in selecting the national TNA coordinator and local consultants, and to further improve or adapt tools, training and capacity building activities. The inception mission will aim to identify qualified national experts/consultants that could lead the different steps of the TNA-TAP process under the supervision of the national TNA coordinator.

#### The UNFCCC Technology Mechanism: a new opportunity

The establishment of the UNFCCC Technology Mechanism presents a new opportunity to strengthen the political will and commitment for the TNA/TAP process and uptake of its results in the countries. The Technology mechanism is constituted of two bodies: (i) the Technology Executive Committee (TEC) which is the strategic and policy arm of the Technology Mechanism and (ii) the CTCN which is the operational arm of the Technology Mechanism. The objectives that were set by the COP for the CTCN are to focus on the practical implementation of the policy and strategic guidance provided by the TEC.

Since its establishment in 2010, the TEC has shown very strong interest in the TNAs and TAPs and generated a series of guidance and recommendations for countries to move to TAP implementation. During the 7th meeting of the TEC, the TEC and the CTCN jointly organized an in-session workshop on technology needs assessments (TNAs) further affirming the expectations of the Parties to establish strong links between the TNAs and the activities of the CTCN. In this context and in line with the TEC's key messages to COP 19, NDEs nominated by countries for the CTCN clearly have the potential to play a key role in establishing strong linkages and maintaining coherence at the national and regional levels between the different planning processes under the Convention, such as TNAs, NAMAs and NAPs. A number of NDEs clearly indicated that they see the TNA/TAP as a key tool for them to fulfill their role and mandate as NDE. The CTCN is seen as a good vehicle for countries to establish the enabling environments, such as policies and regulatory frameworks, for the prioritized technologies of the TNA.

In view of the above, NDEs should be directly involved in the TNA/TAP process in participating countries. In some countries, they could even be nominated as National TNA Coordinators. Overall, NDEs could take advantage of the mechanisms and processes established to conduct the TNA/TAP process at national level such as the national TNA Committees which could be sustained by governments after completion of the TNA/TAP process to support the work of the NDEs over time. Therefore, before project closure (milestone in country workplan as part of the project closure activities), URC will, through consultations with representatives from the corresponding signing ministry and TNA coordinator of each participating country, assess the need for sustaining some of the mechanisms and processes established for the TNA/TAP process and identify the means, feasibility and potential ways to sustain these.

As part of the project, long-term sustainability of the TNA process is considered crucial and therefore a mechanism to ensure this will be set up. URC will also help/guide countries to identify the required means.

#### The project components

The project is composed of three (3) main components. Component 1 aims at facilitating the preparation of Technology Needs Assessments (TNAs) in twenty five (25) developing countries, and the development of Technology Actions Plans (TAPs) in twenty seven (27) developing countries. Component 2 will develop tools and provide information on improved methodologies to support preparation of TNAs and TAPs. Finally,

<sup>&</sup>lt;sup>9</sup> The National TNA Committee is the core group of decision makers and includes representatives responsible for implementing policies from concerned ministries, members familiar with national development objectives, sector policies, climate change science, potential climate change impacts for the country, and adaptation needs. Refer to Annex H-1 for further description of the role and responsibilities of the National TNA Committee.

Component 3 aims at strengthening networking activities to promote use and funding of TNA and TAP priorities, including project proposals for selected priority technologies. A more detailed description of the components and expected results from each of the components is detailed below.

1. <u>Component 1:</u> Facilitating the preparation of TNAs in 25 developing countries and TAPs in 27 developing countries or, where these have already been prepared/started, making them more strategic and useful in an operational sense.

The <u>main objective</u> of this component is to provide technical assistance and funding for participating countries to assess their technology needs for both mitigation and adaptation and develop a national action plan to respond to their prioritized technology needs. When participating countries already conducted a TNA earlier, the objective is to review them and make them more strategic and useful in an operational sense.

The <u>main activities</u> to be conducted in the countries under Component 1 are:

- Establishing the national TNA teams
- Identifying and engaging the stakeholders
- Prioritizing sectors by conducting stakeholder consultations and establishing technology or sectoral working groups
- Identifying and prioritizing technologies in each priority sector
- Identifying barriers and enabling frameworks for each prioritized technology in each priority sector
- Developing a national Technology Action Plan and pilot project for selected technology priorities

The <u>main outputs</u> expected from countries under Component 1 will be a series of minimum 3 reports per country:

- A TNA report that will contain detailed description of how the TNA assessment has been conducted, information on prioritized sectors and subsectors in need of mitigation and adaptation technologies and which methodologies have been used for the prioritization of technologies.
- A Barriers Analysis and Enabling Framework report that will include an in-depth analysis of the actual market and trade barriers that hinder the transfer of a prioritized selection of technologies followed by an assessment of the policy, institutional and finance options to overcome these barriers.
- A TAP report that will present action plans to respond to the country's prioritized technology needs for low carbon and climate resilient development. This report will include proposals for pilot projects on selected technology priorities.

The <u>main outcomes</u> for Component 1 will be a national consensus on technologies for low carbon and climate resilient development in priority sectors and an agreement on actions to be implemented to respond to prioritized technology needs for low carbon and climate resilient development.

2. <u>Component 2:</u> Developing tools and providing capacity building and information on methodologies to support preparation of Technology Needs Assessments (TNAs) and Technology Action Plans (TAPs)

The <u>main objective</u> of Component 2 is to provide participating countries with (i) methodologies, guidance and tools covering adaptation and mitigation technology assessments and action plans, and (ii) strengthening national capacities for conducting the TNA/TAP process.

The <u>main activities</u> under component 2 will aim at improving existing methodologies and developing new guidance:

- Improvements to existing methodologies and guidebooks:
- a) *Methodology for the prioritization of technologies for adaptation:* The methodology for the prioritization of technologies for adaptation has not been developed to the same extent as for mitigation and has been perceived by

participating countries as weak. In contrast to mitigation, the costs and benefits of the various technology options for adaptation cannot be easily compared. This mainly due to the fact that the benefits adaptation technologies give rise to cannot be easily measured and monetized. Aiming at addressing this request, URC will improve the existing methodology making it easier for participant countries to conduct the technology prioritization process for adaptation.

- b) *Barrier Analysis and Enabling Environment guidebook:* The identification of market barriers aimed at identifying market barriers for the introduction and deployment of new sound technologies, which is preceded by a market mapping, has been perceived as difficult by participating countries. To address this, the Barrier Analysis and Enabling Environment guidebook will be revisited and improved to make the whole process easier for users.
  - Development of new guidance:
- c) *Guidebook on stakeholder involvement and engagement process:* Many of the participating countries from the previous TNA phase have shown lack of knowledge or interest in dealing with private and other stakeholders. URC has observed this need and will develop a guidebook to facilitate the process by showing the importance of stakeholder participation but also how to identify and get relevant stakeholders committed. The guidebook will include specific recommendations for identifying champions and engaging decision makers, private sector and financiers.
- d) *E-guidance on TNA best practice:* Many of the countries developing TNAs in Phase I have subsequently expressed a need for more information on other countries' TNA experience. URC works collaborates with the UNFCCC Secretariat to collect, systematize and present the experience from a number of countries and assess the various factors leading to success and failure with the aim of replicating desirable outcomes and avoiding undesirable outcomes. This work which will be presented as an E-guidance on TNA best practice will include an analysis of the complementarities, overlaps and contradictions between TNAs and NAMAs to promote the best possible interaction between the two processes.
- e) *E-learning for Multi Criteria Analysis (MCA):* URC will develop e-learning training material on Multi Criteria Analysis (MCA) used in the TNA decision making processes for the prioritization of sectors and technologies for mitigation and adaptation. Although most of the participating TNA countries found the technique very useful, some countries encountered difficulties. An e-learning training course on the MCA will contribute significantly to strengthening capacity and thereby to well-founded prioritization processes.

The main expected outputs of Component 2 will be:

- An improved Methodology for the prioritization of technologies for adaptation
- A revised version of the Barrier Analysis and Enabling Environment guidebook
- A new guidebook on stakeholder involvement and engagement process
- E-guidance on TNA best practice
- E-learning for Multi Criteria Analysis (MCA)

The foreseen <u>outcome</u> of this component is strengthened capabilities (skills, knowledge, and tools) of key national actors/players in developing TNAs and TAPs leading to improved TNAs with a robust technology prioritization process for both mitigation and adaptation, improved Barrier Analysis and Enabling Framework reports and thereby better articulated project ideas, as well as a more committed stakeholder involvement.

3. <u>Component 3:</u> Strengthening outreach, dissemination and networking activities to promote use and funding of TNAs and TAPs priorities

The <u>main objective</u> of Component 3 is to mobilize governments, development organizations, public and private financiers, and private sector actors for TAP implementation. Experience from the previous phase of the TNA project confirms that getting the finance and technology transfer management communities to start talking to each other early – rather than late – in the technology action process can substantially increase the prospects of finding the right financial product for a given technology.

(i) At national level

At national level, activities will aim at reaching-out/communicating, advocating and networking to attract high-level governmental support and engage with donor coordination groups (which include also local representatives from the MDBs), local banks/financiers, Chambers of Commerce and private sector (such as business associations) all along the TNA/TAP process. This will foster commitments for capacity strengthening actions and the creation of enabling environments, such as policies and regulatory frameworks or NAMAs and NAPs. And as a result, it will accelerate the deployment of the prioritized technologies of the TNA.

At the inception stages, initial consultations will be undertaken with government and donor coordination groups to do some intelligence gathering, find a good entry point to anchor the TNA/TAP process to (i.e. for TNA/TAP results to feed-in a national planning process instead of being implemented as an external/parallel process) and identify opportunities to reach-out to public and private decision makers in the country (this was a successful approach that the national TNA coordinator from Lebanon has used in TNA Phase I to engage the decision makers in her country).

Building on the outcomes of these consultations, UNEP/URC will work with the national TNA teams develop national TNA workplans that include a series of <u>activities</u> (with milestones) to foster interactions between practitioners in the fields of investment/finance, technology and policy, and to provide regular updates, briefings and disseminate results to key decision makers, the donors/development partners community, and financial and business communities in the country.

In addition, to make sure that financiers and decision makers are represented and involved in the TNA process from the beginning, URC will include a clause in the MoU to be signed between URC and the signing ministry in the corresponding country, that direct involvement of decision makers (ideally from Ministries of Economy/Finance and Planning) and investors/financiers in the process (e.g. as members of the National Steering Committee or the National TNA Committee) is a requirement for continued funding. This will be monitored by respective country coordinator at URC and continued funding stopped if lack of compliance.

The <u>outputs</u> will include a series of targeted, tailored and country specific briefings and advocacy documents, as well as letters of intent from donors/financiers to support project ideas prioritized under the TAP.

Through this process, it is expected that climate technology issues will be better integrated into national plans and strategies. The integration of climate technology needs into development plans and strategies will facilitate the allocation of public funds (including donor funding) for enabling activities and risk mitigation and therefore create conditions that will foster private sector engagement and investments in the beneficiary countries. In addition, it will ensure that project ideas developed under the TAP will be better aligned with potential funding opportunities from donors and public and private financiers. Finally, these activities at country level will ensure that steps are taken for the implementation of the TAP and lead to the deployment of low carbon technologies as well as adaptation technologies.

(ii) At regional and global levels

At regional and global levels, <u>activities</u> will aim at disseminating tools, results and best practices; stimulating peerlearning and use of TNA results and promoting priority project ideas and technology actions identified by participating countries to donors, development banks and public and private investors. A number of workshops and events will be organized for dissemination of results and best practices, such as:

- 1. Final experience sharing workshop for TNA Phase I in collaboration with UNFCCC: A TNA Phase I dissemination workshop will be organised in conjunction with the start of TNA Phase II. The objective of this workshop is to disseminate the results of Phase I but also to showcase the best experience to TNA coordinators of Phase II. In addition to Phase I and Phase II representatives, representatives from the regional and international funding community will be invited to participate.
- 2. A Midterm experience sharing workshop will be organised prior to the second training workshop covering the most substantial part of the work, namely, barriers analysis and development of TAPs. Thus, participating countries will have the chance to interact with other participating countries and learn about how the various countries are approaching. Similar to the previous workshop, representatives from the funding community and the organisation that will be linked to the project will be invited. The expected result from this component is thus increased project funding possibilities.

At the regional level, the project will link with existing technology transfer networking initiatives to disseminate results and promote priority project ideas and technology actions from countries to regional and global stakeholders such as regional development banks, business associations and chambers of commerce. For example, UNEP and URC will collaborate with CTI-PFAN to disseminate results to the CTI-PFAN community (private sector/investors) and work with GEF to engage with ADB, IDB and AfDB to disseminate results through the GEF/RBDs regional pilot climate technology finance initiatives. See Annex H-5 for more examples.

While 'traditional' dissemination events such as workshops and conferences will be important tools for diffusion and learning, the project will also utilize information and communication technologies to reach out to the global community. URC recently launched a new website for TNA. This website although still under construction, already provides a significant amount of information, such as country reports, technology prioritization factsheets and guidance from TNA Phase I. A series country web-pages will be developed to summarize country priorities and priority pilot projects from TAPs to facilitate access to TNA/TAP results for development partners as well as public and private investors.

The experience, lessons learnt and best practices will be documented along project implementation notably with a view to better respond to financiers and decision makers needs and improve the TNA/TAP methodology.

<u>Outputs</u> will include knowledge and information sharing tools for enhancing information dissemination between countries; and websites, workshops, reports, newsletters, and networks to disseminate information and promote knowledge sharing (including lessons learnt and best practices).

Successful implementation of the project in the 27 countries will facilitate the establishment of the necessary framework for accelerated technology transfer and diffusion for low emissions and climate resilient development. GEF involvement is justified as countries would not on their own have the means or rationale for conducting the analysis and making plans for acquiring technologies that are more costly but have a global benefit. Table 2 below summarizes the incremental cost reasoning.

Strategy	Baseline	Alternative	Increment
<b>Overall project outcome:</b> Provide targeted financial and technical support to carry out new or improved TNAs and develop TAPs for prioritized technologies that reduce greenhouse gas emissions, support adaptation to climate change, and are	No TNAs, or TNAs that need improvement No TAPs to support decision making for national technology investments	Targeted financial and technical support to carry out new or improved TNAs and TAPs	Improved TNAs and development of TAPs to support decision making for national technology investments

## Table 2 – Incremental cost reasoning

consistent with national sustainable development objectives			
<b>Outcome 1:</b> National consensus on priority technologies, agreement on a national action plan and identification of requests for submission to the CTCN. Institutional provision and capacity built for implementation and action plan update (Component 1)	Limited structural implementation Lack of proper stakeholder engagement and consultation for the identification of national technology needs and priorities	An institutional structure for TNA-TAP implementation put in place Enhanced stakeholder engagement process and consultation mechanisms for TNAs and TAPs	Consensus on priority technologies, agreement on a national action plan and identification of requests for submission to the CTCN Improved stakeholder engagement and consultation for the identification of national technology needs and priorities
Outcome 2: Capabilities of key national actors/players in developing TNAs and TAPs built and/or strengthened (Component 2)	Limited in-country capacity to conduct TNAs and develop TAPs Lack of methodologies for TNAs and TAP development	Countries are trained to conduct TNAs and develop TAPs Capacity building tools and methodologies covering adaptation and mitigation technology needs assessments and action planning are available to countries.	Improved capacities for conducting TNAs and designing TAPs Improved methodologies for conducting TNAs and designing TAPs (especially in the area of adaptation)
Outreach, dissemination and networking activities to promote use and funding of TNAs and TAPs priorities (Component 3)	Limited cooperation for climate technology transfer Lack of integration of climate technology needs and priorities into national development policies, plans, and strategies Lack of access to domestic public and private finances to implement TAPs	Targeted dissemination of TNA/TAP results to decision makers, development partners, donors and public and private investors at national, regional and global levels Integration of climate technology needs and priorities into national development policies, plans, and strategies	Climate technology issues are better integrated into national development priorities to facilitate access to domestic finance for technology projects and programmes Technical advisory and finance networks support TNA development and engage with countries to facilitate TAP implementation

A.6 <u>Risks, including climate change, potential social and environmental risks</u> that might prevent the project objectives from being achieved, and measures that address these risks:

The main threat to the project is related to the fact that governments in many developing countries do not perceive climate change as a national development priority issue and therefore lack a strong political commitment to the TNA process in order to obtain results that would significantly advance the achievement of sustainable development objectives. The weak commitment to climate change issues may result in countries not allocating adequate financial and human resources needed for conducting the widest possible stakeholder engagement necessary for producing a good TNA and also for achieving consensus on a national technology action plan. There is therefore a risk that National partners may revert to the easier but less useful approach followed by many countries in conducting initial TNAs, which in many cases resulted in a list of technology needs without much analysis of what was needed to realize those technologies. In a number of eligible countries, the impact of the risk and the likelihood of occurrence are medium to high.

To reduce this risk, the project partners will within 12 months of commencement of project activities, seek the strongest possible political commitment and involvement of national authorities, not only those in charge of climate change issues but also those in charge of planning, international cooperation and finance. As already

indicated, it is expected that the establishment of the CTCN and the nomination of NDEs may lead to stronger commitment from countries to Climate Change related technology issues and therefore to the TNA/TAP process. In view of the role of NDEs, UNEP and URC will strongly advocate for NDEs (or a representative from their NDEs) to take part in the TNA/TAP process, and in some cases these NDES could be nominated as National TNA Coordinators.

Overall, efforts will be made by national teams to foster a closer working relationship with the teams in charge of National communications preparations, NAPAs and other relevant institutions and stakeholders such as Ministries of Finance and Planning, business associations, financial institutions, academia/research institutions and donors/development partners. The experience from TNA Phase I shows that the most relevant sectors were represented in the TNA Committees and sectoral/thematic working groups (see Annex H-6). The same setting is expected for the new TNA project. This applies also to National Steering Committees. However, for the new TNA Phase, UNEP and URC will put more emphasis in ensuring that decision makers are represented in these bodies established for the TNA/TAP process. Also, more efforts will be made to involve donors/development partners, financial institutions and business representatives. The project will develop tailored approaches to fit with national conditions and support sustainable development priorities. The closer supervision and greater provision of guidance and technical support through various means will reduce the risk that country teams take an easier but less efficient path.

There is a risk that donors do not consider country proposals emerging from TAPs. This risk is closely linked to the country's ability and capacity to (i) officially endorse their TAP or ultimately mainstream their TAP into their National Development Plans and (ii) translate the TAPs into attractive project proposals rather than on the lack of available funding.

To reduce risk of failure to attract donor funding, the project will, in addition to promoting mainstreaming, support country-led consultations with potential donors, with a view to establishing a clear understanding of donor funding policies, as well as securing technical support from donors in the formulation of project proposals from the TAPs. Moreover, since bilateral aid constitutes the majority of aid flows to developing countries, the project will develop tailored approaches to attract the interest and support from bilateral donors operating at country level – which will reinforce the country ownership approach of the TNA process. To this end, the project implementation plan in each country will include specific provisions for periodic donor consultations focused on TNA-TAP activities, status updates, and next steps closely linked to national donor coordination mechanisms existing or planned in the country. The project will also establish close links with donor-supported National Development Plans, technology road-mapping and other processes that influence (and are influenced by) the direction of donor support initiatives in the country.

The table below summarizes the risks and risk management measures.

#### **RISK LOG**

		F	1		1
Risk Description	Category	Impact Severity	Likelihood	Risk Management Strategy & Safeguards	When / By Whom?
1 Lack of strong political commitment to the TNA process as most developing countries do not perceive climate change as a national development priority issue; therefore, there is a risk of inadequate financial and human resource allocation, as well as a risk that less useful approaches are undertaken (includes risk that no good entry point is identified and TNA/TAP is implemented as a parallel process to national planning processes)	Political and government risk	High	Medium to High	<ul> <li>Within 12 months of commencement of project activities, seek strong political commitment and involvement along the TNA/TAP process of national authorities in charge of climate change issues as well as those in charge of planning, international cooperation and finance.</li> <li>Involve closely the NDEs in the TNA/TAP process (in some cases as the National TNA Coordinators) and foster a closer working relationship with the teams in charge of National communications preparations, NAPAs and other relevant institutions/stakeholders</li> <li>Develop tailored approaches to fit with national conditions and that support national sustainable development priorities by identifying entry points for TNA/TAP results to feed in (in collaboration with donors and government)</li> <li>Closer supervision and greater provision of guidance and technical support through various means to reduce the risk that country teams take an easier but less useful path</li> </ul>	Project Partners National Teams

RISK	LOG
TUDIZ	100

Risk Description	Category	Impact Severity	Likelihood	Risk Management Strategy & Safeguards	When / By Whom?
<ul> <li>Risk that donors do not consider country proposals emerging from TAPs</li> </ul>	Institutional, governmental and organisational risk	High	Medium	<ul> <li>Support country-led consultations with potential donors (e.g. by using national donor coordination mechanisms), with a view to establish a clear understanding of donor funding policies, as well as securing technical support from donors in the formulation of project proposals from the TAPs.</li> <li>Develop tailored approaches to attract the interest and support from bilateral donors operating at country level. The project implementation plan in each country will include specific provisions for periodic donor consultations focused on TNA-TAP activities, status updates, and next steps closely linked to national donor coordination mechanisms existing or planned in the country.</li> <li>Advocate for the integration of TAPs into National Development Plans, Establishment of close links with donor-supported technology roadmapping and other processes that influence (and are influenced by) the direction of donor support initiatives in the country.</li> </ul>	Project Partners National Teams

#### A.7. Coordination with other relevant GEF financed initiatives

Throughout the duration of the project, opportunities for coordination with other related initiatives will be sought out and realized. The project will establish links with the regional Technology Transfer and Financing Center projects implemented by the regional development banks, funded by the GEF and designed as regional pilots for the CTCN in Asia, Africa, Europe and Latin America. For countries in the Asia-Pacific region, project activities will be closely coordinated with the Asian Development Bank (ADB)/UNEP regional pilot Climate Technology Network and Finance Center project, e.g. through the organization of joint workshops to enhance cross country learning and knowledge sharing about climate technologies, as well as policies and capacity-building approaches.

## **B. ADDITIONAL INFORMATION NOT ADDRESSED AT PIF STAGE:**

B.1 Describe how the <u>stakeholders</u> will be engaged in project implementation.

The Technology Needs Assessment project involves a wide range of stakeholders both at the national level in the 25 countries supported and those within partner institutions including Regional Centres (RCs) of excellence. In eligible countries, national teams involving all relevant institutions and agencies as well as experts according to national circumstances would be at the core of the project. TNA teams of the TNA Phase I were in most of the countries composed of representatives from the various ministries, such as, energy, natural resources, industry, agriculture and finance. The experience is that most of the relevant sectors have been represented in the TNA team and therefore the same setting is expected for the new TNA project. This applies also to National Steering Committees. However, for the new TNA Phase emphasis will be put on bringing on board decision makers from both public and private sectors. In view of the importance of an adequate stakeholder involvement and the related difficulties encountered during the implementation of TNA Phase I, a new guidebook aimed at guiding the whole stakeholder identification and involvement process will be developed by URC prior to project implementation. The main stakeholders to be involved in project implementation are outlined in the table below.

