Terminal Evaluation Review form, GEF Independent Evaluation Office, APR 2017

1. Project Data

Summary project data			
GEF project ID		3907	
GEF Agency project ID		UNEP	
GEF Replenishment Phase		GEF-4	
Lead GEF Agency (include all for joint projects)		UNEP	
Project name		Technology Needs Assessment	
Country/Countries		Global	
Region		Global	
Focal area		Climate Change	
Operational Program or Strategic Priorities/Objectives		GEF4 Special Climate Change Fund – Technology Transfer CCM-6 supporting enabling activities and capacity building for Convention obligations.	
Executing agencies involved		UNEP RISØ Centre, Regional Centres, National Partners	
NGOs/CBOs involvement		Climate Change Coordination Centre	
Private sector involvement		None.	
CEO Endorsement (FSP) /Approval date (MSP)		09/18/2009	
Effectiveness date / project start		11/30/2009	
Expected date of project completion (at start)		4/30/2012	
Actual date of project completion		4/30/2013	
Project Financing			
		At Endorsement (US $M)	**At Completion (US $M)**
Project Preparation Grant	GEF funding	-	-
	Co-financing	-	-
GEF Project Grant		8.18	NA
Co-financing	IA own	0.15	NA
	Government	2.0	NA
	Other multi- /bi-laterals	0.70	NA
	Private sector	-	
	NGOs/CSOs	-	
Total GEF funding		8.18	6.47
Total Co-financing		2.85	2.85
Total project funding (GEF grant(s) + co-financing)		11.03	9.32
Terminal evaluation/review information			
TE completion date		September, 2016	
Author of TE		Amitav Rath	
TER completion date		May, 2018	
TER prepared by		Ritu Kanotra	
TER peer review by (if GEF IEO review)		Molly Watts Sohn	

2. Summary of Project Ratings

Criteria	Final PIR	IA Terminal Evaluation	IA Evaluation Office Review	GEF IEO Review
Project Outcomes		S	S	S
Sustainability of Outcomes		HL	HL	L
M&E Design		S	S	S
M&E Implementation		S	S	UA
Quality of Implementation		S	S	MS
Quality of Execution		S	S	MS
Quality of the Terminal Evaluation Report		-	-	MS

3. Project Objectives

1. 3.1 Global Environmental Objectives of the project:

As per the CEO Endorsement document (Pg 8), the Global Environmental Objective of the project is to provide the framework conditions, and adequate support, in order for GEF beneficiary countries to produce a grounded and useful Technology Needs Assessment (TNA), with associated Technology Action Plans (TAP) fostering technology transfer for adaptation and mitigation.

2. 3.2 Development Objectives of the project:

As per the CEO Endorsement document (Pg 9), the Development Objective of the project is to improve Technology Needs Assessment (TNA) and develop Technology action plans (TAP) in 35 to 45 countries. The project had the following 4 components:

Component 1 Support for the development or strengthening of TNAs in 35-45 countries

1. A network of participating individuals and institutions at national level informed and bringing capacity to secure national consultations in order to reach a national consensus on adequate technologies Identification and creation of stakeholders' groups will be based on recommendations contained in the draft TNA handbook; 2. A synthesis of methodological applications and hurdles carried out at national level and serving as input for TNA elaboration; 3. Between 35 and 45 TNAs including TAPs produced, identifying barriers to technology transfer at national level and means and actions to overcome them and 4. Feedback for TNA handbook update based on national experiences and processes.

Component 2 Development of tools and provision of methodology information to support TNA and TAP processes

1. A tool to prioritize mitigation options based on cost effectiveness, existing potential, resource availability and relevance for national situations developed and presented; 2. A tool to prioritize technologies for adaptation based on climate change impacts as well as human, economic, social and costs related aspects developed and presented; 3. A simple and efficient market assessment tool made available; 4. A process to apply the tools at national level agreed upon; 5. Access and links to information database elaborated and serving as a base for technology specification in terms of performance, cost and availability and 6. Reporting template for TNA elaborated.