Stakeholder Role	Agencies	Comments
Lead Agencies	UNEP, GEF	UNEP as the agency responsible for the design and implementation of the project and GEF as the main funder of the project
Implementing Partners	National Teams – National Designated Entities (NDEs), Ministries of Environment, Water, Transport, Energy, National Planning, Technologies, Finance; Legal/Law/Policy formulation, Municipal/County Councils, grassroots/community groups, academia, representatives of civil society, research centres. Private firms, in-country financers	Stakeholders who have an active role in implementing the project and are an integral part of project activities.
Active Cooperation	Regional Centres (RCs) - Asian Institute of Technology (Thailand), ENDA (Senegal), Fundación Bariloche (Argentina) and Libelula (Peru) Other UNEP projects and programs in related fields in the region (e.g. CTCN), UNFCCC, IEA	Stakeholders with whom the project will seek active cooperation and coordination (e.g. in avoiding duplicating research or other work)
Communication Only	Other IGOs, NGOs e.g. USAID, World Bank, IFC, Bilateral Agencies	Stakeholders who will be the targets for knowledge dissemination activities.

RCs have gained considerable experience, knowledge and skills that have enhanced the proficiency in providing technical assistance to countries. They will continue to receive targeted capacity building support from URC to address gaps that have become evident with the implementation of the first phase of the TNA project, as well as provide technical assistance to national teams. However, experience from the implementation of TNA Phase I shows that the capacity of these regional centres still needs to be strengthened/complemented particularly on the adaptation side. Therefore, additional regional centres, or experts that could strengthen/complement the current RCs will be incorporated.

B.2 Describe the <u>socioeconomic benefits</u> to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF):

Technology Needs Assessments and associated outputs such as prioritized technologies, and analyses of related technology transfer barriers, are expected to provide a powerful decision-support tool for technology transfer managers and development planners. Resulting technology actions are expected to yield social benefits linked closely to reduction of greenhouse gas emissions while reducing vulnerability of the society to climate change impacts, hence increasing climate resilience of most vulnerable groups and sectors.

Direct benefits expected to be delivered by the project include: better in-country coordination amongst institutions related to technology transfer and adoption; increased awareness of opportunities and associated benefits of technology adoption by decision makers buttressed by increased local capacity to assess adequate, priority technologies according to country needs, identify barriers to their adoption and recommend action that are directly related to project activities. Some of the indirect benefits expected from the project include establishment of stable policy environments featuring strong incentives for increased flows of domestic and foreign investments in prioritized adaptation and mitigation technologies.

B.3. Explain how <u>cost-effectiveness</u> is reflected in the project design:

The large-scale application of existing and near to market efficient and renewable technologies could globally cut the energy-related  $CO_2$  emissions by half by 2050. This project aims at analysing the best available and most appropriate technologies for transfer to developing countries and at creating the framework conditions for more cost effective transfer of both GHG mitigation and adaptation technologies to developing countries and their accelerated global diffusion.

## C. DESCRIBE THE BUDGETED M & PLAN:

The project will follow UNEP standard monitoring, reporting and evaluation processes and procedures. Substantive and financial project reporting requirements are summarized in Annex G. Reporting requirements and templates are an integral part of the UNEP legal instrument to be signed by the executing agency and UNEP.

The project M&E plan is consistent with the GEF Monitoring and Evaluation policy. The Project Results Framework presented in Annex A includes SMART indicators for each expected outcome and end-of-project targets. These indicators along with the key deliverables and benchmarks included in Annex I will be the main tools for assessing project implementation progress and whether project results are being achieved. The means of verification and the costs associated with obtaining the information to track the indicators are summarized in Annex G. Other M&E related costs are also presented in the Costed M&E Plan and are fully integrated in the overall project budget.

The M&E plan will be reviewed and revised as necessary following the project inception missions in the 25 new TNA countries to ensure project stakeholders understand their roles and responsibilities vis-à-vis project monitoring and evaluation. Indicators and their means of verification may also be fine-tuned following the project inception missions in the 25 countries. Day-to-day project monitoring is the responsibility of the project management team but other project partners will have responsibilities to collect specific information to track the indicators. It is the responsibility of the Project Manager to inform UNEP and the Project Steering Committee (PSC) of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely fashion. Like with the implementation of Phase I, the Project Manager and UNEP will have regular consultations with the PSC. The

PSC will receive periodic reports on progress and will be asked to make recommendations to UNEP concerning the need to revise any aspects of the Results Framework or the M&E plan.

The project Steering Committee will receive periodic reports on progress and will make recommendations to UNEP concerning the need to revise any aspects of the Results Framework or the M&E plan. Project oversight to ensure that the project meets UNEP and GEF policies and procedures is the responsibility to the Task Manager in UNEP-GEF. The Task Manager will also review the quality of draft project outputs, provide feedback to the project partners, and establish peer review procedures to ensure adequate quality of scientific and technical outputs and publications.

Project supervision will take an adaptive management approach. The Task Manager will develop a project supervision plan at the inception of the project which will be communicated to the project partners during the inception workshop. The emphasis of the Task Manager supervision will be on outcome monitoring but without neglecting project financial management and implementation monitoring. Progress vis-à-vis delivering the agreed project global environmental benefits will be assessed with the Project Steering Committee at agreed intervals. Project risks and assumptions will be regularly monitored both by project partners and UNEP. Risk assessment and rating is an integral part of the Project Implementation Review (PIR). The quality of project monitoring and evaluation will also be reviewed and rated as part of the PIR. Key financial parameters will be monitored quarterly to ensure cost-effective use of financial resources.

A mid-term management review will take place 18 months after the project start date as indicated in the project milestones. The review will take into account the recommendations and findings from the Terminal Evaluation of TNA Phase I. The project Steering Committee will participate in the mid-term review and develop a management response to the evaluation recommendations along with an implementation plan. It is the responsibility of the UNEP Task Manager to monitor whether the agreed recommendations are being implemented.

In-line with the UNEP Programme Manual and the Evaluation Policy the project will be subject to a Terminal Evaluation (TE). The Evaluation Office will be responsible for the TE and will liaise with the UNEP Task Manager at DTIE throughout the process. The TE will provide an independent assessment of project performance (in terms of relevance, effectiveness and efficiency), and determine the likelihood of impact and sustainability. It will have two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP and executing partners (RISOE/DTU in particular). The direct costs of the evaluation will be charged against the project evaluation budget.

The TE report will be sent to project stakeholders for comments. Formal comments on the report will be shared by the Evaluation Office in an open and transparent manner. The project performance will be assessed against standard evaluation criteria using a six point rating scheme. The final determination of project ratings will be made by the Evaluation Office when the report is finalised. The evaluation report will be publically disclosed and will be followed by a recommendation compliance process.

The GEF tracking tools (Annex J) will be updated at mid-term and at the end of the project and will be made available to the GEF Secretariat along with the project PIR report. As mentioned above the mid-term and terminal evaluation will verify the information of the tracking tool.

## PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT(S) ON BEHALF OF THE GOVERNMENT(S): ): (Please attach the <u>Operational Focal Point endorsement letter(s)</u> with this form. For SGP, use this <u>OFP endorsement letter</u>).

PARTY	NAME	POSITION	MINISTRY	DATE(MM/DD /YYYY)
1. ARMENIA	ARAM HARUTYUNYAN	GEF OPERATIONAL FOCAL POINT FOR THE REPUBLIC OF ARMENIA	MINISTRY OF NATURE PROTECTION OF THE REPUBLIC OF ARMENIA	10/08/2012
2. BURKINA FASO	MAMADOU HONADIA	GEF OPERATION FOCAL POINT	MINISTERE DE L'ENVIRONMENT ET DU DEVELOPPEMENT DURABLE	02/08/2012
3. BURUNDI	EPIMAQUE MURENGERANTWARI	PERMANENT SECRETARY	ERMANENT MINISTRY OF WATER, ECRETARY ENVIRONMENT, LAND AND URBAN PLANNING	
4. BELIZE				
5. BOLIVIA	Cynthia Viviana Silva Maturana	VICE MINISTER MINISTRY OF Environment, Biodiversity, Climate Change and Forestry		06/01/2011
6. EGYPT	DR.FATMA ABOU SHOUK	CEO, EEAA MINISTRY OF STATE FOR ENVIRONMENTAL AFFAIRS, EGYPTIAN ENVIRONMENTAL AFFAIRS AGENCY		07/08/2012
7. GAMBIA	MOMODOU B. SARR	EXECUTIVE DIRECTOR	NATIONAL ENVIRONMENT AGENCY	11/08/2012
8.GRENADA	TIMOTHY N. J. ANTOINE	PERMANENT SECRETARY	MINISTRY OF ENVIRONMENT FOREIGN TRADE & EXPORT DEVELOPMENT	07/08/2012
9. GUYANA	DR. INDARJIT RAMDASS	EXECUTIVE DIRECTOR	ENVIRONMENTAL PROTECTION AGENCY	16/08/2012
10. HONDURAS	IRINA HELENA PINEDA AGUILAR	DIRECTOR OF EXTERNAL COOPERATION AND RESOURCE MOBILIZATION	SECRETARIA DE RECURSOS NATURALES Y AMBIENTE	31/07/2012
11. JORDAN	SALEH AL- KHARABSHEH	SECRETARY GENERAL	CRETARY GENERAL MINISTRY OF PLANNING AND INTERNATIONAL COOPERATION	
12. MADAGASCAR	RALALAHARISOA CHRISTINE EDMEE	LE DIRECTEUR MINISTERE DE GENERAL DE L'ENVIRONNEMENT ET L'ENVIRONMENT DES FORETS		14/08/2012
13. MALAYSIA	DR. LIAN KOK FEI	UNDER SECRETARY OF ENVIRONMENTAL MANAGEMENT & CLIMATE CHANGE DIVISION	MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT	02/08/2012

ΡΔΡΤΥ	NAME	POSITION	MINISTRV	DATE(MM/DD
	IVANIE	TOSITION	MINISTRI	/YYYY)
14. MAURITANIA	MOHAMED YAHYA	GEF OPERATIONAL	MINISTERE DELEGUE	04/06/2012
	LAFDAL	FOCAL POINT	AUPRES DU PREMIER	
			MINISTRE CHARGE DE	
			L'ENVIRONMENT ET DU	
			DEVELOPPEMENT	
			DURARI F	
15 MOZAMBIOUE	MADILIA TELMA	DIDECTOR OF	MINISTEDIO DADA A	06/08/2012
15. WOLAWIDIQUE	MARILIA TELMA ANTONIO MANIATE	COOPERATION		00/00/2012
			COORDENACAO DA	
	Creative Vangent		ACCAO AMBIENTAL	20/00/2012
16. PANAMA	SILVANO VERGARA	ADMINISTRADOR	AUTORIDAD NACIONAL	29/08/2012
		GENERAL	DEL AMBIENTE	
17. PHILIPPINES	ATTV. ANALIZA	LINDERSECRETARY	DEPARTMENT OF	30/08/2012
	REBUELTA-TEH	AND CHIEF OF STAFF	ENVIRONMENT AND	50/00/2012
			NATURAL DESCURCES	
18 SEVCHELLES	DIDIED DOCI EV	SDECIAL ADVISOD TO	MINISTRY OF	31/07/2012
10. SEI CHELLES	DIDIER DOGLEY	SPECIAL ADVISOR TO		51/07/2012
		ENVIRONMENT AND	ENVIRONMENT AND	
		ENERGY	ENERGY	
19. SWAZILAND	JAMESON	DIRECTOR,	MINISTRY OF TOURISM	31/07/2012
	D.VILAKATI	SWAZILAND	AND ENVIRONMENTAL	
		ENVIRONMENT	AFFAIRS	
		AUTHORITY		
20. TANZANIA	JULIUS NINGU	PERMANENT	VICE PRESIDENTS	24/08/2012
		SECRETARY	OFFICE	
21. TOGO	YAO DJIWONU FOLLY	DIRECTEUR DE	MINISTERE DE	03/08/2012
		L'INSPECTION	L'ENVIRONMENT ET	
		FORESTIERE ET	DES RESSOURCES	
		ENVIRONNEMENTALE	FORESTIERES	
22. TUNISIA	SABRIA BNOUNI BEN	GEF OPERATIONAL	MINISTERE DE	04/08/2012
	AMMAR	FOCAL POINT	L'ENVIRONNEMENT	
23. TURKMENISTAN	JUMAMYRAT	DEPUTY MINISTER	MINISTRY OF NATURE	02/08/2012
	SAPARMYRADOW		PROTECTION	
24. URUGUAY	VALERIA PEREZ	GEF OPERATIONAL	MINISTERIO DE	26/07/2012
	GUIDA	FOCAL POINT	VIVIENDA	
			ORDENAMIENTO T	
25 UZBEKISTAN	PROF MR SERGEY	DEPUTY DIRECTOR	NIGMI UZHDROMET	31/07/2012
	MYAGKOV	221 CTT DIRECTOR	HYDROMETEOP-	
			OLOCICAL DESEADCH	
			INSTITUTE OF	
			LIZHVDDOMET	
26 KAZAKINGTAN <sup>10</sup>	V KDMIKOVA	DIDECTOR		17/11/2010
20, NAZAKHSTAN	V. INKYUKOVA	DIRECTOR	CLIMATE CHANGE	1//11/2010
			COORDINATION	
AF 7		<b></b>	CENTER	
27. LAO PDR''	MR. KHAMPADITH	DIRECTOR, DEPT OF	MINISTRY OF	21/11/2013
	KHAMMOUNHEONG	ENVIRONMENTAL Oliality	ENVIRONMENT	
		PROMOTION		
		INUMUTION		

 <sup>&</sup>lt;sup>10</sup> Kazakhstan participated in TNA Phase I, completed its TNA but not its TAP.
 <sup>11</sup> Idem for Lao PDR.

# B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for CEO endorsement/approval of project.

Agency Coordinator, Agency Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Maryam Niamir- Fuller, Director, GEF Coordination Office, UNEP	M. Nien Fulle	12/19/2013	Jonathan Duwyn, Programme Officer, UNEP- DTIE		

#### **List of Annexes**

- Annex A-1: Project Logical Framework, using standardized UNEP template
- Annex A-2: Theory of change diagram
- Annex B-1: Response to GEF Reviews (PIF stage)
- Annex B-2: Responses to STAP comments
- Annex C: Status of implementation of project preparation activities and the use of funds
- Annex D: Calendar of expected reflows [Note : GEF Annex on Reflows normally not required for UNEP projects]
- Annex E: Consultants to be hired
- Annex F-1: Detailed GEF budget
- Annex F-2: Detailed Co-finance budget
- Annex F-3: Budget distributed over project components
- Annex G: M&E Budget and Workplan
- Annex H-1: Project Implementation Arrangements
- AnnexH-2: Lessons learnt from the collaboration with Regional Centres (RCs)
- Annex H-3: Lessons learnt, applying lessons learnt and impacts to date in Phase I countries
- Annex H-4: Key findings from the third synthesis report on technology needs
- Annex H-5: Organizations/networks supporting TNA/TAP outreach and implementation
- Annex H-6: Example of TNA team from TNA Phase I (Thailand)
- Annex I: Detailed Project Workplan showing deliverables and benchmarks
- Annex J: Focal Area Tracking Tools
- Annex K: OFP Endorsement letters
- Annex L: Co-finance letters
- Annex M: Environmental and Social Safeguards checklist
- Annex N: Acronyms and abbreviations

**ANNEX A: PROJECT LOGICAL FRAMEWORK** (either copy and paste here the framework from the Agency docum page in the project document where the framework could be found).

Project Objective	Objective level Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptio Risks
Provide targeted financial and technical support to carry out new or improved TNAs and develop TAPs for prioritized technologies that reduce greenhouse gas emissions, support adaptation to climate change, and are consistent with national sustainable development objectives.	Quality and usefulness of TNAs and TAPs for technology transfer implementation.	No TNAs, or TNAs that need improvement and no TAPs	TNAs and TAPs endorsed by governments in 27 countries TNA and TAPs reflected into country policies, plans or strategies Donors/financiers intend to support TAP implementation	TNA reports and TAPs National policy documents, plans or strategies Reporting and final evaluation requested by UNEP Letters of intent from donors and financiers to support implementation of TAP actions	Lack of stro political wi due to com with more of priorities
Project Outcome	Outcome Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptio Risks
<i>Outcome 1:</i> National consensus on technologies in priority sectors established, compatible with national development priorities, NAMAs, and/or National Climate Change Strategies.	An institutional structure for TNA-TAP implementation put in place (including provisions for stakeholder engagement and consultations) Number of new or updated/ improved TNAs and TAPs	Limited structural implementation	National TNA teams established in all participating countries by May 31 <sup>st</sup> , 2014 National TNA workplans including tailored stakeholder engagement plans developed for all participating countries by June 30 <sup>th</sup> , 2014 6 national stakeholder consultations conducted per country by the end of the TNA-TAP process and lists of stakeholders consulted (with affiliation e.g. government, private sector, research centres etc.) 25 new or improved TNAs by 31 <sup>st</sup> January 2015, and 27 high quality TAPs by September 2016	Periodical progress reports are submitted by participating countries to URC and shared with the international and local funding community. Reports from national TNA teams on national stakeholder consultations conducted (including list of stakeholders consulted) Reviews (quality assessment) of draft TNAs and TAPs from RCs and URC TNA reports and TAPs Reports/strategies/plans/ statements from national, regional, and sectoral entities Final evaluation	Lack of str political wi due to com with more to priorities Lack of sta engagemen commitmen

GEF5 CEO Endorsement

<i>Outcome 2:</i> Capabilities of key national actors /players in TNA and TAPs built and/or strengthened.	Number of tools and methodologies covering adaptation and mitigation TNAs and TAPs available to countries Country capacities for conducting TNAs and developing TAPs are built [through trainings and on- the-job capacity building] Capacities of Regional Centers to support countries in TNA and TAP preparation are enhanced	Limited capacities to conduct TNAs and design TAPs	Improved quality of the 6 training workshops for national TNA teams Improved quality of the training workshop for RCs 4 new tools/improved methods to identify and assess adaptation and mitigation technology needs and build related capacities developed by March 31 <sup>st</sup> 2014	Questionnaires for national TNA coordinators and consultants, members of the national TNA committee, members of the sectoral/technology working groups and stakeholders consultedFeedback from participating countries on TNA-TAP process including tools/methodologiesReports and evaluations from training workshopsNew or improved tools/methods (guidebooks and methodologies)Final evaluation	Weak national institutions and inadequate financial and human resource allocation	Expected Accomplishment (b)
<i>Outcome 3:</i> Outreach, dissemination and networking activities to promote use and funding of TNAs and TAPs priorities	Uptake of TNAs and TAPs through improved dissemination of results, advocacy and promotion of TNAs and TAPs to decision makers and development partners	Lack of dissemination of results, advocacy and promotion of TNAs and TAPs to decision makers and donors/investors (public and private) TAPs are insufficiently used by decision makers and financiers (public and private) to identify technology investments	<ul> <li>10-15 targeted advocacy papers and presentations per country</li> <li>At least 1 presentation of TNA/TAP results (including project ideas) per country to national donor coordination groups/in-country development partners</li> <li>1 national TNA/TAP results dissemination workshop per country</li> <li>Dissemination of TNA/TAP results at 6 regional and international events</li> <li>International and local funding community are engaged with Governments to develop 12 project ideas emanating from TAPs</li> </ul>	Targeted briefing papers and presentations for donors or donor coordination groups, private sector community, and decision makers or working groups established for plans/strategy development or revision processes Targeted briefing papers and presentations for International Financing Institutions and the international development partners community (regional/international development banks) Workshop and meeting reports Reports/minutes from meetings with the international and local funding community to help as	Risk that donors do not consider country proposals emerging from TAPs	Expected Accomplishment (b)

				guidance for project financing. Reporting from countries (including outcomes from meetings between governments and donors/financial institutions) and project documents elaborated from new project ideas emanating from TAPs further developed by countries with the international and local funding community Letters of intent from donors/financiers to support TAP actions Final evaluation		
Project Outputs	Output Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	PoW Output Reference Number
Component 1: Facilitating the useful in an operational sense	e preparation of TNAs in 25 de	veloping countries and TA	APs in 27 developing countries of	r, where these have already been	prepared/started, making	them more strategic and
Output 1.1: TNA reports	Number of approved TNA reports	No TNA or TNA that needs improvements	25 approved TNA reports	TNA reports submitted by the countries		<i>Output 3</i> : Tools and approaches designed and piloted in countries to develop mitigation plans, policies, measures, and low-emission development strategies, and spur investment and innovation within selected sectors in a manner that can be monitored, reported on and verified
Output 1.2: Barrier Analysis & Enabling Framework reports	Number of approved Barrier Analysis & Enabling Framework reports	No Barrier Analysis & Enabling Framework analysis for climate technology transfer	25 approved Barrier Analysis & Enabling Framework reports	Barrier Analysis & Enabling Framework reports submitted by the countries		Output 3
Output 1.3: TAP reports (including project ideas)	Number of approved and endorsed TAP reports (including project ideas)	No TAPs	27 approved and endorsed TAP reports (including project ideas)	TAP reports submitted by the countries		Output 3

Component 2: Developing tools and providing capacity building and information on methodologies to support preparation of Technology Needs Assessments (TNAs) and Technology Action Plans (TAPs)					
Output 2.1: Capacity building workshops	Number and quality of capacity building workshops	Limited capacity to conduct TNAs and develop TAPs and climate technology transfer projects	<ol> <li>7 capacity building workshops</li> <li>1 training workshop for RCs</li> <li>6 regional training workshops for the countries</li> </ol>	Workshop reports and workshop evaluation fiches	Output 3
Output 2.2: Guidebooks	Number of new or improved guidebooks/methodologies	9 guidebooks	<ol> <li>4 new or improved guidebooks/methodologies</li> <li>1. Improved Barrier Analysis and Enabling Framework guidebook</li> <li>2. Strengthened Adaptation methodology</li> <li>3. Stakeholder identification and involvement guidebook</li> <li>4. Guidance note on mainstreaming TAPs into national/sectoral development plans</li> </ol>	New and improved guidebooks and methodologies	Output 3
Output 2.3: TNA/TAP e- learning and e-guidance	Number of new e-guidance and e-learning programmes	1 e-guidance programme 1 e-learning programme	<ol> <li>E-guidance document on TNA best practice</li> <li>E-learning for Multi Criteria Analysis (MCA)</li> </ol>	New e-guidance and e- learning programmes	
Component 3: Strengthening	outreach, dissemination and net	working activities to pron	note use and funding of TNAs a	nd TAPs priorities	
Output 3.1: TNA dissemination workshops/events/meetings	Number of dissemination workshops and events Number of meetings with National donor coordination groups/local funding community Number of targeted briefing papers and advocacy material developed for decision makers, donors, the financial community, the private sector and working groups established for strategy development.	N/A	<ul> <li>3 dissemination workshops/events</li> <li>1. Side event at COP 20</li> <li>2. Global experience sharing workshop</li> <li>3. Side event at COP 21</li> <li>27 national meetings with the international (in-country donor coordination groups) and local funding community</li> <li>27 national TNA/TAP dissemination workshops</li> </ul>	Reporting from dissemination meetings/workshops/events Policy briefs, CEO briefs, briefing papers Letters of intent from donors and financiers	Output 3

revision or planning processes	3 regional dissemination workshops for the CTI- PFAN community
Number of letters of intent from donors and financiers to support TAP actions	Dissemination through the participation and/or joint organization of workshops implemented under the GEF/RBDs regional pilot climate technology finance initiatives

#### **ANNEX A-2: THEORY OF CHANGE**



#### ANNEX A-2: THEORY OF CHANGE DIAGRAM

**NSES TO GEF REVIEWS** (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work ne Convention Secretariat and STAP at PIF).

# GEF SECRETARIAT REVIEW FOR FULL/MEDIUM-SIZED PROJECTS\*

THE GEF/LDCF/SCCF TRUST FUNDS

	4948			
	Global			
	Technology Needs Assessment			
	UNEP	GEF Agency Project ID:		
	GEF Trust Fund	GEF Focal Area (s):	Climate Change	
CF/SCCF Objective (s):		CCM-6; CCM-6; Project Management;		
PPG:	\$0	Project Grant:	\$6,105,835	
	\$2,036,921	Total Project Cost:	\$8,142,756	
	February 20, 2013	Council Approval/Expected:	April 12, 2013	
oroval		Expected Project Start Date:		
	Franck Jesus	Agency Contact Person:	Jonathan Duwyn	

Questions	Secretariat Comment at PIF (PFD)/Work Program Inclusion <sup>1</sup>	Secretariat Comment At CEO Endorsement(FSP)/Approval (MSP)	UNEP response
Is the participating untry eligible?	CCA-JS Please see comment in section 6.	FJ - Jan 8, 2014: Yes	
	CCM/FJ - Apr 19, 2012: There is no finalized list of countries where the project would be implemented.		

		Cleared.		
	2. Has the operational focal point endorsed the project?	CCM/FJ - Apr 19, 2012: There are no endorsement letters for each country where the project would be implemented. CCM/FJ - Sep 18, 2012: Cleared		
	3. Is the Agency's comparative advantage for this project clearly described and supported?	CCM/FJ - Apr 19, 2012: Yes.	FJ - Jan 8, 2014: Yes.	
Agency's Comparative Advantage	4. If there is a non-grant instrument in the project, is the GEF Agency capable of managing it?	CCM/FJ - Apr 19, 2012: the project is a grant.	FJ - Jan 8, 2014: The project is a grant.	
	5. Does the project fit into the Agency's program and staff capacity in the country?	CCM/FJ - Apr 19, 2012: Yes.	FJ - Jan 8, 2014: Yes.	
	6. Is the proposed Grant (including the Agency fee)			
	within the resources available from (mark all			
Resource	the STAR allocation?			

Availability	the focal area	CCM/FJ - Apr 19. 2012:	FJ - Jan 8, 2014:	
		Activities that are not strict TNA	Yes	
	anocation?	preparation activities can not be		
		funded by the global set aside and		
		would need to be funded by		
		national CCM STAR allocation		
		with appropriate endorsement		
		letters.		
		CCM/FJ - Sep 18, 2012:		
		a) Please consider taking		
		Component 3 out of the		
		proposal since it does not		
		appear to focus on TNA		
		preparation activities.		
		b) Please also clarify the mechanism considered in		
		Component 2 as it also seems		
		not to focus on TNA		
		preparation activities.		
		FJ - Jan 17, 2013:		
		Cleared.		
	the LDCF under the			
	principle of equitable			
	access			
	the SCCF (Adaptation	The SCCF does not have		
	or Technology	sufficient funds in this Work		
	Transfer)?	Program to accommodate the		
	<i>,</i>	proposed project.		
	Nagoya Protocol			
	Investment Fund			

	focal area set-aside?	CCM/FJ - Apr 19, 2012: Requests of funding from the global set- aside cannot go beyond strict TNA preparation activities since the resource of the set aside are limited.		
		<ul> <li>CCM/FJ - Sep 18, 2012:</li> <li>a) Please consider taking Component 3 out of the proposal since it does not appear to focus on TNA preparation activities.</li> <li>b) Please also clarify the mechanism considered in Component 2 as it also seems not to focus on TNA preparation activities.</li> </ul>		
		FJ - Jan 17, 2013: Cleared.		
	7. Is the project aligned with the focal /multifocal areas/ LDCF/SCCF/NPIF results framework?	CCM/FJ - Apr 19, 2012: See Q8.	FJ - Jan 8, 2014: See Q8.	
Project Consistency	8. Are the relevant GEF 5 focal/ multifocal areas/LDCF/SCCF/NPIF objectives identified?	CCM/FJ - Apr 19, 2012: No. The CCM objective relevant to technology needs assessment is CCM-6. CCM/FJ - Sep 18, 2012: Cleared	<ul> <li>FJ - Jan 8, 2014:</li> <li>a) Section a.2.1 should mention the Long-Term Program of the Poznan</li> <li>Strategic Program on Technology Transfer under which this project is supported.</li> </ul>	a) See section a 2.1
			b) The last sentence of section a.2.1 is inaccurate. Objective CCM-6 does not target TNA only; it targets to support enabling activities and capacity	b) Idem
		building for Convention obligations.		
--	---	--	-----------------	
9. Is the project consistent with the recipient country's national strategies and plans or reports and assessments under relevant conventions, including NPFE, NAPA, NCSA, or NAP?	CCM/FJ - Apr 19, 2012: This is a global project. The TNA part of the project stems from Decision 4/CP.13 of the Conference of the Parties to the UNFCCC, which requested the GEF to elaborate a strategic programme to scale up investment on technology transfer, and the resulting GEF Council-approved document that was also endorsed by the Conference of the Parties in Poznan in December 2008.	FJ - Jan 8, 2014: The second to last sentence of the last paragraph of section A.1 is not accurate. In November 2008, the GEF Council and the Least Developed Country Fund (LDCF)/Special Climate Change Fund (SCCF) Council both approved the Strategic Program on Technology Transfer. The paragraph should also mention the Longer-Term Program.	See section A.1	
10. Does the proposal clearly articulate how the capacities developed, if any, will contribute to the sustainability of project outcomes?	CCM/FJ - Apr 19, 2012: Unable to assess. CCM/FJ - Sep 18, 2012: Please clarify the nature of the mechanism of component 2. The project framework describes it as aiming at "providing technology information critical to undertaking and documenting climate change technology needs" while paragraph 16 page 6 mentions mechanisms aimed at promoting "exchange of experience and information between countries". Please also see address Q6's comment. FJ - Jan 17, 2013: Cleared.	FJ - Jan 8, 2014: Yes.		

	11. Is (are) the baseline	CCM/FJ - Apr 19, 2012: No.	FJ - Jan 8, 2014:	
	project(s), including	Component 2 and 3 do not seem to	Yes.	
	problem (s) that the	take into account the activities		
	baseline project(s) seek/s	planned in the pilot regional		
	to address, sufficiently	climate technology networks the		
	described and based on	GEF will be financing.		
	sound data and assumptions?	CCM/FJ - Sep 18, 2012: This comment was not taken into		
		account. For instance, the project		
		does not seem to have identified		
		the complementarity (or		
		redundancy) it would have with		
		the activities planned in the pilot		
Project Design		regional climate technology		
		networks the GEE will be		
		financing		
		innancing.		
		EL Ion 17 2012		
		Cleared		
	12. Use the cost	Clealed.	EL Log 9 2014:	
	12. Has the cost-		FJ - Jan 8, 2014:	
	effectiveness been		Yes.	
	sufficiently			
	demonstrated, including			
	the cost-effectiveness of			
	the project design			
	approach as compared to			
	alternative approaches to			
	achieve similar benefits?			
	13. Are the activities that	CCM/FJ - Apr 19, 2012: Unable	FJ - Jan 8, 2014:	
	will be financed using	to assess.	For each component, please detail	See new Annex F-3
	GEF/LDCF/SCCF funding		what the GEF will be funding and	
	based on incremental/	CCM/FJ - Sep 18, 2012:	what the co-financing will be	
	additional reasoning?	See comment of Q11	funding.	

14. Is the project framework	CC	M/FJ - Apr 19, 2012: No.	FJ -	- Jan 8, 2014:		
sound and sufficiently	a)	Going further than usual	a)	In Section A.5 please provide a detailed description of the	a)	Detailed description
clear?		propering action plans and		different project activities and		
		project proposals would		their associated outputs. The		A.J
		suppose strong links with		current description of the 3		
		notantial donors to ansura the		components does not provide		
		relevance of such work with		sufficient detail for a CEO		
		their quality check and		andorsoment request		
		funding criteria. The project	<b>b</b> )	Please detail who would be the	b)	See anney H 6
		does not appear to ensure this	0)	participants to TNA	0)	See annex 110
		for instance, no multilateral		Committees		
		hank appear involved		Since the role of the national	()	See section A 5 last
	h)	Component 2 aims at the	C)	TNA Committees is likely to	0)	paragraph on CTCN
	0)	creation of Implementation		extend beyond project		as an opportunity
		support Agencies in each		completion (in particular for the		us un opportunity
		country providing numerous		implementation of the TAPs)		
		services to facilitate the		please clarify how the project		
		implementation of technology		will secure sustainable means		
		action plans. The financial		(human and financial) to ensure		
		sustainability of these		their continued operation		
		agencies is not ensured by the	d)	As agreed at PIF stage it was	d)	See description of
		current proposal. See also	α)	expected that the project would	ω)	component 3 in
		011.		involve key decision makers		Section A.5
				and financiers in the TNA		
		c) Component 3 is still too		process to ensure that the		
		vaguely designed at this stage		results of TNAs and TAPs		
		and does not provide		would have a good chance to be		
		information on how such		concretely implemented. The		
		networking events may		description of outcome 1 in		
		sustain further practical		Table 2, suggest that, instead,		
		actions rather than just be one		the project would only identify		
		shot communication		requests to be submitted to the		
		operations. See also Q11.		CTCN. Please review and		
				revise this since this does not		
				correspond to the approved PIF.		<b>a</b> 1 1 1 a
	CC	M/FJ - Sep 18, 2012:	e)	It is understood that component	e)	See description of
				2 will improve existing tools		component 2 in
	The	e previous comments have not		and methodologies rather than		Section A.5
				develop new ones. However the		

yet been sufficiently addressed. a) The project description does not yet clarify whether and how it would develop strong links with potential donors to ensure the relevance of the project's		component title and the first output in Table B Part 1 seem to suggest that new tools and methodologies will be developed. Please clarify.		
work (action plans and associated projects' proposals) with the quality check and funding criteria of these potential donors. b) Cleared	f)	Please detail the improvements that component 2 will develop in the tools and methodologies, clarify why these improvements are needed and how they will be	f)	Idem
c) The new Component 3 appears more focused on engaging activities for the future Climate Technology Center and Networks of the UNFCCC rather than on ensuring the success of TNAs'	g)	done. Please clarify the objective of component 3. Is it supporting the use and implementation of TNAs and TAPs for concrete technology transfer or is it focused on network	g)	See description of component 3 in Section A.5
Q6's comment.	h)	strengthening? The latter objective would be problematic for the GEF. Please clarify what is meant by "technical cooperation	h)	Technical cooperation agreements replaced by letters of intent from donors/financiers
FJ - Jan 17, 2013: Cleared. It is expected that the CEO		agreements" under component 3 and what purpose would such agreements serve. Please also clarify how the project intends to facilitate them.		These will be facilitated by engaging donors/financiers early in the process and all along the
endorsement request will detail how the activities of the project will avoid any redundancy with what the CTCN will be responsible for	i)	Please clarify how the regional and national level activities of component 3 would be linked to the TNA and TAP design and	i)	process. See description of component 3 in
	j)	Please detail the project activities aiming at using proven communication technologies, and what is expected from this	j)	Idem. See also component 2 elements on e-learning
	k)	The CEO endorsement request	k)	What is meant is that

		<ul> <li>indicates that the project will help the CTCN provide technical support in identifying technology needs. Please clarify this since it is understood that the TNA project will help assess the technology needs and therefore that the CTCN would not need to do this assessment/identification again.</li> <li>Please clarify what are the knowledge and information sharing tools the project is expected to produce to enhance information dissemination between countries.</li> <li>m) Please clarify the improved mechanism providing additional technical and funding support to countries that successfully complete their TAPs. How would the mechanism be put in place, work and be sustained beyond project completion?</li> </ul>	<ul> <li>the CTCN can conduct more in depth assessments focussing on specific areas/issues/technolog ies identified in TNAs/TAPs. The TNA/TAP is high level/broad and more in depth work (including assessments) is needed for moving to concrete implementation of TAP actions.</li> <li>See j)</li> <li>M) See description of component 3 in Section A.5</li> </ul>
15. Are the applied methodology and	CCM/FJ - Apr 19, 2012: This	FJ - Jan 8, 2014: This project mostly involves	TNA is an enabling
assumptions for the	building at this stage and does not	capacity building at this stage and	UNFCCC
description of the	present estimations of emission	does not present estimations of	
incremental/additional	reductions impacts.	emission reductions impacts.	
benefits sound and	· ·	*	
appropriate?			

16. Is there a clear description of: a) the socio-economic benefits, including gender dimensions, to be delivered by the project, and b) how will the delivery of such benefits	CCM/FJ - Apr 19, 2012: A description is provided but the benefits associated with component 2 and 3 remain uncertain (see Q16). CCM/FJ - Sep 18, 2012: Although the response provided	FJ - Jan 8, 2014: Yes.	
of incremental/ additional benefits?	network forum /linkage to potential funding partners, the description of component 3 in the project framework table and in paragraph 10 appear insufficiently focused to clarify whether the project will effectively implement activities allowing to identify and discuss with donors for the priority technologies, actions and projects identified following TNA and TAP finalization. Please address Q6's and Q14's comments. FJ - Jan 17, 2013: Cleared.		

17. Is public participation, including CSOs and indigeneous people, taken into consideration, their role identified and addressed properly?	CCM/FJ - Apr 19, 2012: No participation of representatives of potential technology users (public, private sector or households) is anticipated. There is no involvement of the Ministries in charge of finance and fiscal laws for when technology transfer incentives or disincentives removal are	FJ - Jan 8, 2014: Yes.	
	considered. CCM/FJ - Sep 18, 2012: a) Please clarify whether the project will enable the participation of representatives of households as potential technology users. Details on the means to enable the participation of potential technology users from the public and private sectors are expected for CEO endorsement.		
	<ul> <li>b) Cleared.</li> <li>FJ - Jan 17, 2013:</li> <li>Cleared.</li> <li>It is expected that the CEO endorsement request will clarify how key government stakeholders, beyond the Ministries in charge of climate change, will be involved to</li> </ul>		

	achieve a strong political commitment and involvement of national authorities.		
18. Does the project take into account potential major risks, including the consequences of climate change and provides	CCM/FJ - Apr 19, 2012: Unable to assess. See previous comments. CCM/FJ - Sep 18, 2012: Please clarify how the project will	<ul> <li>FJ - Jan 8, 2014:</li> <li>a) The risk of a low involvement of key national decision-makers in the TNA process and in the use of its results</li> </ul>	a) See Section A.5 especially component 3

sufficient risk mitigation measures? (i.e., climate resilience)	<ul> <li>mitigate the risk of not finding donors to fund the identified priority actions, technologies and projects coming out of TNAs and TAPs.</li> <li>FJ - Jan 17, 2013:</li> <li>Cleared.</li> </ul>	<ul> <li>is well identified but the measures to mitigate this risk do not seem adequate. At PIF approval, it was expected that the CEO endorsement request would clarify how key government stakeholders, beyond the Ministries in charge of climate change, would be involved to achieve a strong political commitment and involvement of national authorities. The involvement of NDEs proposed does not address the initial expectations. Please review and propose a different process and activities to involve key government stakeholders, beyond the Ministries in charge of climate change, and achieve a strong political commitment and involvement.</li> <li>b) Please detail the activities that will be implemented to ensure that the financing community may consider country proposals emerging from TAPs. What activities will be implemented for this? At what stage of the process? How often? What outcomes/outputs are expected from each of these activities?</li> </ul>	<ul> <li>b) See Section A.5 especially component 3</li> </ul>
		activities will be implemented for this? At what stage of the process? How often? With which stakeholders? What outcomes/outputs are expected from each of these activities? The financing community may also include national financers (e.g. public and private banks) and international private financers. Please clarify whether these stakeholders will be involved and how.	

19. Is the project consistent	CCM/FJ - Apr 19, 2012: See Q11.	FJ - Jan 8, 2014:	
19. Is the project consistent and properly coordinated with other related initiatives in the country or in the region?	CCM/FJ - Apr 19, 2012: See Q11. CCM/FJ - Sep 18, 2012: See Q11. FJ - Jan 17, 2013: Cleared.	<ul> <li>FJ - Jan 8, 2014:</li> <li>a) Please clarify what are the technical advisory and financial networks mentioned in the project, how they function and how they would interact with the project.</li> <li>b) Please identify the additional regional centres, or experts the project will mobilize on the adaptation issues.</li> <li>c) Following the PIF comments, please detail how the activities of the project will avoid any redundancy with what the CTCN will be responsible for.</li> </ul>	<ul> <li>a) UNEP/URC will make links with several regional organisations to disseminate project results and help countries move from TAP development to the actual implementation of the project ideas emanating from the TAPs. To facilitate this process. These organisations will be regularly informed about the progress of the project but also invited to participate in training workshops, experience sharing workshops and other project (see Annex H-5)</li> <li>b) See section A.5. Capetown University – energy research center in Africa. In Asia AIT will bring in additional adaptation expertise from the region</li> <li>c) See Section A.5. TNA and CTCN are complementary and in no way redundant.</li> </ul>

	20. Is the project implementation/ execution arrangement adequate?	CCM/FJ - Apr 19, 2012: Unable to assess. See previous comments. CCM/FJ - Sep 18, 2012: Cleared	FJ - Jan 8, 2014: Yes.	
	21. Is the project structure sufficiently close to what was presented at PIF, with clear justifications for changes?		FJ - Jan 8, 2014: Yes.	
	22. If there is a non-grant instrument in the project, is there a reasonable calendar of reflows included?		FJ - Jan 8, 2014: n.a.	
	23. Is funding level for project management cost appropriate?	CCM/FJ - Apr 19, 2012: The rationale for the proposed budget with reference to the previous UNEP TNA support project funded by the GEF is not explained.	<ul> <li>FJ - Jan 8, 2014:</li> <li>a) The project management cost represents close to 10% of the project grant, way above the threshold of 5% applicable to projects above \$2 million of GEF grant. Please reduce the</li> </ul>	a) See justification on PMC needs, this is a global project covering more than 25 countries.
Project Financing		CCM/FJ - Sep 18, 2012: The cost per country is similar to what was approved for the previous TNA support project GEF ID 3907 (\$300,000 per country). Cleared.	<ul> <li>project management cost or justify the cost with details regarding the project management budget.</li> <li>b) There is no co-financing for the project management cost. Please provide a co-financing with a cofinancing ratio similar to the ratio of the project co-financing.</li> </ul>	b) Added 45k\$ of URC co-financing for PMC

24. Is the fundi	ng and co- CCM/FJ	- Apr 19, 2012: Unable	FJ - Jan 8, 2014:		
financing po	er objective to assess	s. See previous comments.	Yes.		
appropriate	and adequate				
to achieve t outcomes an	he expected nd outputs?	- Sep 18, 2012:			
	Unable the other	to assess. Please address r comments first.			
	FJ - Jan	17, 2013:			
	Cleared.				
	The CEG expected means w involver commun	D endorsement request is I to clarify how sufficient vill be devoted to the ment of the funding hity.			
25. At PIF: con	ment on the CCM/FJ	- Apr 19, 2012: The	FJ - Jan 8, 2014:	a)	Co-financing increased
indicated co	ofinancing; cofinanc	ratio is much too low.	a) The co-financing ratio $(1.0, 33)$ is		(additional activities
At CEO end	lorsement: CCM/F	I - Sep 18-2012.	lower than for the PIF and for the		on e-guidance and e-
indicate if c	onfirmed co-	<b>J</b> - <b>Dcp</b> 10, 2012.	previous TNA support project		learning). 45k\$ co-
financing is	provided The co-f	Financing ratio (1:0.26) is	(1.0.35) Please increase the co-		finance redistributed to
Infancing is	lower th	an for the previous TNA	(1.0.55). I lease increase the CO-		PMC
	support	project (1:0.35). Please	infancing to at least the I in level.		
	increase higher le TNA su	the cofinancing to a evel than for the previous pport project.	b) There is no co-financing for the consultants working for technical assistance components (Table F). Please provide a co-financing with a co-financing ratio similar to the	b)	Major share of RISOE co-financing is TA (442,111 USD). They are a technical/research
	FJ - Feb	1, 2013:	ratio of the project co-financing.		institution which
	Cleared.				develops the tools and methodologies and provides capacity building and technical support to countries).

	26. Is the co-financing amount that the Agency is bringing to the project in line with its role?	CCM/FJ - Apr 19, 2012: No. UNEP is providing less than 1% of the project cost. CCM/FJ - Sep 18, 2012: Cleared. UNEP is now providing 2% of the project cost.	FJ - Jan 8, 2014: UNEP is providing 1.5% of the project co-financing. Please clarify the decrease of UNEP's co- financing from what was in the approved PIF.	UNEP co-finance was reduced but co-finance from RISOE was significantly increased (also since RISOE is one of UNEP's collaborating Centres and therefore receives funding from UNEP).
	27. Have the appropriate Tracking Tools been included with information for all relevant indicators, as applicable?		FJ - Jan 8, 2014: Please provide the Tracking tool in a separate Excel format file.	Done
Project Monitoring and Evaluation	28. Does the proposal include a budgeted M&E Plan that monitors and measures results with indicators and targets?		FJ - Jan 8, 2014: The first row of Annex A: Project Logical Framework should include, among the targets and means of verification, elements to assess whether the project effectively helped initiate technology transfer implementation or not. Please address Q14 e) and f) and review the row for outcome 2 in Annex A accordingly.	The mandate to conduct TNA/TAP is to identify technology needs, barriers and enablers and develop a related action plan. The project will however work with donors to get Letters of intent from them to implement TAP actions (project ideas). See changes in Annex A and Section A.5 Component 3
Agency Responses	29. Has the Agency responded adequately to comments from:			
	STAP?	CCM/FJ - Apr 19, 2012: n.a.	FJ - Jan 8, 2014:	See Annex B-2

			Please address STAP comments.	
	Convention Secretariat?			
	Council comments?			
	Other GEF Agencies?			
Secretariat Recommen	ndation			
Recommendation at	30. Is PIF clearance/approval being recommended?	No. The SCCF does not have suffient resources.		
PIF Stage		CCM/FJ - Apr 19, 2012: No.		
		CCM/FJ - Sep 18, 2012: No. Please address the above comments.		
		FJ - Jan 17, 2013: Yes.		

	31. Items to consider at CEO endorsement/approval.	<ul> <li>FJ - Jan 17, 2013:</li> <li>a) It is expected that the CEO endorsement request will detail how the activities of the project will avoid any redundancy with what the CTCN will be responsible for.</li> <li>b) It is expected that the CEO endorsement request will clarify how key government stakeholders, beyond the Ministries in charge of climate change, will be involved to achieve a strong political commitment and involvement of national authorities. c) The CEO endorsement request is expected to clarify how sufficient means will be devoted to the involvement of the funding community.</li> </ul>		
Recommendation at CEO Endorsement/ Approval	32. At endorsement/approval, did Agency include the progress of PPG with clear information of commitment status of the PPG?		FJ - Jan 8, 2014: n.a.	
	33. Is CEO endorsement/approval being recommended?		FJ - Jan 8, 2014: No. Please address the above comments. Please contact the GEF secretariat prior to re-submission.	
Review Date (s)	First review*	April 18, 2012		

Additional review (as	September 18, 2012	
necessary)		
Additional review (as	February 01, 2013	
necessary)		
Additional review (as		
necessary)		
Additional review (as		
necessary)		

\* This is the first time the Program Manager provides full comments for the project. Subsequent follow-up reviews should be recorded. For specific comments for each section, please insert a date after comments. Greyed areas in each section do not need comments.

#### **REQUEST FOR PPG APPROVAL**

<b>Review Criteria</b>	Decision Points	Program Manager Comments
PPG Budget	1. Are the proposed activities for project preparation appropriate?	
	2. Is itemized budget justified?	
Secretariat	3. Is PPG approval being recommended?	
Recommendation	4. Other comments	
Review Date (s)	First review*	
	Additional review (as necessary)	

\* This is the first time the Program Manager provides full comments for the project. Subsequent follow-up reviews should be recorded. For specific comments for each section, please insert a date after comments.

#### ADDITIONAL EMAL REVIEW COMMENTS RECEIVED

GEF5 CEO Endorsement

GEF Review Comment	Response
Table A, first row, outputs column, second bullet: please check the number of countries (currently written: twenty three (24))	Table A has been modified to show 24 countries.
Table B, project objective: please check the number of countries in the first sentence (currently, twenty three are mentioned).	Table B, objective has been modified to show 24 countries.
Table B, Component 1: please check the number of countries in the component title(currently, twenty three are mentioned).	Table B, component 1 has been modified to show 24 countries.
Please revise the agency fee to be in line with the new fee policy sent by email on January 8, 2013.	The IA fee is now 9.5% of the project total.
Paragraph 10: the current text seems to imply that the consultation of the funding community will be limited to discussion of the TAPs, when it would be useful to have the funding community involved earlier in the TNAs process. Please consider mentioning in paragraph 10 that the funding community consultation will start earlier in the TNA preparation process.	Paragraph 10 has been modified to show that the funding community will be consulted on the TNA and TAP process.
Please mention all 4 regional GEF technology transfer finance centers in paragraph 26 as it is done for the 3rd output of component 2 in table B.	All 4 GEF funded technology networks have now been included in paragraph 26.
Question 20 – CCM/FJ - Please review paragraph 32: UNFCCC decisions on providing full cost support only apply to convention obligations and TNA is not a convention obligation.	The paragraph providing reference to the convention obligation has been deleted. Paragraph 32 now only reflects UNEP's contribution to the project.

# ANNEX B-2: RESPONSES TO STAP COMMENTS

STAP comment	UNEP response
1. It is commendable to "carefully structure and synthesis" the project with the newly established CTCN, but how exactly will this be achieved? Will someone representing CTCN be on some form of advisory board for example?	As indicated in the CEO document, the national representative for the CTCN (i.e. National Designated Entity nominated for the CTCN by governments) will take part in the TNA/TAP process. It is expected that many countries will nominate their NDE as National TNA Coordinator since a number of NDEs see the TNA/TAP as essential tools to fulfill their roles and the main framework for their actions.
2. The project should ensure the countries produce timelines, benchmarks and indicators that will help to reduce the risk of non-success and effectiveness of planned preparatory missions.	It will be challenging to get countries to produce timelines, benchmarks and indicators for the preparatory missions (i.e. inception missions) since the purpose of the inception missions is to set-up the national TNA teams.
<ul><li>3. There are two queries relating to the proposal;</li><li>a) I accept covering 24 countries within 36 months will be a</li></ul>	a) UNEP invited countries to express interest for joining this new TNA project in 2012. All countries that have expressed interest have been included in the proposal.
challenge, but how were these 24 countries identified? Were they selected - in which case on what basis? Were others interested but declined - on what basis? Were they the only ones to respond? Might other countries be given similar opportunities in the future?	b) The need of additional tools in addition to the TNA handbook has been expressed by countries participating in TNA Phase I. For example, the TNA assess tool was perceived as too complicated by the countries and was therefore not used. In the absence of that, URC developed a simplified Excel version tool. TNA Phase I countries have expressed the need for tools to identify and engage stakeholders. Therefore, for the implementation of the TNA Phase II, another methodology guidebook (notebook) on the stakeholder engagement process will be developed. For
<ul> <li>b) Were other tools evaluated - LEAP for example - prior to URC starting to develop its own? It would be useful to explain why the need for a new tool when a range of others might exist. This tool is yet to be reviewed by stakeholders. How long will it take to fully develop? Will it be used on a pilot study of one or two countries initially? What happens if it fails to deliver as promised? The risk of such a failure is not included in Section B4.</li> </ul>	more information please see description on component 2. Note that LEAP is a tool which is not appropriate to be used in the TNA process.

# ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND TO FFUNDS

A. Provide detailed funding amount of the PPG activities financing status in the table below:

PPG Grant Approved at PIF: N/A								
Project Preparation Activities Implemented	GEF/LDCF/SCCF/NPIF Amount (\$)							
	Budgeted Amount	Amount Spent Todate	Amount Committe					
Total	0	0						

# ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used)

Provide a calendar of expected reflows to the GEF/LDCF/SCCF/NPIF Trust Fund or to your Agency (and/or revolving fund that will be set up)

N/A

# ANNEX E: CONSULTANTS TO BE HIRED

Position Titles	\$/ Person Week*	Estimated Person Weeks**	Tasks To Be Performed
For Project Management			·
Local			
	1250	0	
International			
	3000	0	
Justification for travel, if any: N/A	A		
For Technical Assistance			
Local			
Local consultants to be hired by the countries with funding provided under the agreements signed between URC and beneficiary Governments	1250	0	Support to the identification and categorization of the country's priority sectors and identification and prioritization of climate technologies through a participatory process. The experts will also: (i) facilitate the analysis of implementation barriers and enabling framework and (ii) the identification of ways to address them.
International			
Translator Russian	3000	11.33	Translation of Guidebooks
Translator Spanish	3000	10.67	Translation of Guidebooks
Translator French	3000	10.67	Translation of Guidebooks
Mitigation expert (URC)	3000	8.33	Improvement of adaptation methodologies/tools
Adaptation expert (URC)	3000	8.33	Improvement of mitigation methodologies/tools
Justification for travel, if any: N/A	Α		

## **ANNEX F-1: DETAILED GEF BUDGET**

# A: RECONCILIATION BETWEEN GEF ACTIVITY BASED BUDGET AND UNEP BUDGET LINE (GEF FUNDS ONLY US\$)<sup>12</sup>

#	Title	GEF 2014	GEF 2015	GEF 2016	GEF TOTAL	Component 1	Component 2	Component 3	PMC
1100	Project Personnel								
1101	Project coordination (URC)	239,203	151,214	121,597	512,013	-	-	-	512,013
1102	Technical and methodological support	360,797	148,786	119,786	629,370	251,748	251,748	125,874	-
1103	Technical and methodological support (UNEP)	-	-	-	-	-	-	-	-
1199	Sub-total	600,000	300,000	241,383	1,141,383	251,748	251,748	125,874	512,013
1200	Consultants								
1201	Methodology improvement (Adaptation)	20,000	5,000	-	25,000	-	25,000	-	-
1202	Methodology improvement (Mitigation)	20,000	5,000	-	25,000	-	25,000	-	-
1203	Translation of guidebooks to French	32,000	-	-	32,000	-	32,000	-	-
1204	Translation of guidebooks to Spanish	32,000	-	-	32,000	-	32,000	-	-
1205	Translation of guidebooks to Russian	34,000	-	-	34,000	-	34,000	-	-
1299	Sub-total	138,000	10,000	-	148,000	-	148,000	-	-
1300	Administrative support								
1301	Project assistant	20,786	20,786	20,786	62,359	-	-	-	62,359
1399	Sub-total	20,786	20,786	20,786	62,359	-	-	-	62,359
1600	Travel								
1601	Staff travel project coordination	5,000	5,000	5,000	15,000	-	-	-	15,000
1602	Staff travel technical and methodological support	135,000	35,000	11,293	181,293	161,293	-	20,000	-
1699	Sub-total	140,000	40,000	16,293	196,293	161,293	-	20,000	15,000
1999	Component total	898,786	370,786	278,462	1,548,035	413,041	399,748	145,874	589,372
2200	Sub-contracts (MOU's/LOA's for supporting organizations)								
2201	Regional Centres (technical support)	240,000	240,000	240,000	720,000	520,000	140,000	60,000	-

<sup>&</sup>lt;sup>12</sup> Substantial project activities and expenditures are expected to end in December 2016, 9 additional months were included in the project duration to cover project closure activities (financial closure, final reporting).

2202	25 new TNA countries + 2 countries from previous phase (only TAPs)	1,163,333	1,163,333	1,163,333	3,490,000	3,250,000	-	240,000	-
2299	Sub-total	1,403,333	1,403,333	1,403,333	4,210,000	3,770,000	140,000	300,000	-
2999	Component total	1,403,333	1,403,333	1,403,333	4,210,000	3,770,000	140,000	300,000	-
3200	Group training								
3201	Capacity building workshops for Regional Centres	33,000	-	-	33,000	-	33,000	-	-
3202	Capacity building workshops for countries	50,000	50,000	20,000	120,000	-	120,000	-	-
3299	Sub-total	83,000	50,000	20,000	153,000	-	153,000	-	-
3300	Meetings/conferences								
3301	Steering Committee Meetings	3,000	3,000	3,000	9,000	-	-	-	9,000
3302	Global experience sharing workshop	-	33,000	-	33,000	-	33,000	-	-
3399	Sub-total	3,000	36,000	3,000	42,000	-	33,000	-	9,000
3999	Component total	86,000	86,000	23,000	195,000	-	186,000	-	9,000
5200	Reporting cost								
5201	Guideline for country reporting	10,000	10,000	-	20,000	20,000	-	-	-
5299	Sub-total	10,000	10,000	-	20,000	20,000	-	-	-
5300	Sundry								
5301	Newsletter	12,000	12,000	12,000	36,000	-	-	36,000	-
5302	Translation of newsletters to French, Russian and Spanish	9,600	9,600	9,600	28,800	-	-	28,800	-
5303	Project website	6,000	1,000	1,000	8,000	-	-	8,000	-
5304	Conference dissemination documents	3,000	3,000	4,000	10,000	-	-	10,000	-
5399	Sub-total	30,600	25,600	26,600	82,800	-	-	82,800	-
5500	Monitoring and evaluation								
5581	External evaluation	-	-	50,000	50,000	25,000	15,000	10,000	-
5599	Sub-total	-	-	50,000	50,000	25,000	15,000	10,000	-
5999	Component total	40,600	35,600	76,600	152,800	45,000	15,000	92,800	-
	Grand total	2,428,720	1,895,720	1,781,396	6,105,835	4,228,041	740,748	538,674	598,372

# ANNEX F-2: DETAILED CO-FINANCE BUDGET

B: RECONCILIATION BETWEEN GEF BUDGET AND CO-FINANCE BUDGET (TOTAL GEF & CO-FINANCE US\$)

#	TITLE	GEF 2014	URC 2014 (IN-KIND)	UNEP 2014 (IN-KIND)	GOVERNMENTS 2014 (IN-KIND)	GEF 2015	URC 2015 (IN-KIND)	UNEP 2015 (IN-KIND)	GOVERNMENTS 2015 (IN-KIND)	GEF 2016	URC 2016 (IN-KIND)	UNEP 2016 (IN-KIND)	GOVERNMENTS 2016 (IN-KIND)	GEF TOTAL	URC TOTAL (IN-KIND)	UNEP TOTAL (IN- KIND)	GOVERNMENTS TOTAL (IN- KIND)	TOTAL
1100 1101 1102	Project Personnel Project coordination (URC) Technical and methodological support	239,203 360,797	18,000 221,410	35,000 -	-	151,214 148,786	18,000 92,608	35,000	-	121,597 119,786	18,000 119,093	35,000	-	512,013 629,370	54,000 433,111	105,000	-	671,013 1,062,481
1103	Technical and methodological support	-	-	67,630	-	-	-	- 67,630	-	-	-	67,630	-	-	-	202,889	-	202,889
1199	Sub-total	600,000	239,410	102,630	-	300,000	110,608	102,630	-	241,383	137,093	102,630	-	1,141,383	487,111	307,889	-	1,936,383
1200 1201	Consultants Methodology improvement (Adaptation)	20,000	-	-	-	5,000	-	-	-	-	-	-	-	25,000	-	-	-	25,000
1202	Methodology improvement (Mitigation)	20,000	-	-	-	5,000	-	-	-	-	-	-	-	25,000	-	-	-	25,000
1203	Translation of guidebooks to Spanish	32,000	-	-	-	-	-	-	-	-	-	-	-	32,000	-	-	-	32,000
1205	Translation of guidebooks to Russian	34,000	-	-	-	-	-	-	-	-	-	-	-	34,000	-	-	-	34,000
1299	Sub-total	138,000	-	-	-	10,000	-	-	-	-	-	-	-	148,000	-	-	•	148,000
1300	Project assistant	20,786	-	-	-	20,786	-	-	-	20,786	-	-	-	62,359	-	-	-	62,359
1399	Sub-total	20,786	-	-	-	20,786	-	-	-	20,786	-	-	-	62,359	-	-	-	62,359
1601 1601	Staff travel Project coordination Staff travel technical and methodological support	5,000 135,000	-	-	-	5,000 35,000	-	-	-	5,000 11,293	-	-	-	15,000 181,293	-	-	-	15,000 181,293
1699	Sub-total	140,000	-	-	-	40,000	-	-	-	16,293	-	-	-	196,293	-	-	-	196,293
1999 2200	Sub-contracts (MOU's/LOA's for supporting organizations)	898,786	239,410	102,630	-	370,786	110,608	102,630	-	278,462	137,093	102,630	-	1,548,035	487,111	202,889	-	2,343,035
2201 2202	Regional Centres (technical support) 25 new TNA countries + 2 countries from previous phase (only TAPs)	240,000 1,163,333	-	-	- 453,973	240,000 1,163,333	-	-	- 453,974	240,000 1,163,333	-	-	- 453,974	720,000 3,490,000	-	-	- 1,361,921	720,000 4,851,921
2299	Sub-total	1,403,333	-	-	453,973	1,403,333	-	-	453,974	1,403,333	-	-	453,974	4,210,000	-	-	1,361,921	5,571,921
2999 3200	Component total Group training	1,403,333	-	-	453,973	1,403,333	-	-	453,974	1,403,333	-	-	453,974	4,210,000	-	-	1,361,921	5,571,921
3220	Capacity building workshops for Regional Centres	33,000	-	-	-	-	-	-	-	-	-	-	-	33,000	-	-	-	33,000
3221	Capacity building workshops for countries	50.000				50.000				00.000				400.000				400.000
3299	Sub-total	50,000	-	-	-	50,000	-	-	-	20,000	-	-	-	120,000	-	-	-	120,000
2200	Maatingalaanfaranaaa	83,000	-	-		50,000	-	-		20,000	-	-		153,000	-	-		153,000
3301	Steering Committee Meetings	3,000	-	-	-	3,000	-	_	-	3,000	-	-	-	9,000	_	_	-	9,000
3302	Global experience sharing workshop					22.000								22.000				22,000
3399	Sub-total	-	-	-	-	33,000	-	-	-	-	-	-	-	33,000	-	-	-	33,000
3999	Component total	3,000	-		-	36,000	-		-	3,000	-	-	-	42,000	-	-	-	42,000
5555		86,000	-	-		86,000	-	-		23,000	-	-		195,000	-	-		195,000
5200 5201	Reporting cost																	
		10,000				10,000				-	-	-	-					
5202	Audit report (URC)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5299	Sub-total	10,000	-	-	-	10,000	-	-	-	-	-	-	-	20,000	-	-	-	20,000
5300 5301	Sundry Newsletter	10.000				40.000				10.000				00.000				00.000
5302	Translation of newsletters to French,	12,000	-	-	-	12,000	-	-	-	12,000	-	-	-	36,000	-	-	-	36,000
5000	Russian and Spanish	9,600	-	-	-	9,600	-	-	-	9,600	-	-	-	28,800	-	-	-	28,800
5303	Project website	6,000	-	-	-	1,000	-	-	-	1,000	-	-	-	8,000	-	-	-	8,000
5304	Misc reports, conference dissemination	2 000				2 000				4.000				10.000				10,000
5399	Sub-total	3,000	-	-	-	3,000	-	-	-	4,000	-	-	-	10,000	-	-	-	10,000
5500	Monitoring and evaluation	30,600	-	-		25,600	-	-		26,600	-	-		82,800	-	-		82,800
5500		-	-	-	-		-	-	-	50,000	-	-		50,000	-	-	-	50,000
2222	Sub-total	-	-	-	-	-	-	-	-	50,000	-	-	-	50,000	-	-	-	50,000
5999	Component total	40,600	-	-	-	35,600	-	-	-	76,600	-	-	-	152,800	-	-	-	152,800
	Grand total	2,428,720	239,410	102,630	453,973	1,895,720	110,608	102,630	453,974	1,781,396	137,093	102,630	453,974	6,105,835	487,111	202,889	1,361,921	8,262,756

## ANNEX F-3: Funding distribution by project component

Component	GEF	URC (in-kind)	UNEP (in-kind)	Countries (in-kind)	Total
<ol> <li>Facilitating the</li> </ol>	4,228,041		65,000	976,165	5,304,206
preparation of Technology					
Needs Assessments					
(TNAs) in twenty five (25)					
developing countries - or,					
where these have already					
been prepared/started,					
making them more					
strategic and useful in an					
operational sense - and					
Technology Action Plans					
(TAPs) in twenty seven					
(27) developing countries.					
2. Developing tools and	740,748	358,111	65,000		1,415,748
providing capacity					
building and information					
on methodologies to					
support preparation of					
Technology Needs					
Assessments (TNAs) and					
Technology Action Plans					
(TAPs).					
3. Strengthening	538,674		72,889	385,756	1,030,319
outreach, dissemination					
and networking activities					
to promote use and					
funding of TNAs and TAPs					
priorities.					
4. Project Management	512,013	54,000	105,000		557,013
Costs (PMC)					
Total	6,105,835	487,111	307,889	1,361,921	8,262,756

## ANNEX G: MONITORING AND EVALUATION BUDGET AND WORKPLAN

Type of M&E activity	Responsible Parties	Budget GEF	Budget co- finance	Time Frame	
Inception Report	URC	-	-	1 month after project inception missions	
Measurement of project indicators (outcome, progress and performance indicators, GEF tracking tools) at national and global level	URC, RCs	-	-	Outcome indicators: start, mid and end of project Progress/perform. Indicators: annually	
Semi-annual Progress/ Operational Reports to UNEP	URC, RCs	-	-	Within 1 month of the end of reporting period i.e. on or before 31 January and 31 July	
Project Steering Committee meetings <sup>13</sup>	UNEP, URC, National TNA coordinators	9,000	-	Once a year minimum	
Reports of PSC meetings	URC	-	-	Annually	
PIR	URC, UNEP	-	-	Annually, part of reporting routine	
Monitoring visits to field sites	URC, RCs <sup>14</sup>	10,000	-	As appropriate	
Mid Term Management Review	UNEP Task Manager/UNEP Evaluation Office	-	-	At mid-point of project implementation	
Terminal Evaluation	UNEP Evaluation Office	50,000		Within 6 months of end of project implementation	
Audit	DTU (URC)	-	-	Annually	
Project Final Report	URC, UNEP	-	-	Within 2 months of the project completion date	
Co-financing report	URC, UNEP	-	-	Within 1 month of the PIR reporting period, i.e. on or before 31 July	
Publication of Lessons Learnt and other project documents	URC, UNEP	-	-	Annually, part of Semi-annual reports Project Final Report before 30 September, 2017	
Total M&E Plan Budget		69.500	-		

<sup>&</sup>lt;sup>13</sup> National TNA Steering Committee meetings are covered by Government co-finance under respective agreements signed with URC <sup>14</sup> RCs travel covered under respective agreements signed with URC

#### ANNEX H-1: PROJECT IMPLEMENTATION ARRANGEMENTS

The project will be implemented in 25 new countries that have submitted their letters of endorsements for this project, plus two TNA phase I countries that need to complete their TAPs (Kazakhstan and Laos). To ensure that activities at the country level respond to the priorities identified in the relevant United Nations Development Assistance Framework and national strategies, participating countries, with the support of a national TNA project team, will prepare a costed national work plan based on a simplified format, but will include timelines, benchmarks, and indicators to show how each output supports the overall TNA process at the national level. Prior to the start-up of project activities in each country, UNEP DTIE and the URC will deploy inception missions that will assess the level of political and administrative effort needed to establish favorable institutional conditions for subsequent project activities.

UNEP DTIE and the URC will be involved in coordinating efforts, providing methodological guidance and technical expertise to the countries on the themes related to technology needs assessments and associated Technology Action plans.

Drawing on its experience in supporting the National Communications and the TNA Project, UNEP will take the lead in identifying and securing the support of key stakeholders in each country, including the structuring of legal agreements with appropriate government institutions (Memorandum of Understanding), in close consultation with URC. Once the necessary agreements are in place, URC will provide guidance to countries on setting up the national project management implementation structures (using a model developed under the previous TNA project phase). The institutional structure proposed for carrying a successful TNA is shown in the figure below. The National TNA Team will include a National TNA Committee, National Consultants, experts, Work groups, and a TNA coordinator. Roles for each of them are clearly defined. Once the national team has been established, national capacity will be strengthened through regional capacity building workshops. National consultants will receive training on methodologies and tools for conducting the TNA. The in-country institutional elements and their exact nomenclature would depend on countries. For example, a country may decide to call the project decision making body as "National Advisory Committee" instead of "National Steering Committee". However each element of the in-country institutional structure is designed to play an important role.

The TNA process can be completed by engaging a few national experts (National consultants) and asking them to produce reports. However if a wide range of stakeholders is to be consulted, then a National TNA committee and work groups need to be constituted. Similarly, the work groups and National TNA committee can come out with policy recommendations but if those are to be implemented, they need to be vetted by policy makers, who constitute the National steering committee. A more detailed description of the various national bodies and their corresponding role is described below.



#### In-country

#### 1. National Steering Committee

National Steering Committee is envisaged as the top most decision making body of the project. The National Steering Committee should be comprised of members responsible for policy making from all relevant ministries as well as key stakeholders from the private sector. The National Steering Committee provides political acceptance to the TNA process within a country and will be responsible for:

- Appointment of the National TNA Committee
- Political acceptance for the Technology Action Plan

#### 2. National TNA Team

The National TNA Team will be the main decision making body for the project with the Project Coordinator (or National TNA Coordinator) acting as a focal point. The National TNA team will be comprised of a small core group as the National TNA Committee, and a broader group of stakeholders and experts, that will aid the core group. This broader group will include national experts/consultants and sectoral/technological workgroups. The "National TNA coordinator" will play a key role and coordinate amongst the different groups to ensure that they work together as a team.

#### 3. National TNA Coordinator

The appointment of the National TNA Coordinator is the responsibility of the Signing entity (responsible ministry) or the National Steering Committee. The National TNA Coordinator will be the focal point for the effort and manager of the overall TNA process. In view of the role of NDEs, UNEP and URC will strongly advocate to have countries select their NDEs (or a representative from their NDEs) as their National TNA Coordinators. This will involve providing vision and leadership for the overall effort, facilitating the tasks of communication with the National TNA Committee members, National Consultants and stakeholder groups, formation of networks, information acquisition, and coordination and communication of all work products. The leadership of the National TNA coordinator is critical for the success of the TNA in each country. It is therefore recommended that the skill set of the TNA Coordinator includes facilitation skills, project management, and some scientific or engineering background, as these are likely to be advantageous in terms of familiarity with technology specifications and performance requirements.

#### 4. National TNA Committee

The National TNA Committee is the core group of decision makers and includes representatives responsible for implementing policies from concerned ministries, members familiar with national development objectives, sector policies, climate change science, potential climate change impacts for the country, and adaptation needs. The membership of the National TNA Committee should be ideally limited to less than ten people, which is essential to keep the decision making process simple. A larger group size can make things complicated in terms of organizing meetings and coming to conclusions.

The National TNA team overcomes the restriction on the membership of National TNA Committee by having the flexibility to induct members from the relevant stakeholder group for specific tasks. e.g., if electricity is one of sectors for mitigation then a work group would be constituted comprised of stakeholders drawn from utilities, industrial consumers, civil society, regulators, etc.

The role of the National TNA Committee is to provide leadership to the project in association with the TNA coordinator. However the specific responsibilities include;

- Identifying national development priorities, and priority sectors from thereon.
- Deciding on the constitution of sectoral/technological workgroups
- Approving technologies and strategies for mitigation and adaptation which are recommended by sectoral workgroups.

• Approving the Sectoral Technology Action Plan (a roadmap of policies that will be required for removing barriers and creating the enabling environment) and developing a cross cutting National Technology Action Plan for mitigation and adaptation.

#### 5. National Consultants/Experts

The national consultants are national experts, selected by the National TNA Committee with support and guidance from URC. They will work in close collaboration with the National TNA committee and various work groups, and would be directly responsible to the National TNA Coordinator. The national consultants' overall task is to support the entire TNA process. The national consultants will be an important component of the global TNA project and participate in capacity building workshops to be organized by URC at regional level together with the RCs. They will be responsible for providing process-related and technical advisory services needed for conducting TNAs and developing Technology Action Plans (TAPs) at the country level. The role of the national consultants will thus be to lead and undertake activities such as research, analysis and synthesis in support of the TNA exercise. The national consultants will assist the TNA coordinator in applying a participatory approach to the TNA process by facilitating the tasks of communication within the national TNA team, outreach to stakeholders, formation of networks, and coordination and communication of work products. The national consultant is expected to:

- Provide support to the identification and categorization of the country's priority sectors, and identification and prioritization of technologies for mitigation through a participatory process with a broad involvement of relevant stakeholders;
- Facilitate the process of analyzing with the work groups how the prioritized technologies can be implemented in the country and how implementation circumstances could be improved by addressing the barriers and developing an enabling framework;
- Prepare the National TAP, which will outline essential elements of an enabling framework for technology transfer consisting of market development measures, institutional, regulatory and financial measures, and human and institutional capacity development requirements. It will also include a detailed plan of actions in order to implement the proposed policy measures and estimate the need for external assistance to cover additional implementation costs.
- Prepare the TNA and TAP reports and final report for the country.

#### 6. Sectoral/Technological Workgroups

The Stakeholders are central to the TNA process. A network of stakeholders needs to be established to carry forward an implementation plan after completion of the TNA. Therefore, to give an active role to the stakeholders in the TNA process, constitution of workgroups is proposed. The workgroups would be constituted by the National TNA Committee. The workgroups can be on a sectoral basis and in this case they decide on the technologies appropriate for a sector, undertake market/barrier analysis and recommend an enabling framework for the sector. In case the National TNA Committee chooses to work along technology lines, work groups can be organized on technology lines.

The work groups could include persons drawn from government departments with responsibility for policy formulation and regulation, private and public sector industries, electric utilities and regulators, technology suppliers, finance, technology end users (e.g., households, small business, farmers, technology experts (e.g., from universities, consultants, etc.) and others (international organizations, donors).

#### Regional

#### 7. Regional Centres (RCs)

In the previous TNA phase the project engaged one RC in each of the regions (Africa and the middle East, and Asia and CIS), except for the Latin American and Caribbean region where two RCs were engaged to support the TNA process in the countries, to create a greater awareness about technology needs of the countries at regional level, and to enhance capacities within the region. Based on experience from the previous phase, it has been realized the RCs in Africa and the Middle East, and Asia and CIS need to be strengthened. For that reason, one extra RC in each of these two regions will be engaged in the new phase.

Like in the previous phase, the RCs will, in cooperation with the staff at URC, play a substantial role in providing technical support to the national TNA teams. The main responsibilities of the RCs will be the following:

- Partner URC in the organization and facilitation of regional training workshops where participants from countries will be imparted training on methodology for conducting the TNA.
- Provide technical and process support to the countries within the region during the whole project implementation. For this, the RCs will undertake supporting missions to countries depending on the needs expressed by the countries.
- Provide countries with advice/guidance (help desk) requested by the countries after country missions, workshops and throughout project implementation.
- Provide technology descriptions for technologies not found on the Climate Techwiki3 based on requests made by the countries.
- Partner URC in the organization and facilitation of regional experience sharing workshops for countries.
- Review and comment technology needs assessment (TNA) and technology action plan (TAP) reports from countries to help improve quality of outputs and compile a synthesis report.

#### Global

#### 8. Project Steering Committee (PSC)

The PSC plays a central role in the implementation of the project. During TNA Phase I, the PSC provided strategic guidance and advice on various issues requesting corrective measures or interaction with participating countries along project implementation. The PSC will receive periodic reports on progress and will be asked to make recommendations to UNEP concerning the need to revise any aspects of the Results Framework or the M&E plan.

The PSC provides guidance and advice to the project by:

- Participating in annual PSC meetings and provide strategic guidance and advice based on the project update (during Phase I, these meetings have been organized in conjunction with TNA side events at COPs);
- Contacting national TNA coordinators or signing ministries in case of delays in initiating activities or failure to deliver expected outputs in time (this has proven to be useful for some countries during Phase I);
- Maintaining regular communication with representatives of National Steering Committees (NSC). To facilitate this, URC and UNEP will present the constituted PSC to the NSC of each of the participating countries during inception missions;
- Providing feedback regarding selection of national coordinators. Experience from Phase I shows some of the delays in delivering outputs from participating countries or the non-completion of the TNA work could have been prevented if the PSC had been consulted on the selection of national TNA coordinators beforehand;
- Providing suggestions regarding external participation/collaboration in regional training workshops and global experience sharing workshop;
- Helping in the identification of relevant representatives from the international, regional and local funding community so those can be involved from project implementation's start.

#### 9. UNEP Risoe Center (URC)

URC is the executing agency for the project at global level and its main job is to provide support to the countries in the TNA exercises. URC, through a team working under the supervision of the TNA Project Manager, facilitates the TNA/TAP process by:

- Providing guidance and assistance to the countries to set-up the institutional structures required for conducting the TNA/TAP process.
- Providing methodological inputs.
- Providing support to the countries for data related to technologies on mitigation and adaptation. This support would be rendered by strengthening Climate Techwiki, developing/improving existing guidebooks, and through the on-demand help desk facility available with the RCs.
- Providing training in methodological tools and databases which will be provided in regional capacity building workshops.

The TNA Project Manager at URC will be responsible for:

- Overall project coordination and managing the TNA team in URC (in line with the tasks for URC listed above).
- Following-up, and communicating with national TNA country coordinators and other local stakeholders such as national consultants, representatives from signing ministries and the local funding community.
- Reporting on project activities to UNEP and the PSC (this includes financial reporting and preparing the annual Project Implementation Review (PIR) report for GEF in collaboration with the UNEP Task Manager).

In addition, URC will, in consultation with national executing agencies evaluate training needs for national TNA team members aimed at enhancing the quality of TNA/TAP reporting (i.e. knowledge, skill and behavioral gaps) and feed these into the development of a comprehensive capacity building strategy in the context of the overall project implementation plan. Based on country needs, suitable support will be provided by collaborating RCs implying that a national team will be able to access services from more than just one regional center during the project life span. URC will also assist countries (i) evaluate their TNA/TAP capacity needs/constraints, (ii) identify, if needed, additional regional training centers to train national teams (iii) provide an oversight role to regional centers supporting all participating countries (QA/QC), as well as provide targeted technical assistance to Regional Centers to help address adaptation and/or mitigation areas capacity constraints.

Countries will receive grant financing for in-country activities and participation in regional and global capacity building events, while qualified RCs will be used to provide as much of the technical guidance and support, as their capacities allow, based on a participatory evaluation of their capacities by URC. The project will network and promote exchange of experience and information between countries. This will not only aid in the preparation of TNAs but will also establish the basis for cooperative arrangements for eventual implementation of measures identified in TNAs. A steering committee will be established to provide strategic guidance to the programme on technology transfer. This will be further elaborated during the project preparatory phase.

### *10. UNEP*

UNEP will provide backstopping services to URC through in-kind support from a UNEP/DTIE Programme Officer who shall:

- Provide strategic, technical and methodological support for project implementation;
- Support the dissemination of results and engagement of donors/development partners to foster TAP implementation;
- Facilitate synergies and links between the project and the CTCN as well as the broader group of UNEP's climate change programmes and projects.

Also, UNEP as the GEF Implementing Agency and through the UNEP/DTIE Task Manager will be responsible for project supervision to ensure consistency with GEF and UNEP policies and procedures. The Task Manager will formally participate in project Steering Committee meetings, the mid-term and final evaluations, clear half yearly and annual reports, and provide technical review of project outputs.

The Task Manager shall:

- Provide project oversight to ensure that GEF policies and criteria are adhered to and that the project meets its objectives and achieves expected outcomes in an efficient and effective manner.
- Perform liaison functions between the project and the GEF Secretariat;
- Report on the progress against milestones outlined in the CEO approval letter to the GEF Secretariat;
- Inform the GEF Council through UNEP's GEF Coordination Office whenever there is a potentially substantive change (i.e., one affecting the project objectives, the underlying concept, scale, scope, strategic priority, conformity with GEF criteria, likelihood of project success, or outcome of the project);
- Rate, on an annual basis, progress in meeting project objectives, project implementation progress, risk, and quality of project monitoring and evaluation, and report to UNEP's GEF Coordination Office and the GEF Council through the Project Implementation Review (PIR) report;
- Verify that publications and other forms of communication project publications adhere to the requirements of the GEF Secretariat's guidelines for GEF-wide strategic communications, and ensure that clearance for such communications is received from the GEF Secretariat in accordance with the GEF Communications and Outreach Strategy;
- Undertake a mid-term management review or request UNEP's Evaluation Office to perform an independent mid-term evaluation;
- Ensure that EOU arranges for an independent terminal evaluation and submits its report to the GEF Evaluation Office.

#### Background

The TNA Phase I was executed by UNEP Risoe Centre (URC) in collaboration with Regional Centres (RCs) in Asia (AIT), Africa (ENDA) and Latin America (Fundación Bariloche and Libélula). Both AIT and ENDA assisted participating countries in both mitigation and adaptation, while in Latin America Fundación Bariloche assisted countries in the area of mitigation and Libélula assisted countries in the area of adaptation. The RCs played a substantial role in the execution of the project providing technical support to the national TNA teams and consultants in all the participating countries. The activities carried out by the RCs were to:

- Acquire a full understanding of the objectives of the Project.
- Participate in the first national workshop of each of the countries participating in the first round and second round.
- Participate in inception workshops organised by URC in collaboration with national TNA teams.
- Provide technical and process support to the participating countries during the whole project implementation. For this, the RCs were requested to undertake missions (2 to 4) missions per country depending on the needs expressed by the countries. These missions were conducted in conjunction with planned workshops, before or after workshops or separately.
- Prepare proceedings/reports with the outcomes of country missions.
- Assist participating countries with advice/guidance (help desk) requested by the countries after country missions, workshops and throughout project implementation.
- Provide up to 25 written (4 page) technology descriptions, which can serve the immediate need from the countries and later be uploaded at the Climate Techwiki.
- Assist URC in the organization and facilitation of two regional training workshops to be held in August and November 2010 for the first round of 4 countries. This includes to, in consultation with URC, identify the venue and make all the necessary logistic arrangements for the workshop and its participants, convene the workshop, provide inputs to the workshop programme and facilitate the workshop in cooperation with URC and provide some training inputs. The venue of the workshop was decided with consideration of reducing overall travel costs.
- Assist URC in the organization and facilitation of two regional information sharing workshops. This included to, in consultation with URC, identify the venue and make all the necessary logistic arrangements for the workshop and its participants, provide inputs to the workshop programme, facilitating the workshop and provide main training inputs.
- Prepare proceedings/reports with the outcomes of the six workshops mentioned above.
- Review and comment on 12 countries' technology needs assessment (TNA) and technology action plan (TAP) reports.
- Collate information on national policies within the countries. The policies would be related to the sectors / technologies which are selected by the countries. These policies would be inputted in a format to be provided by URC.
- Compile a synthesis report per region.

#### Lessons learnt

The collaboration with the RCs was key for the successful implementation of the project and their technical support to the countries was highly valued. Overall, their performance was good both when it comes to the technical support given to the countries and the support given to URC in the organization of each of the training workshops and experience sharing workshop.

Nevertheless, experience shows that the support from the RCs can be further improved, particularly when it comes to the area of adaptation. This particularly applies to the Asian and African regions where participating countries have expressed their request for increased support for the identification of adaptation technology needs and the design of the corresponding TAP. Therefore, to strengthen the support RCs can provide to participating countries of the new TNA phase, RCs AIT and ENDA have been asked to increase their capacity in the area of adaptation by collaborating with another RC or, by contracting additional experts in this area.

RCs themselves have expressed the need for increased interaction among themselves. For this reason, and to have all the RCs, including RCs or new experts, on the same level of understanding regarding the TNA-TAP process and methodology, a training workshop with all RCs and new experts prior to project implementation will be organized by URC.

With the measures envisaged above, URC believes the support participating countries will receive in this new phase will be further strengthened thus improving the quality of TNA and TAP reports.

#### ANNEX H-3: Lessons learnt, applying lessons learnt and impacts to date in TNA Phase I countries

The TNA Phase I project was completed by 31 April 2013, after three and a half years of implementation. Having helped 36 developing countries define what kind of clean technologies are best suited for their climate change mitigation and adaptation efforts, and what is required to get them in place. The project helped the countries track their needs for new equipment, techniques, knowledge, and skills for mitigating greenhouse gas emissions and reducing vulnerability to climate change. In addition, the project helped participating countries prepare their Technology Action Plans (TAPs), which recommend frameworks for the diffusion of prioritized technologies, and help develop appropriate project ideas and financing activities. They also offer practical solutions to remove existing policy, finance, and technological barriers.

Out of the 36 countries, 30 countries completed their TNAs and TAPs (including project ideas) while 33 countries completed only their TNAs. Of the three countries not completing their TAPs, two of them (Kazakhstan and Laos) have already expressed their interest in completing their TAPs in Phase II. This will leave only three countries not completing their TNAs, nor their TAPs, namely, Bolivia, Ethiopia and Guatemala. In all the cases, the fail in conducting the TNAs was due to political circumstances beyond UNEP's control. For instance, in the case of Bolivia, both the focal point from the signing ministry and the national TNA coordinator were replaced by new staff. This did not allow the country to set up the required project TNA team structure to initiate project implementation. In the case of Guatemala, a new administration that took power halfway after project start, demanded an evaluation of all international projects and stopped therefore the implementation of all international projects. As a result and almost one year after project start, the country itself asked to quit the TNA project. In the case of Ethiopia, the country never got started and similar to Guatemala, decided not to conduct the TNA. The conclusion that can be drawn is that there are political circumstances which are beyond our control and therefore there will be a risk that this may happen also in a new TNA Phase.

#### Lessons learnt

The implementation of TNA Phase I has shown that the quality of the outputs from the TNA/TAP process varies between countries. Overall, TNA Phase I permitted to identify 3 key factors for the quality and success of the TNA/TAP process:

- High level political will/support.
- Stakeholder engagement and commitment.
- Local capacities (notably of the local consultants) and knowledge (including availability of information and data).

Moreover, Phase I has shown that stakeholder engagement and commitment to the TNA process tends to be high where there is a strong signal from donors regarding the availability of financing.

The main lessons for Phase II are:

- The need to closely link TNA/TAP to national sustainable development plans: Closely linking TNA/TAP to national sustainable development plans increases political commitment, stakeholder engagement and uptake by donors.
- The need to engage better the in-country donor community and improve dissemination of results: Engaging incountry donor community and better dissemination of results will increase potential for uptake and investments of actions for climate technology transfer.
- The need to advocate for nomination of "good" national TNA coordinators (TNA champions) i.e. TNA coordinators who can dedicate sufficient time and act as champions notably for the integration of climate technology priorities and actions into development plans.

- The need to devote enough time, and if necessary, be intrusive in the identification and selection of local consultants: Local consultants must be carefully selected since they need to be strong technically but also at communicating and engaging stakeholders.
- Need to be flexible and adapt to the country specific needs/context: Each country has different needs/context/capacities this implies that approaches and support need to be tailored/adapted.
- Some tools need to be strengthened and additional tools are needed: Some tools/methodologies (e.g. for mapping market barriers) were perceived by some of the countries as not fully clear and need to be better tailored to country capacities (TNA/TAP is a complex exercise).

#### Applying lessons learnt for TNA Phase II

It is important to note that the establishment of the CTCN is strong opportunity for the TNA/TAP process. Requests to CTCN will help to move from TNA/TAP to implementation. It is expected that the operationalisation of the CTCN and related nomination of National Designated Entities (NDEs) will strengthen the political will and commitment for climate technology issues. The NDEs will strongly benefit from the TNA and TAP including from processes established for TNA (e.g. working groups and stakeholder consultation) which could be used by them to generate, approve and select the country requests.

For TNA Phase II, based on the above and lessons learnt from Phase I, UNEP/URC/RCs will:

- Advocate for strong NDEs involvement (TNA champions), ideally as National TNA Coordinator.
- Provide strong support/guidance for selection of consultants.
- Engage donor coordination groups (consultation, dissemination of results regular briefings...).
- Where possible engage/feed results into planning processes (e.g. revision of national sustainable development plans/strategies, development of national/sectoral investment plans...).
- Integration of peer learning, mentoring and promoting best practices from Phase I countries.
- Revision of guidebook/improvement of methodologies to better respond to local capacities (BA&EF, Adaptation methodology).
- Development of new tools (guidance for stakeholder identification and engagement) and strengthen training for both for RCs and country teams.

For the first four points listed above, it should be noted however that the TNA/TAP process is a country driven process and therefore, there is a limit to the extent that UNEP/URC/RCs will be able to influence these.

#### Impacts to date

It is important to note that TNAs and TAPs are not an end in themselves but the TNA/TAP process is an enabling activity. However, TNAs and TAPs are recognized as contributing to existing national policies, plans/strategies including NAMAs, low-carbon development strategies, and the Millennium Development Goals. TNA Phase I demonstrated that TNA/TAP can help countries to:

- Integrate climate technology issues into national plans and strategies including investment plans.
- Improve institutional processes, policies and regulations.
- Develop NAMAs, NAPA actions, technology programmes and projects.
- Develop more in-depth technology roadmaps or "technology specific" action plans.
- Generate requests for CTCN.
For example, in Argentina, the Secretariat of Energy is preparing a Nationally Appropriate Mitigation Action (NAMA) for biomass based on information gathered in the TAP. Meanwhile, the Secretariat of Water Resources is culling information from the TAP about observation systems and applying it to their monitoring systems. In Indonesia, the TAP identified a wealth of emissions reduction measures and technologies that will be used to create a regulatory framework for encouraging the growth of the country's domestic solar PV panel manufacturing industry. Another example is Lebanon where two adaptation TAPs are on the brink of implementation in the country. Under the aegis of the country's AgriCAL project, an initiative launched by the Lebanon Ministry of Agriculture, IFAD and the Adaptation fund, the TAP will be used to help farming communities adapt to climate change through sustainable water and land management. In addition, a TAP for the water sector will be adopted for pilot implementation by the National Action Programme to Mainstream Climate Change into Lebanon's Development Agenda, which will be executed by the Ministry of Environment through the Lebanon's Recovery Fund. Some TNA Phase I countries have started approaching the CTCN with preliminary ideas for requests emanating from their TNAs/TAPs (e.g. Indonesia and Kazakhstan).

Although not many concrete examples of this type can be documented yet, a significant number of countries have expressed their satisfaction with the TNA process in their final reports. According to them, it has helped them to strengthen the capacity of conducting technology needs assessments, but also, it has helped them to introduce the TNA approach in similar processes. Since TNA is an enabling activity, it's difficult to get evidence of the impacts in the short term. However, the TNA methodology has been introduced in these countries and it's likely more examples of the ones mentioned above will be observed in the long term.

# ANNEX H-4: Key findings from the third synthesis report on technology needs

These key findings are extracted from the Third synthesis report on technology needs identified by Parties not included in Annex I to the Convention prepared by the UNFCCC Secretariat in response to a request made by the Subsidiary Body for Scientific and Technological Advice (SBSTA) at its thirty-fifth session. It was published on 21 October 2013 and submitted to SBSTA at COP 19.

The report synthesizes the information contained in the technology needs assessment (TNA) reports prepared by 31 Parties that participated in the global TNA project (TNA Phase I) supported by the Global Environment Facility (GEF) under the Poznan strategic programme on technology transfer and implemented by the United Nations Environment Programme (UNEP) in collaboration with the UNEP Risoe Centre. The full report can be accessed at the following link: http://unfccc.int/resource/docs/2013/sbsta/eng/inf07.pdf

### Key findings arising:

### 1. Process related

- Of the 31 Parties that participated in the global TNA project, 29 prepared TNA reports on mitigation and all of them prepared TNA reports on adaptation.
- Most of the Parties reported that the coordination of the TNA process was carried out by their ministry of environment. All 31 Parties mentioned involving stakeholders in the TNA process, particularly through workshops and expert consultation. However, only a few of the Parties reported involving stakeholders from the finance community.
- Most of the Parties stated their national development priorities as a starting point for the TNA process.

### 2. Prioritized sectors

- For mitigation, almost all of the Parties prioritized the energy sector. The most prioritized subsectors of the energy sector were energy industries and transport.
- For adaptation, the agriculture and water sectors were the most prioritized.

### 3. Prioritized technologies for mitigation and adaptation

- For mitigation, the majority of the technologies prioritized for the energy industries subsector were related to electricity generation. Solar photovoltaic and biomass/biogas electricity generation technologies were the most prioritized technologies, followed by efficient lighting, waste to energy, wind turbines and hydropower.
- For adaptation, the majority of the technologies prioritized for the agriculture sector were related to crop management. Biotechnologies, including technologies related to crop improvement, new varieties and drought-resistant, salient-tolerant and short-maturing varieties, were the most prioritized technologies.

### 4. Identified barriers to the prioritized technologies

- For mitigation, the most commonly reported barriers to the development and transfer of the prioritized technologies were economic and financial and technical barriers. Within the first category (economic and financial), most of the Parties identified inappropriate financial incentives and disincentives as the main barrier. In the technical barrier category, many of the Parties identified system constraints and inadequate standards, codes and certification as the main barriers.
- For adaptation, almost all of the Parties identified the following types of barriers to the development and transfer of the prioritized technologies: economic and financial; policy, legal and regulatory; institutional and organizational capacity; and technical. Within the first two categories, Parties identified the lack of or

inadequate access to financial resources and an insufficient legal and regulatory framework as the most common barriers.

### 5. Identified enablers for the prioritized technologies

- For mitigation, the most commonly mentioned enabler was the measure to provide or expand financial incentives for the implementation and use of the prioritized technology.
- For adaptation, the most commonly mentioned enabler was the measure to increase the financial resources available for the technology, by introducing or increasing the allocation for the technology in the national budget or by identifying and creating financial schemes, funds, mechanisms or policies.

### 6. Technology action plans and project ideas

- Almost all of the Parties developed TAPs, which consist of a group of measures to address the identified barriers to a prioritized technology. The total accumulative estimated budget of Parties for the implementation of their TAPs was USD 5.2 billion for mitigation and USD 2.4 billion for adaptation. However, the size of Parties' budgets varied significantly.
- Almost all of the Parties developed project ideas as part of their TNA processes. In the context of their TNAs, Parties envisaged project ideas as concrete actions for the implementation of a prioritized technology. The total accumulative estimated budget of Parties for the implementation of their projects was USD 12.5 billion for mitigation and USD 12.2 billion for adaptation. However, as for the TAPs, the size of the individual budgets varied significantly between Parties.

### 7. Linkages between technology needs assessments and other processes

- Most of the Parties reported that they did not consider the TNA process to be a stand-alone process. Rather, TNAs were often considered to complement national policies and plans for mitigating greenhouse gas (GHG) emissions and adapting to climate change.
- Over half of the Parties elaborated on possible interlinkages between TNAs and other processes under and
  outside of the Convention. Many of those Parties noted that their TNAs drew on completed nationally
  appropriate mitigation actions (NAMAs) and national adaptation programmes of action (NAPAs), or identified
  the outputs of their TNAs as inputs to the work on their national communications, NAMAs or national
  adaptation plans (NAPs).
- A few of the Parties made clear references to the Technology Mechanism in relation to supporting the implementation of the results of TNAs.

### 8. Comparison of the second and third synthesis reports on technology needs

- In the TNA reports synthesized in this report, almost all of the Parties included TAPs recommending enabling frameworks to address identified barriers to prioritized technologies. This is a major evolution from the TNA reports synthesized in the second synthesis report prepared in 2009, in which Parties only elaborated on the identification of possible next steps to address identified barriers.
- In addition, in the TNA reports synthesized in this report, almost all of the Parties included detailed project ideas with concrete actions for the implementation of their prioritized technology needs. This contrasts with the TNA reports synthesized in the second synthesis report, in which only some of the Parties identified more generic project ideas.

# ANNEX H-5: Organizations/networks supporting TNA/TAP outreach for implementation

The project will help countries move from TAP development to the actual implementation of the project ideas emanating from the TAPs. To facilitate this process UNEP/URC will make links with several regional organisations and regularly inform through project's quarterly newsletters about the progress of the project thus increasing dissemination and visibility of project outputs. These organisations will be regularly informed about the progress of the project but also invited to participate in training workshops, experience sharing workshops and other project activities. For instance, the idea of organising a combined global dissemination workshop for TNA Phase I/Inception workshop for TNA Phase II is being discussed with UNFCCC to which relevant regional organisations and networks would be invited. In addition to this and at the local and regional level, RCs will be asked to regularly update participant countries on the existence of local and regional financiers which may constitute potential sources of funding for actual TAP implementation. Below is a preliminary list of organizations that will be contacted:

# Global level

- 1. UNFCCC Technology Mechanism (TEC and CTCN)
- 2. CTI-PFAN which already collaborated with UNEP under TNA Phase I.
- 3. GNESD a global network coordinated by URC

# In Africa

- 1. AFREPREN has worked with URC on several projects since 1990s, i.a. GNESD and AFREPREN/FWD. It is a NGO based in Nairobi, Kenya, with extensive expertise on energy in East and Southern Africa and some experience in West and North Africa
- 2. CSIR is a partner in CTCN, in addition URC has collaborated with CSIR staff in several projects.
- 3. African Centre for Technology Studies (ACTS) worked with URC as regional coordinator Eastb Africa in CEMA project. Regional outreach experience.
- 4. African Development Bank (AfDB) which recently signed a MoU with UNEP which includes collaboration on climate technology deployment (such as renewables).

# <u>In Asia</u>

- 1. TERI Worked with UNEP /URC on multiple projects and is also a member of GNESD.
- 2. Indian Institute of Management, Ahmedabad Worked with UNEP /URC on multiple projects, Balancing Climate and Development, Promoting Low Carbon Transport.
- 3. National Institute of Environmental Studies (NIES) Work with developing countries on low carbon transitions
- 4. Asian Development Bank's Climate Technology Finance Center which collaborates directly with UNEP under GEF funded ADB-UNEP Asia Pacific Climate technology network and finance center project (as well as a number of other clean technology initiatives)

# In Latin America

1. Climate Change Practice, World Bank Institute, World Bank has worked with URC in several projects and together with URC co-organized the Latin American Carbon Forum.

- 2. Climate Change and Sustainable Division, Inter-American Development Bank (IDB) has worked with URC in several project in Latin America and the Caribbean.
- 3. Corporación Andina de Fomento (CAF) has similar to the organizations above, collaborated with URC in several projects.

# ANNEX H-6: Example of the full TNA Team in Thailand

Below an example showing the TNA Team composition of Thailand, a country that completed the previous TNA project successfully.



# ECT WORKPLAN SHOWING KEY DELIVERABLES AND BENCHMARKS

Activities	Deliverables	Benchmarks
Inception missions to all 25 countries	Inception report	January-February 2014
Contracts (MoUs) with all countries signed	MoUs with countries for the implementation of TNAs	April 2014
Implementation of TNA by national TNA teams	First draft TNA submitted by countries First draft reviewed by URC and RCs Second draft submitted by countries Second draft reviewed by URC and RCs Final TNA approved reports submitted by countries to and uploaded	September 2014 October 2014 November 2014 December 2014 January 2015
Development of Barrier Analysis and Enabling Framework (BAEF) report by national TNA teams	First draft BAEF submitted by countries First draft reviewed by URC and RCs Second draft submitted by countries Second draft reviewed by URC and RCs Final BAEF approved reports submitted by countries and uploaded	August 2015 September 2015 November 2015 December 2015 March 2016
Design of TAP (including project ideas) by national TNA teams	First draft TAP reports including project ideas (PI) submitted by countries First draft TAP reports including PI reviewed by RCs and URC Second draft TAP reports including PI report submitted by countries Second draft TAP reports including PI reviewed by RCs and URC Final TAP including PI reports approved and uploaded Regional Synthesis report submitted by RCs	May 2016 June 2016 July 2016 August 2016 September 2016
Improvement of Barrier Analysis and Enabling Framework guidebook Strengthening of Adaptation methodology Financing guidebook Training workshop with all RCs First regional capacity building workshop ( 3 regions) Second regional capacity building workshops (3 regions)	Improved Barrier Analysis and Enabling Framework guidebook Strengthened Adaptation methodology Financing guidebook Workshop report Workshop report Workshop report	March 2014 March 2014 March 2014 April 2014 May 2014 February 2015
Side event at COP 20 Global experience sharing workshop Side event COP 21		December 2014 October 2015 December 2015
Periodic project reporting Project closure activities (after all country activities have been completed)	Project progress reports Final project reporting and financial statements	Annually June 2017

# Tracking Tool for Climate Change Mitigation Projects (For CEO Endorsement)

Special Notes: reporting on lifetime emissions avoided

Lifetime direct GHG emissions avoided: Lifetime direct GHG emissions avoided are the emissions reductio attributable to the investments made during the project's supervised implementation period, totaled over the lifetime of the investments.

Lifetime direct post-project emissions avoided: Lifetime direct post-project emissions avoided are the emission reductions attributable to the investments made outside the project's supervised implementation period, but s by financial facilities put in place by the GEF project, totaled over the respective lifetime of the investments. The financial facilities will still be operational after the project ends, such as partial credit guarantee facilities, risk of facilities, or revolving funds.

Lifetime indirect GHG emissions avoided (top-down and bottom-up): indirect emissions reductions are those attributable to the long-term outcomes of the GEF activities that remove barriers, such as capacity building, in catalytic action for replication.

Please refer to the Manual for Calculating GHG Benefits of GEF Projects.

Manual for Energy Efficiency and Renewable Energy Projects

Manual for Transportation Projects

For LULUCF projects, the definitions of "lifetime direct and indirect" apply. Lifetime length is defined to be 2 unless a different number of years is deemed appropriate. For emission or removal factors (tonnes of CO2eq hectare per year), use IPCC defaults or country specific factors.

General Data	Target	Notes
	at CEO Endorsement	
	Technology Needs	
Project Title	Assessment – Phase II	
GEF ID	4948	
Agency Project ID	863	
Country	GLOBAL	
Region		
GEF Agency	UNEP	
Date of Council/CEO Approval		Month DD, YYYY (e.g., M 2010)
GEF Grant (US\$)	6,105,835	
Date of submission of the tracking tool		Month DD, YYYY (e.g., M 2010)
Is the project consistent with the priorities identified in National Communications, Technology Needs Assessment, or other	1	
Enabling Activities under the UNFCCC?		Yes = 1, No = 0
Is the project linked to carbon finance?	0	Yes = 1, No = 0
Cofinancing expected (US\$)	2,036,921	

**Objective 1: Transfer of Innovative Technologies** 

Please specify the type of enabling environment created for technology transfer

through this project	
National innovation and technology transfer	
policy	Yes = 1, No = 0
Innovation and technology centre and network	Yes = 1, No = 0
Applied R&D support	Yes = 1, No = 0
South-South technology cooperation	Yes = 1, No = 0
North-South technology cooperation	Yes = 1, No = 0
Intellectual property rights (IPR)	Yes = 1, No = 0
Information dissemination	Yes = 1, No = 0
Institutional and technical capacity building	Yes = 1, No = 0
Other (please specify)	
Number of innovative technologies	
demonstrated or deployed	
Please specify three key technologies for demonstration or deployment	
Area of technology 1	
Type of technology 1	specify type of technology
Area of technology 2	
Type of technology 2	specify type of technology
Area of technology 3	
Type of technology 3	specify type of technology
Status of technology demonstration/deployment	<ul> <li>0: no suitable technologies are in place</li> <li>1: technologies have been identified and assessed</li> <li>2: technologies have been demonstrated on a pilot basis</li> <li>3: technologies have been deployed</li> <li>4: technologies have been diffused widely with investments</li> <li>5: technologies have reached market potential</li> </ul>
	tonnes CO2eg (see Special Notes
Lifetime direct GHG emissions avoided	above)
Lifetime direct post-project GHG emissions	tonnes CO2eq (see Special Notes
avoided	above)
Lifetime indirect GHG emissions avoided	tonnes CO2eq (see Special Notes
(bottom-up)	above)
Lifetime indirect GHG emissions avoided (top- down)	tonnes CO2eq (see Special Notes above)

# Objective 2: Energy Efficiency

# Please specify if the project targets any of the following areas

Lighting	Yes = 1, No = 0
Appliances (white goods)	Yes = 1, No = 0
Equipment	Yes = 1, No = 0
Cook stoves	Yes = 1, No = 0
Existing building	Yes = 1, No = 0
New building	Yes = 1, No = 0
Industrial processes	Yes = 1, No = 0

Synergy with phase-out of ozone depleting	$N_{22} = 1$ $N_{22} = 0$
	 Yes = 1, No = 0
Other (please specify)	
Policy and regulatory framework	0: not an objective/component 1: no policy/regulation/strategy in place 2: policy/regulation/strategy discussed and proposed 3: policy/regulation/strategy proposed but not adopted 4: policy/regulation/strategy adopted but not enforced 5: policy/regulation/strategy enforced
Establishment of financial facilities (e.g., credit lines, risk guarantees, revolving funds)	0: not an objective/component 1: no facility in place 2: facilities discussed and proposed 3: facilities proposed but not operationalized/funded 4: facilities operationalized/funded but have no demand 5: facilities operationalized/funded and have sufficient demand
Capacity building	0: not an objective/component 1: no capacity built 2: information disseminated/awareness raised 3: training delivered 4: institutional/human capacity strengthened 5: institutional/human capacity utilized and sustained
Lifetime energy saved	MJ (Million Joule, IEA unit converter: http://www.iea.org/stats/unit.asp) Fuel savings should be converted to energy savings by using the net calorific value of the specific fuel. End-use electricity savings should be converted to energy savings by using the conversion factor for the specific supply and distribution system. These energy savings are then totaled over the respective lifetime of the investments.
Lifetime direct GHG emissions avoided	tonnes CO2eq (see Special Notes above)
Lifetime direct post-project GHG emissions	tonnes CO2eq (see Special Notes
Lifetime indirect GHG emissions avoided	tonnes CO2eq (see Special Notes
Lifetime indirect GHG emissions avoided (top-	tonnes CO2eq (see Special Notes
uuwii)	abovej

**Objective 3: Renewable Energy** 

# Please specify if the project includes any of the following areas

following areas	
Heat/thermal energy production	Yes = 1, No = 0
On-grid electricity production	Yes = 1, No = 0
Off-grid electricity production	Yes = 1, No = 0
Policy and regulatory framework	0: not an objective/component 1: no policy/regulation/strategy in place 2: policy/regulation/strategy discussed and proposed 3: policy/regulation/strategy proposed but not adopted 4: policy/regulation/strategy adopted but not enforced 5: policy/regulation/strategy enforced
Establishment of financial facilities (e.g., credit lines, risk guarantees, revolving funds)	0: not an objective/component 1: no facility in place 2: facilities discussed and proposed 3: facilities proposed but not operationalized/funded 4: facilities operationalized/funded but have no demand 5: facilities operationalized/funded and have sufficient demand
Capacity building	0: not an objective/component 1: no capacity built 2: information disseminated/awareness raised 3: training delivered 4: institutional/human capacity strengthened 5: institutional/human capacity utilized and sustained
Installed capacity per technology directly resulting from the project	
Wind	MW
Biomass	MW el (for electricity production)
	MW th (for thermal energy

Biomass	MW el (for electricity production)
	MW th (for thermal energy
Biomass	production)
Geothermal	MW el (for electricity production)
	MW th (for thermal energy
Geothermal	production)
Hydro	MW
Photovoltaic (solar lighting included)	MW
Solar thermal heat (heating, water, cooling,	MW th (for thermal energy
process)	production, $1m^2 = 0.7kW$ )
Solar thermal power	MW el (for electricity production)
Marine power (wave, tidal, marine current,	
osmotic, ocean thermal)	MW

# Lifetime energy production per technology directly resulting from the project (IEA unit converter: http://www.iea.org/stats/unit.asp)

Wind	MWh
Biomass	MWh el (for electricity production)

Biomass	MWh th (for thermal energy production)
Geothermal	MWh el (for electricity production)
Geothermal	MWh th (for thermal energy production)
Hydro	MWh
Photovoltaic (solar lighting included)	MWh
Solar thermal heat (heating, water, cooling, process)	MWh th (for thermal energy production)
Solar thermal power	MWh el (for electricity production)
Marine energy (wave, tidal, marine current, osmotic, ocean thermal)	MWh
Lifetime direct GHG emissions avoided	tonnes CO2eq (see Special Notes above)
Lifetime direct post-project GHG emissions avoided	tonnes CO2eq (see Special Notes above)
Lifetime indirect GHG emissions avoided (bottom-up)	tonnes CO2eq (see Special Notes above)
Lifetime indirect GHG emissions avoided (top- down)	tonnes CO2eq (see Special Notes above)

Objective 4: Transport and Urban Systems	
Please specify if the project targets any of the following areas	
Bus rapid transit	Yes = 1, No = 0
Other mass transit (e.g., light rail, heavy rail, water or other mass transit; excluding regular bus or minibus)	Yes = 1, No = 0
Logistics management	Yes = 1, No = 0
Transport efficiency (e.g., vehicle, fuel, network efficiency)	Yes = 1, No = 0
Non-motorized transport (NMT)	Yes = 1, No = 0
Travel demand management	Yes = 1, No = 0
Comprehensive transport initiatives (Involving the coordination of multiple strategies from different transportation sub-sectors)	Yes = 1, No = 0
Sustainable urban initiatives	Yes = 1, No = 0
Policy and regulatory framework	0: not an objective/component 1: no policy/regulation/strategy in place 2: policy/regulation/strategy discussed and proposed 3: policy/regulation/strategy proposed but not adopted 4: policy/regulation/strategy adopted but not enforced 5: policy/regulation/strategy enforced

Establishment of financial facilities (e.g., credit lines, risk guarantees, revolving funds)	0: not an objective/component 1: no facility in place 2: facilities discussed and proposed 3: facilities proposed but not operationalized/funded 4: facilities operationalized/funded but have no demand 5: facilities operationalized/funded and have sufficient demand
Capacity building	0: not an objective/component 1: no capacity built 2: information disseminated/awareness raised 3: training delivered 4: institutional/human capacity strengthened 5: institutional/human capacity utilized and sustained
Length of public rapid transit (PRT)	km
Length of non-motorized transport (NMT)	km
Number of lower GHG emission vehicles	
Number of people benefiting from the improved transport and urban systems	
Lifetime direct GHG emissions avoided	tonnes CO2eq (see Special Notes above)
Lifetime direct post-project GHG emissions	tonnes CO2eg (see Special Notes
avoided	above)
Lifetime indirect GHG emissions avoided (bottom-up)	tonnes CO2eq (see Special Notes above)
Lifetime indirect GHG emissions avoided (top- down)	tonnes CO2eq (see Special Notes above)

Objective 5: LULUCF	
Area of activity directly resulting from the project	
Conservation and enhancement of carbon in forests, including agroforestry	ha
Conservation and enhancement of carbon in nonforest lands, including peat land	ha
Avoided deforestation and forest degradation	ha
Afforestation/reforestation	ha
Good management practices developed and adopted	0: not an objective/component 1: no action 2: developing prescriptions for sustainable management 3: development of national standards for certification 4: some of area in project certified 5: over 80% of area in project certified

Carbon stock monitoring system established	0: not an objective/component 1: no action 2: mapping of forests and other land areas 3: compilation and analysis of carbon stock information 4: implementation of science based inventory/monitoring system 5: monitoring information database publicly available
Lifetime direct GHG emission avoided	tonnes CO2eq (see Special Notes above)
Lifetime indirect GHG emission avoided	tonnes CO2eq (see Special Notes above)
Lifetime direct carbon sequestration	tonnes CO2eq (see Special Notes above)
Lifetime indirect carbon sequestration	tonnes CO2eq (see Special Notes above)

# **Objective 6: Enabling Activities**

Please specify the number of Enabling Activities for the project (for a multiple country project, please put the number of countries/assessments)		
National Communication		
Technology Needs Assessment	25	
Nationally Appropriate Mitigation Actions		
Other		
Does the project include Measurement, Reporting and Verification (MRV) activities?	0	Yes = 1, No = 0



Lao People's Democratic Republic Peace Independence Democracy Unity Prosperity

10001

Ministry of Natural Resources and Environment Department of Environmental Quality Promotion

Vientiane, Date: 29 November 2013

To: Maryam Niamir Fuller Director GEF Coordination Office UN Environment Programme Nairobi, Kenya

Subject: Endorsement for GEF Project ID 4948: Technology Needs Assessments

In my capacity as GEF Operational Focal Point for Lao PDR, I confirm that the above Programme is (a) in accordance with my government's national priorities and our commitment as a Party to the United Nations Framework Convention on Climate Change (UNFCCC) and (b) was discussed with relevant stakeholders including the UNFCCC focal point.

Accordingly, 1 am pleased to endorse the objectives and strategies of the above Programme and express our commitment to participate in this Program.

Sincerely

Mr. Khampadith Khammounheang Director General Department of Environmental Quality Promotion

Copy to: Mr. Syamphone SENGCHANDALA UNFCCC Focal Point

REPUBLIC OF UZBERISTAN O'ZBEKISTON RESPUBLIKASI CABINET OF MINISTERS VAZIRLAR MAHKAMASI THE CENTER OF HYDROMETEOROLOGICAL HUZURIDAGI GIDROMETEOROLOGIYA XIZMATI MARKAZI SERVICE (UZHYDROMET) (O'ZGIDROMET) 72 K.Makhsumov st 100052, Toshkent shahar. Tashkent 100052, Republic of Uzbekistan Q Maxsumov ko'chasi, 72 +(99871) 233 61 80 +(99871) 150 86 27 +(99871) 236 07 58 +(99871) 233 61 80 Telefonlar: +(99871) 150 86 27 +(99871) 236 07 58 Telegraf manzili: Toshkent THMET Telegruph. Tashkent GIMET +(99871) 233 20 25 Fax: E-mail +(99871) 233 20 25 Fin uzhvmet@meteo.uz E-mail: uzhvmet@meteo.uz

201 & yil 31. 07 NO 07-15-546

31 July 2012

To: Maryam Niamir-Fuller Director, GEF Coordination Office, United Nations Environment Programme P. O. Box 30552-00100 Nairobi, Kenya Email: maryam.niamir-fuller@unep.org

sonli xatga

#### Subject: Endorsement for Technologies Needs Assessment Project under the UNFCCC

In my capacity as GEF Operational Focal Point for Uzbekistan I confirm that the abovementioned Technology Needs Assessment Project is (a) in accordance with my government's national priorities and our commitment as a Party to the United Nations Framework Convention on Climate Change (UNFCCC) and (b) was discussed with relevant stakeholders including the UNFCCC focal point.

Accordingly, I am pleased to endorse the preparation of the above project proposal with the support of UNEP and express our commitment to participate in this project.

Sincerely,

Mund

Prof. Mr. Sergey MYAGKOV Deputy Director of NIGMI Uzhydromet Hydrometeorological Research Institute of Uzhydromet/ NIGMI Uzhydromet GEF National Operational Focal Point

140g no e-mail 31.07.2012

Copy to: UNFCCC Focal Point



July 26th, 2012

To: Maryam Niamir-Fuller Director, GEF Coordination Office United Nations Environment Programme Nairobi, Kenya maryam.niamir-fuller@unep.org

### Subject: Endorsement for UNEP Umbrella Programme to Support Technology Needs Assessment Project under the UNFCCC

In my capacity as GEF Operational Focal Point for Uruguay, I confirm that the above-mentioned Technology Needs Assessment Project is (a) in accordance with my government's national priorities and our commitment as a Party to the United Nations Framework Convention on Climate Change (UNFCCC) and (b) was discussed with relevant stakeholders including the UNFCCC focal point.

Accordingly, I am pleased to endorse the preparation of the above project proposal with the support of UNEP and express our commitment to participate in this project.

Sincerely,

Valeisfuer (.

Valeria Perez Güida GEF Operational Focal Point for Uruguay

Copy to: Mr. Francisco Beltrame, Minister of Housing, Land Planning and Environment Mr. Jorge Rucks, National Director of Environment Ms. Pauline Davies, Head, Environment Department Ministry of Foreign Affairs; GEF Political Focal Point Mr. Luis Santos, UNFCCC Focal Point, Director of the Climate Change Unit, National Directorate of Environment

### THE UNITED REPUBLIC OF TANZANIA

Telegrams: "MAKAMU" Telephone: 213983/2118416 Fax: 2125297/2113856/2113082 E-mail: <u>ps@vpo.tz</u>

Ref: BD. 38/202/01/III

VICE-PRESIDENT'S OFFICE

P. O. BOX 5380

DAR ES SALAAM

TANZANIA

24 August, 2012

M/s Maryam Niamir-Fuller Director, GEF Coordination Office, United Nations Environment Programme P. O. Box 30552-00100 <u>Nairobi, Kenya</u> Email: <u>maryam.niamir-fuller@unep.org</u>

### RE: Endorsement for Technology Needs Assessment project under the project

In my capacity as GEF Operational Focal Point for the United Republic of Tanzania, I confirm that the above-mentioned Technology Needs Assessment Project is (a) in accordance with my government's national priorities and our commitment as a Party to the United Nations Framework Convention on Climate Change (UNFCCC) and (b) was discussed with the National UNFCCC focal point.

Accordingly, I am pleased to endorse the preparation of the above project proposal with the support of UNEP and express our commitment to participate in this project.

Sincerely,

# Dr. Julius K. Ningu For: PERMANENT SECRETARY

Copy to: Mr. Richard S. Muyungi, Assistant Director of Environment and National UNFCCC Focal Point

# TÜRKMENISTANYŇ TEBIGATY GORAMAK MINISTRLIGI



744000, Aşgabat ş., Arçabil şaýoly, 92
Tel.: 44-80-02, Faks: 44-80-09

« O2 » 08 2012 ý.

# MINISTRY OF NATURE PROTECTION OF TURKMENISTAN

744000, 92, Archabil str. Ashgabat
 Phone.: 44-80-02, Fax: 44-80-09

To: Maryam Niamir-Fuller Director, GEF Coordination Office, United Nations Environment Programme P. O. Box 30552-00100 Nairobi, Kenya Email: maryam.niamir-fuller@unep.org

# Subject: Endorsement for Technology Needs Assessment Project under the UNFCCC

In my capacity as GEF Operational Focal Point for Turkmenistan, I confirm that the above-mentioned Technology Needs Assessment Project is (a) in accordance with my government's national priorities and our commitment as a Party to the United Nations Framework Convention on Climate Change (UNFCCC) and (b) was discussed with relevant stakeholders including the UNFCCC focal point.

Accordingly, I am pleased to endorse the preparation of the above project proposal with the support of UNEP and express our commitment to participate in this project.

Sincerely,

Jeaper 7

Jumamyrat Saparmyradov GEF Operational Focal Point Deputy Minister Ministry of Nature Protection of Turkmenistan REPUBLIQUE TUNISIENNE —o— MINISTERE DE L'ENVIRONNEMENT —o—



Tunis, le

0 4 AOUT 2012

To: Maryam Niamir-Fuller Director, GEF Coordination Office United Nations Environment Programme P.O. Box 30552-00100 Nairobi, Kenya Email : maryam.niamir-fuller@unep.org

Subject: Endorsement for Technology Needs Assessment project under the UNFCCC.

In my capacity as GEF Operational Focal Point for Tunisia, I confirm that the above mentioned Technology Needs Assessment project is (a) in accordance with the national priorities and our commitments as a party to the United Nations Framework Convention on Climate Change and (b) was discussed with relevant stakeholders including the UNFCCC focal point.

Accordingly, I am pleased to endorse the preparation of the above project proposal with the support of UNEP and express our commitment to participate in this project.

Sincerely,

**GEF** Operational Focal Point

Sabria Bnouni Ben Ammar

REPUBLIQUE TOGOLAISE Travail – Liberté – Patrie

CABINET POINT FOCAL OPERATIONNEL FEM

MINISTÈRE DE L'ENVIRONNEMENT ET DES RESSOURCES FORESTIERES



To: Maryam Niamir-Fuller Director, GEF Coordination Office, United Nations Environment Programme P. O. Box 30552-00100 Nairobi, Kenya Email: maryam.niamir-fuller@unep.org

# Subject: Endorsement for Technology Needs Assessment Project under the UNFCCC

In my capacity as GEF Operational Focal Point for TOGO, I confirm that the abovementioned Technology Needs Assessment Project is (a) in accordance with my government's national priorities and our commitment as a Party to the United Nations Framework Convention on Climate Change (UNFCCC) and (b) was discussed with relevant stakeholders including the UNFCCC focal point.

Accordingly, 1 am pleased to endorse the preparation of the above project proposal with the support of UNEP and express our commitment to participate in this project.

Sincerely.

Yao Djiwonu FOLLY Directeur de l'Inspection Forestière et Environnementale Point Focal Opérationnel du FEM

Copy to: UNFCCC Focal Point



### MINISTRY OF TOURISM AND ENVIRONMENTAL AFFAIRS

Tel: ++268 404 6420/3 404 1714/8 Fax: ++268 404 5415 404 1719/404 6438 E-mail: mintour@realnet.co.sz

P.O. BOX 2652 MBABANE H100 SWAZILAND

31st July 2012

TO: Maryam Niamir-Fuller Director, GEF Coordination Office, United Nations Environment Programme P. O. Box 30552-00100 Nairobi, Kenya Email: maryam.niamir-fuller@unep.org

# SUBJECT: ENDORSEMENT FOR TECHNOLOGY NEEDS ASSESSMENT PROJECT UNDER THE UNFCCC.

In my capacity as GEF Operational Focal Point for Swaziland, I confirm that the above-mentioned Technology Needs Assessment Project is (a) in accordance with my government's national priorities and our commitment as a Party to the United Nations Framework Convention on Climate Change (UNFCCC) and (b) was discussed with relevant stakeholders including the UNFCCC focal point.

Accordingly, I am pleased to endorse the preparation of the above project proposal with the support of UNEP and express our commitment to participate in the project.

Sincerely

MESON D VII GEF OPERATIONAL FOCAL POINT AND DIRECTOR, SWAZILAND ENVIRONMENT AUTHORITY

Copy to: UNFCCC Focal Point



#### Republic of Seychelles Ministry of Environment and Energy

31<sup>st</sup> July 2012

Special Advisor's Office

Ms. Maryam Niamir-Fuller Director, GEF Coordination Office United Nations Environment Programme P. O. Box 30552-00100 Nairobi, Kenya Email: maryam.niamir-fuller@unep.org

Dear Ms. Niamir-Fuller,

### SUBJECT: Endorsement for Technology Needs Assessment Project under the UNFCCC

In my capacity as GEF Operational Focal Point for Seychelles, I confirm that the above-mentioned Technology Needs Assessment Project is (a) in accordance with my government's national priorities and our commitment as a Party to the United Nations Framework Convention on Climate Change (UNFCCC) and (b) was discussed with relevant stakeholders including the UNFCCC focal point.

Accordingly, I am pleased to endorse the preparation of the above project proposal with the support of UNEP and express our commitment to participate in this project.

Yours sincerely

Didier Dogley

GEF Operational Focal Point for Seychelles Special Advisor to the Minister (Environment & Energy)

Copy: UNFCCC Focal Point

Botanical Gardens, Mont Fleuri, P.O Box 445, Victoria, Mahé, Seychelles Tel: (248) 4670568 – Fax (248) 610648 – E mail: <u>d.dogley@env.gov.sc</u>



Republic of the Philippines Department of Environment and Natural Resources Visayas Avenue, Diliman, Quezon City, 1100 Tel. Nos. (632) 929-66-26 to 29 • (632) 929-62-52 929-66-20 • 929-66-33 to 35 • 929-70-41 to 43

30 August 2012

### DR. MARYAM NIAMIR-FULLER

Director, Division of Global Environment Facility United Nations Environment Programme (UNEP) Nairobi 00100, Kenya

### Subject: Endorsement for Technology Needs Assessment Project under the UNFCCC

### Dear Dr. Fuller:

In my capacity as GEF Operational Focal Point for the Philippines, I confirm that the above-mentioned Project is (a) in accordance with the government's national priorities and our commitment as a Party to the United Nations Framework Convention on Climate Change and (b) was discussed with relevant stakeholders including the UNFCCC focal point.

Accordingly, I am pleased to endorse the preparation of the above project proposal with support of UNEP and express our commitment to participate in this project.

Thank you.

Very truly yours,

ATTY. ANALIZA REBUELTA-TEH //- Undersecretary Chief of Staff and GEF Operational Focal Point

Copy furnish: Hon. Mary Ann Lucille Sering UNFCCC Focal Point, Climate Change Commission, Malacañang Compound, San Miguel Manila autoridad nacional del

> Panamá, 29 de agosto de 2012 AG-1559-2012

Ms. MARYAM NIAMIR-FULLER Director, GEF Coordination Office United Nations Environment Programme Nairiobi, Kenya En su despacho

> Asunto: " Carta de Endoso para el Proyecto Evaluación de las Necesidades Tecnológicas en el marco UNFCCC.

En mi calidad de Punto Focal Operacional del GEF para Panamá. Confirmo que el proyecto en mención "Evaluación de las Necesidades Tecnológicas" es: (a) de conformidad con las prioridades nacionales de mi gobierno y nuestro compromiso como una de las Partes de la Convención Marco de Naciones Unidas sobre el Cambio Climático (UNFCCC) y (b) se discutió con las partes interesadas pertinentes, incluido el punto focal de la UNFCCC.

Por consiguiente, me complace apoyar la preparación de la propuesta del proyecto anterior con el apoyo del PNUMA y expresamos nuestro compromiso de participar en este proyecto

Con muestra de mi más alta estima y consideración.

autoridad nacional del . ambiente SILVANO VERGARA ADMINISTRACIÓN GENERAL Administrador General, encargado Republica de Panama

SV/ALDG/CM NA c.c.: Punto Focal Convención Cambio Climático

Central Telefónica 500-0855 Pagina web: www.anam.gob.pa



### REPÚBLICA DE MOÇAMBIQUE MINISTÉRIO PARA A COORDENAÇÃO DA ACÇÃO AMBIENTAL Direcção de Cooperação

#### Our Ref 119/DC/MICOA/2012

06<sup>th</sup> August 2012

To: Maryam Niamir-Fuller Director, GEF Coordination Office, United Nations Environment Programme P. O. Box 30552-00100 Nairobi, Kenya Email: maryam.niamir-fuller@unep.org

#### Subject: Endorsement for Technology Needs Assessment Project under the UNFCCC

In my capacity as GEF Operational Focal Point for Mozambique I confirm that the abovementioned Technology Needs Assessment Project is (a) in accordance with my government's national priorities and our commitment as a Party to the United Nations Framework Convention on Climate Change (UNFCCC) and (b) was discussed with relevant stakeholders including the UNFCCC focal point.

Accordingly, I am pleased to endorse the preparation of the above project proposal with the support of UNEP and express our commitment to participate in this project.



Murilla Telma Autonio Manjate Director of Cooperation and GEF OFP and UNFCCC Focal Point

Av. Acordos de Lusaka, nº2115 - C.P.2020 - Maputo - Tel: 21466495 - Fax: 21465849

Page 1

République Islamique de Mauritanie Honneur - Fraternité - Justice

Ministère Délégué auprès du Premier Ministre Chargé de l'Environnement et du Développement Durable

Direction de la Programmation de la Coordination et de l'Information Environnementale

Nº ... A A. A.O. 0. 5. 6. ..... /DPCIE

N Réf:

V Réf:



الجمهورية الإسلامية الموريتانية شرف - الحاه - علل وزارة المنتئبة لدى الوزير الأول المكلفة بالبيئة وبالتنمية المستديمة إدارة البرمجة والتنسيق والمعلومات البينية

رقم.....اب ت م

الراكشوط Nouakchott le..4... الاالمان المالي Nouakchott le..4

المدير

La Directour

To: Maryam Niamir-Fuller Director, GEF Coordination Office, United Nations Environment Programme P. O. Box 30552-00100 Nairobi, Kenya Email: <u>maryam.niamir-fuller@unep.org</u>

Subject: Endorsement for Technology Needs Assessment Project under the UNFCCC

In my capacity as GEF Operational Focal Point for Mauritania, I confirm that the abovementioned Technology Needs Assessment Project is (a) in accordance with my government's national priorities and our commitment as a Party to the United Nations Framework Convention on Climate Change (UNFCCC) and (b) was discussed with relevant stakeholders including the UNFCCC focal point.

Accordingly, I am pleased to endorse the preparation of the above project proposal with the support of UNEP and express our commitment to participate in this project.

Copy to:

NFP, UNCC'

GEF Operational Focal Point MOHAMME YAHYA LAFDAL Diene

من.ب 170 – ملتف :الألكس : 14 4: 222 524 - شتار ع 125-14 – للعسر – الوائشُوط ـ موريتاتيا BP : 170- Tél./ Fax : +222 524 31 43 - Rue 21-185- Ksar- Nouakchott – Mauritanie



MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT, MALAYSIA, ENVIRONMENTAL MANAGEMENT AND CLIMATE CHANGE DIVISION LEVEL 6, WISMA SUMBER ASLI NO. 25, PERSIARAN PERDANA, PRECINT 4 FEDERAL GOVERNMENT ADMINISTRATIVE CENTRE 62574 PUTRAJAYA



Telephone : 603-8886 1111 Telefax : 683-8888 4473

Our Ref : NRE(S) 602-5/1 Jld. 19 Date : August 2012

MARYAM NIAMIR-FULLER Director, GEF Coordination Office United Nations Environment Programme P.O.Box 30552-00100 NAIROBI, KENYA (E-mail: maryam.niamir-fuller@unep.org)

Dear Madam,

### ENDORSEMENT FOR UNEP UMBRELLA PROGRAMME TO SUPPORT TECHNOLOGY NEEDS ASSESSMENT PROJECT UNDER UNFCCC

In my capacity as GEF Operational Focal Point for Malaysia, I confirm that the above-mentioned Technology Needs Assessment Project is (a) in accordance with my government's national priorities and our commitment as a Party to the United Nations Framework Convention on Climate Change (UNFCCC); and (b) was discussed with relevant stakeholders, including the UNFCCC focal points.

Accordingly, I am pleased to endorse the preparation of the above project proposal with the support of UNEP and express our commitment to participate in this project.

Thank you.

Sincerely,

Dr. Lian Kok Fei Under Secretary of Environmental Management & Climate Change Division On behalf of the Secretary General Ministry of Natural Resources and Environment Cum GEF/UNFCCC Operational Focal Point, Malaysia

"Warisan Sumber Aslı dan Alam Sekilar unluk Kesejahteraan Hidup"





SECRETARIAT GENERAL

DIRECTION GENERALE DE L'ENVIRONNEMENT



REPORT MAN MADATABIKARA

Antananarivo, le

Le Directeur Général de l'Environnement, Point Focal Opérationnel FEM pour Madagasear

To

Maryam Niamir-Fuller Director, GEF Coordination Office, United Nations Environment Programme P. O. Box 30552-00100 Nairobi, Kenya Email: maryam.niamir-fuller@unep.org

### Subject: Endorsement for Technology Needs Assessment Project under the UNFCCC

In my capacity as GEF Operational Focal Point for Madagascar, I confirm that the above-mentioned Technology Needs Assessment Project is (a) in accordance with my government's national priorities and our commitment as a Party to the United Nations Framework Convention on Climate Change (UNFCCC) and (b) was discussed with relevant stakeholders including the UNFCCC focal point.

Accordingly, I am pleased to endorse the preparation of the above project proposal with the support of UNEP and express our commitment to participate in this project.



Copy to: UNFCCC Focal Point



MINISTRY OF PLANNING AND INTERNATIONAL COOPERATION

WHO:

UNEP DIVISION OF GEF COORDINATION

RECEIVED

2 SEP 2012

Tram

Ref. No. 12/3/3/6089 Date 06/09/2012

> Ms. Maryam Niamir-Fuller Director, GEF Coordination Office, United Nations Environment Programme P. O. Box 30552-00100 Nairobi, Kenya Email: <u>maryam.niamir-fuller@unep.org</u>

Subject: Endorsement for Technology Needs Assessments Project under the UNFCCC

Dear Ms. Fuller,

As the GEF Focal Point for the Government of Jordan, I confirm that the abovementioned Technology Needs Assessment Project is (a) in accordance with my government's national priorities and our commitment as a Party to the United Nations Framework Convention on Climate Change (UNFCCC) and (b) was discussed with relevant stakeholders including the UNFCCC focal point.

Accordingly, I am pleased to endorse the preparation of the above project proposal with the support of UNEP and express our commitment to participate in this project.

Sincerely

Saleh Al-Kharabsheh Secretary General GEF OFP Ministry of Planning and International Cooperation

Saleh Al-Kharabsheh Secretary General

THE HASHEMITE KINGDOM OF JORDAN - AMMAN TEL +982 6 4644466 FAX +982 6 4648341 RODOX 555 AMMAN 11118 JORDAN E-MAIL: MON@MOP.COV.JO





July 31,2012

To: Maryam Niamir-Fuller Director, GEF Coordination Office, United Nations Environment Programme P. O. Box 30552-00100 Nairobi, Kenya Email: <u>maryam.niamir-fuller@unep.org</u>

### Subject: Endorsement for Technology Needs Assessment Project under the UNFCCC

In my capacity as GEF Operational Focal Point for Honduras, I confirm that the abovementioned Technology Needs Assessment Project is (a) in accordance with my government's national priorities and our commitment as a Party to the United Nations Framework Convention on Climate Change (UNFCCC) and (b) was discussed with relevant stakeholders including the UNFCCC focal point.

Accordingly, I am pleased to endorse the preparation of the above project proposal with the support of UNEP and express our commitment to participate in this project.

Sincerely, Irina Helena Pineda Aguilar Director of External Cooperation and Resource Mobilization

Copy to: Manuel Lopez Luna/ National Director of Climate Change / UNFCCC Focal Point

Edificio Principal: Despacho de recursos Naturales y Ambiente 100 mts. al Sur del Estadio Nacional Tels.: 2232-2011, 2239-4298, Fax: 2232-6250, Apto. Postal 1389,4710. Tegucigalpa, M.D.C., Honduras, C.A.





Environmental Protection Agency

### Maryam Niamir-Fuller,

Director, GEF Coordination Office, United Nations Environment Programme, P. O. Box 30552-00100, Nairobi, Kenya.

Dear Ms. Niamir-Fuller,

# Endorsement for Technology Needs Assessment Project under the UNFCCC

In my capacity as GEF Operational Focal Point for Guyana, I confirm that the above-mentioned Technology Needs Assessment Project is (a) in accordance with my government's national priorities and our commitment as a Party to the United Nations Framework Convention on Climate Change (UNFCCC) and (b) was discussed with relevant stakeholders including the UNFCCC focal point.

Accordingly, I am pleased to endorse the preparation of the above project proposal with the support of UNEP and express our commitment to participate in this project.

Yours sincerely,

dece

Dr. Indarjit Ramdass, Executive Director.

C.c: Mr. Shyam Nokta, Head, Office of Climate Change and UNFCCC Focal Point

Ganges Street, Sophia, Georgetown, GUYANA Tel.: (592)-225- 5467-69 / 5471-72 / 6044 / 6048 Fax: 225-5481 Email: epa@epaguyana.org Website: www.epaguyana.org "The Environment is Everybody's Business" Ref. No. In replying the above Number and date of this letter should be quoted.



MINISTRY OF ENVIRONMENT FOREIGN TRADE & EXPORT DEVELOPMENT FINANCIAL COMPLEX, THE CARENAGE, ST. GEORGE'S, GRENADA, W.I.

2

August 7, 2012

Ms. Maryam Niamir-Fuller Director, GEF Coordination Office, United Nations Environment Programme P. O. Box 30552-00100 Nairobi, Kenya Email: <u>maryam.niamir-fuller@unep.org</u>

### Subject: Endorsement for Technology Needs Asseessment Project under the UNFCCC

In my capacity as GEF Operational Focal Point for Grenada, I confirm that the above-mentioned Technology Needs Assessment Project is: (a) in accordance with the national priorities of the Government of Grenada and our commitment as a Party to the United Nations Framework Convention on Climate Change (UNFCCC); and (b) was discussed with relevant stakeholders including the UNFCCC focal point.

Accordingly, I am pleased to endorse the preparation of the above project proposal with the support of UNEP and express our commitment to participate in this project.

Yours faithfully

Timothy N.J. Antoine PERMANENT SECRETARY

Copy to: UNFCCC Focal Point



### NATIONAL ENVIRONMENT AGENCY

Gambia Environment House, Jimpex Road Kanifing, PMB 48, The GAMBIA Tel: (220) 4399422, 4399423 Fax: (220) 4399430 Email: nea@gamtel.gm Website: www.nea.gm



### NEA/ADM 130/01Part XXIII (60)

11<sup>th</sup> August 2012

### Ms. Maryam Niamir-Fuller

Director, GEF Coordination Office, United Nations Environment Programme P. O. Box 30552-00100 Nairobi, Kenya Email: maryam.niamir-fuller@unep.org

### Subject: Endorsement for Technology Needs Assessment Project under the UNFCCC

In my capacity as GEF Focal Point for The Gambia, I confirm that the above-mentioned Technology Needs Assessment Project is: (a) in accordance with my government's national priorities and our commitment as a Party to the United Nations Framework Convention on Climate Change (UNFCCC) and (b) was discussed with relevant stakeholders including the UNFCCC Focal Convention Point.

Accordingly, I am pleased to endorse the preparation of the above project proposal with the support of UNEP and express our commitment to participate in this project.

Momodou B. Sarr

EXECUTIVE DIRECTOR GEF Focal Point

Cc Secretary General, Office of The President, State House, Banjul Director, Dept. Water Resources, UNFCCC Convention Focal Point, Banjul Director, Dept. of Forestry, UNCCD Convention Focal Point, Banjul Director, Dept. Parks & Wildlife Management, UNCBD Convention Focal Point, Abuko Arab Republic of Egypt Cabinet of Ministers Ministry of State for Environmental Affairs Egyptian Environmental Affairs Agency جمهورية مصر العربية رئاسة مجلس الوزراء وزارة ألدولة لشنون البينة جهاز شنون البيشة

August 7th 2012

Maryam Niamir-Fuller Director, GEF Coordination Office, United Nations Environment Programme P. O. Box 30552-00100 Nairobi, Kenya Email: maryam.niamir-fuller@unep.org

#### Subject: Endorsement for Technology Needs Assessment Project under the UNFCCC

In my capacity as GEF Operational Focal Point for Egypt, I confirm that the above-mentioned Technology Needs Assessment Project is (a) in accordance with my government's national priorities and our commitment as a Party to the United Nations Framework Convention on Climate Change (UNFCCC)'and (b) was discussed with relevant stakeholders including the UNFCCC focal point.

Accordingly, I am pleased to endorse the preparation of the above project proposal with the support of UNEP and express our commitment to participate in this project.

Sincerely,

F. Abarshus

Dr. Fatma Abou Shouk CEO / EEAA GEF Operational Focal Point / Egypt

Copy to: UNFCCC Focal Point

٢٥ ٢٥٦٤٥٦ - خلف فندق موفيتل للعادي - القاهرة الرقم البريدي ١١٧٢٨ ت، ٢٥٢٦٤٥٢ فاكس - ٢٥ ٥١٩٩٠
 ٢٥ ٥٥. (Misr Helwan El - Zyrae Rd., Maadi - Cairo. P.O. 11728 Tel. : 25256452 - Fax : 25256490

### REPUBLIC OF BURUNDI



### MINISTRY OF WATER, ENVIRONMENT, LAND AND URBAN PLANNING

#### OFFICE OF THE MINITER

August 13rd, 2012

Maryam Niamir-Fuller Director, GEF Coordination Office, United Nations Environment Programme P. O. Box 30552-00100 Nairobi, Kenya Email: <u>maryam.niamir-fuller@unep.org</u>

To:

### Subject: Endorsement for Technology Needs Assessment Project under the UNFCCC

In my capacity as GEF Operational Focal Point for BURUNDI, I confirm that the above-mentioned Technology Needs Assessment Project is (a) in accordance with my government's national priorities and our commitment as a Party to the United Nations Framework Convention on Climate Change (UNFCCC) and (b) was discussed with relevant stakeholders including the UNFCCC focal point.

Accordingly, I am pleased to endorse the preparation of the above project proposal with the support of UNEP and express our commitment to participate in this project.

Sincere DU Epimaque MURENGERA ermanent Sec

Copy to: UNFCCC Focal Point
### MINISTERE DE L'ENVIRONNEMENT ET DU DEVELOPPEMENT DURABLE

**BURKINA FASO** Unité - Progrès - Justice

Unité - Trogrés - Justi

POINT FOCAL OPERATIONNEL DU FONDS POUR L'ENVIRONNEMENT MONDIAL (FEM)



Ouagadougou, le 0 2 AOUT 2012

Operational Focal Point

To

Ms. Mariam Niamir FULLER UNEP/GEF Coordination Office PO Box 30552-00100 Fax: +254 20 762 4041 or 4042 Mail: mariam.niamir-fuller@unep.org

Subject: Endorsement for Technology Needs Assessment Project under the UNFCCC

### NAIROBI-KENYA

## Dear Madam,

In my capacity as GEF Operational Focal Point for Burkina Faso, I confirm that the above-mentioned Technology Needs Assessment Project is (a) in accordance with my government's national priorities and our commitment as a Party to the United Nations Framework Convention on Climate Change (UNFCCC) and (b) was discussed with relevant stakeholders including the UNFCCC Focal Point.

Accordingly, I am pleased to endorse the preparation of the above project proposal with the support of UNEP and express our commitment to participate in this project.

Sincerely,



Copy to - UNFCCC Focal Point

> (SP-CONEDD, 01 BP 6486 Ouagadougou 01) Tél. : St. (226) 50 31 31 66 Email : spconedd@fasonet.bf Fax: (226) 50 31 64 91



A M AyA

La Paz, 06 ENE 2011 MMAYA- VMA Nº 0030 2011

Señora Sylvie Lemmet Directora de la División de Tecnología, Industria Y Economía (DTIE) PROGRAMA DE LAS NACIONES UNIDAS PARA EL DESARROLLO (PNUD). Presente.

#### Ref.: Programa "Technology Needs Assessments" (TNA).

Tengo el agrado de dirigirme a usted, con la finalidad de referirme a su nota 584/BJ/LA/man, mediante la cual el Estado Plurinacional de Bolivia es invitado a participar del Programa denominado "Evaluación de Necesidades Tecnológicas" (TNA por sus siglas en inglés).

Al respecto, para el Gobierno de Bolivia es importante continuar con la implementación de Programas y Proyectos, que contribuyan a los procesos de adaptación a los efectos del Cambio Climático, y al combate de sus causas, construyendo el Vivir Bien.

En este sentido, se ve con agrado la posibilidad de concretar la amable propuesta hecha por el PNUD/DTIE, para lo cual consideramos pertinente la realización de una reunión de coordinación entre las Autoridades Bolivianas de la temática, con los respectivos representantes del PNUD/DTIE, que se encuentran a cargo del Programa TNAs.

La citada reunión tendria por objeto estructurar el Programa a ser implementado en Bolivia, y desarrollar un Plan de Trabajo, conforme a la visión y política boliviana, particularmente con los principios establecidos en la Conferencia Mundial de los Pueblos sobre Cambio Climático.

Con este motivo, hago propicia la oportunidad para expresarle las seguridades de mi más alta y distinguida consideración,

> ynthill Wreiana Silva Maturana Veeniniau de Medo Antienia. notweriau, Canties Clinatoce y de

Gavido y Desarruto Estextal

CSM/ cc. archivo

Viceministerio de Medio Ambiente, Biodiversidad, Cambios Climáticos y de Gestión y Desarrollo Forestal Av Camacho 1471 entre cales Loayza y Bueno Telefonos (1967-2) 2111055 La Paz - Bolivie



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MINISTRY OF NATURE PROTECTION OF THE REPUBLIC OF ARMENIA

MINISTER

МИНИСТЕРСТВО ОХРАНЫ ПРИРОДЫ РЕСПУБЛИКИ АРМЕНИЯ

министр

Nº 1/01.3/11269

<</o>> \_0.8 \_\_\_\_ 2012p.

010, g. Երևան, Հանրապետության հր. Կառավարական 3-рг. տուն Government Bldg. Republic Sq. Yerevan, 0010, Armenia 110, Армеяня, г.Еренан, Дом правительства, зданов N3 "фавии /E-mail/ эллочта: <u>min ecology@mnp.am</u> <sup>20</sup> (374 10) 52 10 99 **2** (374 10) 52 10 99 **2** (374 10) 54 08 57

> To: Maryam Niamir-Fuller Director, GEF Coordination Office, United Nations Environment Programme Nairobi, Kenya Email: maryam.niamir-fuller@unep.org

# Subject: Endorsement for the preparation "Technology Needs Assessment" project under the UNFCCC

Dear Mrs. Niamir-Fuller

In my capacity as a GEF Operational Focal Point for the Republic of Armenia, I confirm that the above-mentioned Technology Needs Assessment Project a/ is in accordance with our government's national priorities and commitment as a Party to the UN Framework Convention on Climate Change (UNFCCC) and b/ it was discussed with relevant stakeholders including the UNFCCC focal point.

Accordingly, I am pleased to endorse the preparation of the above mentioned project proposal with the support of UNEP and express our commitment to participate in this project.

Sincerely,



Copy to: Mr. Aram Gabrielyan UNFCCC National focal point for Armenia





# **Climate Change Coordination Centre**

Office 102, 20 Abay str, 010000, Astana, Republic of Kazakhstan Tel.: +7 7172 717170/69/73 Fax: +7 7172 324738 e-mail: info@climate.kz URL: http://www.climate.kz

"17 " November 2010

Nº 1-184

Ms Sylvie Lemmet Director of the Division of Technology, Industry and Economics United Nations Environment Programme

## Dear Ms Sylvie Lemmet,

Further to letter of the Ministry of Environment Protection of the Republic of Kazakhstan №02-01-20/2501-µ dated November 11, 2010, Climate Change Coordination Centre as a local partner for the project is ready to associate for the purposes of implementing the Technology Needs Assessment Project in Kazakhstan and, subsequently, to support in accepting technical team visiting our country on December 14, 2010.

Climate Change Coordination Centre looks forward to working with you for the successful implementation of the project.

Best regards,

Director

Mg\_

V.Kryukova



Ministry of Forestry, Fisheries & Sustainable Development Second Floor, West Block Building, Belmopan City Phone: (501) 822-0810/0401; Fax: 822-2396 Email: <u>ceo@ffsd.gov.bz</u> and <u>minister@ffsd.gov.bz</u>

Ref: Gen/22/01/13(02)

31<sup>st</sup> May, 2013

Maryam Niamir-Fuller Director, GEF Coordination Office Block 2, North Wing, Ground Floor UNEP Nairobi, Kenya

Dear Ms. Niamir-Fuller:

In 2012, Belize completed its Second National Communication where it addressed issues pertaining to technology needs in respect of mitigating greenhouse gas emissions and adapting to climate change.

Through the Second National Communication process, Belize conducted an analysis of its technology needs and requirements for addressing climate change which addresses both mitigation and adaptation issues. Although this study provided an indication and possible technologies that can be applied in specific sectors, further analysis is needed to prioritize technology applications and to analyse the enabling requirement to receive the technology.

The Ministry of Forestry, Fisheries and Sustainable Development (MFFSD) as the government agency responsible for the coordination and implementation of climate change policies in Belize, endorses the participation of the Climate Change Officer in participating in the Technology Needs Assessment Project implemented by United Nations Environment Programme. Participating in this project will allow Belize to build on earlier work carried out in the initial Technology Needs Assessment for the Second National Communication. It will also allow Belize to capitalize on one of the more important recommendations of the convention, "the development and transfer of technology". Importantly, this project will assist Belize in determining its technology priorities regarding mitigation of greenhouse gas emissions and adaptation to climate change and as such help Belize to cope with an ever evolving climate system.

We look forward to working with you.

icerel A.F. CRUZ) for Chief Executive Officer

## ANNEX L: CO-FINANCING COMMITMENT LETTERS FROM PROJECT PARTNERS



#### UNITED NATIONS ENVIRONMENT PROGRAMME

ogramme des Nations Unies pour l'environnement Programa de las Naciones Unielas para el Medio Ambiente Программа Орглимации Объедименных Наций во окружающей среде 取合国环境规划署



001/ TNAII/ JSD/MR

26 September 2013

Dear Mrs Niamir-Fuller,

UNEP-DTIE hereby confirms that the Technology Needs Assessment - Phase II cleared by the GEF CEO on February 20<sup>th</sup>, 2013, and subsequently approved by the GEF Council, will benefit from a co-financing amount of \$307,889 for 2014-2016 coming from UNEP, as an in-kind contribution covering backstopping services to URC for:

- Providing strategic, technical and methodological support for project implementation under all project components;
- Supporting the dissemination of outputs and results, and engagement of donors/development partners to foster TAP implementation under component 3; and
- Facilitating the synergies and links under component 3 between the project and the CTCN as well as the regional Technology Transfer and Financing Center projects implemented by the regional development banks in Asia, Africa, Europe and Latin America.

Yours sincerely, Mark Radka

Head Energy Branch

Mrs. Niamir-Fuller GEF Executive Coordinator, UNEP P.O. Box 30552 Nairobi Kenya

> Division of Technology, Industry and Economics 15, rue de Milan, 75441 Paris Cedex 09, France Tel : +33 (0) 1.44.37.14.29 Fax : +33 (0) 1.44.37.14.74 E-mail : unep.tie@unep.fr www.uneptie.org

# URC CO-FINANCE LETTER IS ATTACHED SEPARATELY

# ANNEX M: ENVIRONMENTAL AND SOCIAL SAFEGUARDS

The project component 1 (facilitating the preparation of TNAs and TAPs, or making existing ones more strategic and useful in an operational sense) offers the opportunity to ensure the strengthening of, and compliance with, environmental and social safeguards in the technology transfer market. Similarly, components 2 (develop tools and provide information on improved methodologies to support the preparation of TNAs and TAPs) and 3 (strengthen networking activities to promote the use and funding of TNAs and TAPs priorities) will ensure dissemination of environmental and social safeguards through tools and network activities.

All three components will make sure that environmental and social safeguards are included in any TAPs that are developed. Moreover, the actions of the TNAs and TAPs will present the opportunity to mitigate GHG emissions and/or reduce the vulnerability of sectors and livelihoods to the adverse impacts of climate change, thus strengthening environmental and social safeguards. In addition, the project will include a broad range of long term social contributions. The introduction of new technologies will generate new markets and thus lead to job creation. Cleaner technologies will lead to reduced pollution which will result in improved health of the local population and reduce its vulnerability to the adverse impacts of climate change. The deployment of clean technologies will improve access to modern energy services, and increase water and food security in the countries.

The impact of the present project on civil society, or gender is limited during project execution while indirect impacts, which could be provided by effective technology transfer, can be substantial. The classical example is the replacement of fuel wood, usually gathered by women, by modern energy. Studies demonstrate that the time dedicated by women to cooking and household tasks can be divided by 5 through introduction of modern energy, hence leaving time for self-education, productive activity and children education. However, the present project is focussed on reporting to the UNFCCC on technology needs, and identifying barriers as well as remedial actions, which would allow technology transfer to take place. Hence, while the capacity building elements is very strong and focussed on producing high quality TNAs involving all relevant stakeholders at national levels as well as provide the roadmap for technology adoption, implications on gender on one hand and civil society on the other will be seen when implementing the identified measures.

As part of the GEFs evolving Fiduciary Standards that Implementing Agencies have to address 'Environmental and Social Safeguards'. To fill this checklist:

- STEP 1: Initially assess E&S Safeguards as part of PIF development. The checklist is to be submitted for the CRC.
- STEP 2 : Check list is reviewed during PPG project preparation phase and updated as required
- STEP 3 : Final check list submitted for PRC showing what activities are being undertaken to address issues identified

# **UNEP/GEF Environmental and Social Safeguards Checklist**

Project Title:	Technology Needs A	ssessment – Phase II	
GEF project ID and UNEP ID/IMIS Number		Version of checklist	
Project status (preparation, implementation, MTE/MTR, TE)	Preparation	Date of this version:	23/08/2013
Checklist prepared by (Name, Title, and Institution)	Jonathan Duwyn, P	rogramme Officer, UNEP	

In completing the checklist both short- and long-term impact shall be considered.

# Section A: Project location

If negative impact is identified or anticipated the Comment/Explanation field needs to include: Project stage for addressing the issue; Responsibility for addressing the issue; Budget implications, and other comments.

	Yes/No/N.A.	Comment/explanation
- Is the project area in or close to -		
- densely populated area	N.A.	
- cultural heritage site	N.A.	
- protected area	N.A.	
- wetland	N.A.	
- mangrove	N.A.	
- estuarine	N.A.	
- buffer zone of protected area		
- special area for protection of biodiversity	N.A.	
- Will project require temporary or permanent	N.A.	
support facilities?		
If the project is anticipated to impact any of the a	hove areas an En	vironmental Survey will be needed to determine if the

If the project is anticipated to impact any of the above areas an Environmental Survey will be needed to determine if the project is in conflict with the protection of the area or if it will cause significant disturbance to the area.

# Section B: Environmental impacts

If negative impact is identified or anticipated the Comment/Explanation field needs to include: Project stage for addressing the issue; Responsibility for addressing the issue; Budget implications, and other comments.

	Yes/No/	Comment/explanation
	N.A.	-
- Are ecosystems related to project fragile or degraded?	N.A.	
- Will project cause any loss of precious ecology, ecological, and economic	N.A.	
functions due to construction of infrastructure?		
- Will project cause impairment of ecological opportunities?	N.A.	
- Will project cause increase in peak and flood flows? (including from	N.A.	
temporary or permanent waste waters)		
- Will project cause air, soil or water pollution?	N.A.	
- Will project cause soil erosion and siltation?	N.A.	
- Will project cause increased waste production?	N.A.	
- Will project cause Hazardous Waste production?	N.A.	
- Will project cause threat to local ecosystems due to invasive species?	N.A.	
- Will project cause Greenhouse Gas Emissions?	N.A.	
- Other environmental issues, e.g. noise and traffic	N.A.	
Only if it can be carefully justified that any negative impact from the project	t can be av	oided or mitigated satisfactorily

Only if it can be carefully justified that any negative impact from the project can be avoided or mitigated satisfactorily both in the short and long-term, can the project go ahead.

# Section C: Social impacts

If negative impact is identified or anticipated the Comment/Explanation field needs to include: Project stage for addressing the issue; Responsibility for addressing the issue; Budget implications, and other comments.

	Yes/No/N.A.	Comment/explanation
- Does the project respect internationally proclaimed human rights including	N.A.	
dignity, cultural property and uniqueness and rights of indigenous people?		
- Are property rights on resources such as land tenure recognized by the	N.A.	
existing laws in affected countries?		
- Will the project cause social problems and conflicts related to land tenure and	N.A.	
access to resources?		
- Does the project incorporate measures to allow affected stakeholders'	Yes	TNA/TAP process is
information and consultation?		driven by stakeholder
		consultations
- Will the project affect the state of the targeted country's (-ies') institutional	N.A.	

context?		
Will the project cause change to heneficial uses of land or recourses? (incl	NI A	
- will the project cause change to beneficial uses of fand of resources? (incl.	IN.A.	
loss of downstream beneficial uses (water supply or fisheries)?		
- Will the project cause technology or land use modification that may change	N.A.	
present social and economic activities?		
- Will the project cause dislocation or involuntary resettlement of people?	N.A.	
- Will the project cause uncontrolled in-migration (short- and long-term) with	N.A.	
opening of roads to areas and possible overloading of social infrastructure?		
- Will the project cause increased local or regional unemployment?	N.A.	
- Does the project include measures to avoid forced or child labour?	N.A.	
- Does the project include measures to ensure a safe and healthy working	N.A.	
environment for workers employed as part of the project?		
- Will the project cause impairment of recreational opportunities?	N.A.	
- Will the project cause impairment of indigenous people's livelihoods or	N.A.	
belief systems?		
- Will the project cause disproportionate impact to women or other	N.A.	
disadvantaged or vulnerable groups?		
- Will the project involve and or be complicit in the alteration, damage or	N.A.	
removal of any critical cultural heritage?		
- Does the project include measures to avoid corruption?	Yes	Clause on external
		auditing in agreements
		with the countries
Only if it can be carefully justified that any negative impact from the project ca	n he avoided	or mitigated satisfactorily
	n be avoided	or murgurea sansjacionity
both in the short and long-term, can the project go ahead.		

# Section D: Other considerations

If negative impact is identified or anticipated the Comment/Explanation field needs to include: Project stage for addressing the issue; Responsibility for addressing the issue; Budget implications, and other comments.

	Yes/No/N.	Comment/explanation
	<i>A</i> .	
- Does national regulation in affected country (-ies) require EIA and/or ESIA	N.A.	
for this type of activity?		
- Is there national capacity to ensure a sound implementation of EIA and/or SIA	N.A.	
requirements present in affected country (-ies)?		
- Is the project addressing issues, which are already addressed by other	No	Project responds to a
alternative approaches and projects?		UNFCCC requirement
- Will the project components generate or contribute to cumulative or long-term	Yes	Beneficiary countries will
environmental or social impacts?		come up with TAPs that if
		implemented will lead
		them on a low carbon and
		climate resilient
		development path
- Is it possible to isolate the impact from this project to monitor E&S impact?	Yes	If the TAPs are
		implemented in the
		countries

# ANNEX N: ACRONYMS AND ABBREVIATIONS

AIT	Asia Institute of Technology
BF	Bariloche Foundation
BURs	Biennial Update Reports
CSOs	Civil Society Organizations
CTCN	Climate Technology Center and Networks
CTI-PFAN	Climate Technology Initiative – Private Finance Advisory Network
ENDA	Environment Development Action in the third world
GEF	Global Environment Facility
IEA	International Energy Agency
IRENA	International Renewable Energy Agency
MCAs	Multi-criteria analyses
NAMAs	National Appropriate Mitigation Actions
NAPAs	National Action Plan on Adaptation
NAPs	National Action Plans
NDE	National Designated Entities
NGOs	Non-governmental organizations
TAP	Technology Action Plans
TNA	Technology Needs Assessment
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNIDO	United Nations Industrial Development Organization
URC	UNEP Risoe Centre on Energy, Climate and Sustainable Development