Component 3 Establishment of a cooperation mechanism that aids preparation and refinement of TNAs and TAPs implementation and dissemination

1.A Network involving both national and supra national institutions recognized for their success in technology transfer activities established and operational; 2. Proven approaches to elaborate good quality TNAs developed. Institutional responsibilities set up. Capacities built to elaborate, implement and revise TNAs and associated TAPs; 3. Replication approach available to all GEF beneficiary countries together with a proposed mechanism for interactive support; 4. A "Best Practices and Lessons Learnt report" from the project produced and disseminated and 5. Synthesis report from the project produced and disseminated.

3. 3.3 Were there any **changes** in the Global Environmental Objectives, Development Objectives, or other activities during implementation?

No.

4. GEF IEO assessment of Outcomes and Sustainability

Please refer to the GEF Terminal Evaluation Review Guidelines for detail on the criteria for ratings.

4. Relevance can receive either a Satisfactory or Unsatisfactory rating. For Effectiveness and Cost efficiency, a six-point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess. Sustainability ratings are assessed on a four-point scale: Likely=no or negligible risk; Moderately Likely=low risk; Moderately Unlikely=substantial risks; Unlikely=high risk. In assessing a Sustainability rating please note if, and to what degree, sustainability of project outcomes is threatened by financial, sociopolitical, institutional/governance, or environmental factors.

Please justify ratings in the space below each box.

4.1 **Relevance**	Rating: **Satisfactory**

The TE assesses the relevance of the project as 'highly satisfactory'. Based on the evidence in the TE and the project document, this TER revised the project relevance to be 'satisfactory'. The adoption of advanced technologies in developing countries is being increasingly 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. The project was congruent with the national priorities of most of the participating countries that highlighted their need for assistance in determining both technology priorities and the measures needed to overcome barriers that prevent them from acquiring these technologies under market or near-to-market conditions. The objectives of the current project were also consistent with the global priorities as exemplified by the discussions at the COP21 in Paris, in 2015. The strategic objectives of the project stemmed directly from UNFCCC resolutions on technology needs for mitigation and adaptation.

The project was a part of the GEF's climate change priorities, both as mandated by UNFCCC and reflected in GEF priority statements and allocation of resources. It met with all conditions for GEF enabling activity and supported capacity development measures; focused on technology, strengthening national capacities to report and fulfil commitments made under the Convention. Support for enhanced

TNAs was also included in the GEF Strategic Programme on Technology Transfer approved by the GEF Council in November 2008.

4.2 **Effectiveness**	Rating**: Satisfactory**

This TER concurs with the rating assigned to the effectiveness of the project as 'satisfactory'. The project contributed successfully to the national capacity building, achieving national consensus on technology priorities for mitigation and adaptation and action plans for implementation. As expected, the TNA and TAPs were produced and synthesized by the participating countries along with an updated global TNA handbook. The project also helped in building capacity of the national coordinators and 1-2 other key members of the team, with the assistance of the regional centers. While the TE found considerable evidence of the take of the findings through the UNFCCC process, evidence of the outcome of increased global learning and experience sharing, outside those established UNFCCC process was not noticeable. This is because the project had the least activities and resources directed towards regional and global networking, and a mechanism that would have enabled cross fertilization didn't take place. Similarly, review of reports and guides prepared during the project suggests that engagement with the private sector, wherever appropriate and available, and participation of the financial institutions and donors was lacking.

Component 1: Support for the development or strengthening of TNAs in 35-45 countries **– Satisfactory**

The output of a national technical and network structure was formed and achieved by involving Technology Needs Assessment (TNA) national coordinators as designated by the countries. A total of 30 countries (as against a target of 36) produced all four TNA and Technology Action Plan (TAP) reports. Two countries produced only half the number and were paid partially. A few countries noted difficulty with the task due to low national capacity. Other planned outputs such as methodological tools were developed and shared with regional centers and countries, which helped the participating countries to carry out their Technology Needs Assessment (TNA) elaboration with these inputs. An updated TNA and book was also produced. A synthesis of methodological reports was completed by UNEP Partnership with Technical University of Denmark (UDP) and shared with the reginal centers and countries. Participating countries were able to carry out their TNA elaboration with these inputs. Review of the methods, guides and reports by the TE also suggest a possible shortcoming that economic and financial issues could most likely require more attention for further action in many reports. This could have been improved with greater participation of the private sector, where appropriate and available, and similarly, with the participation of donors and financial institutions.

Component 2: Development of tools and provision of methodology information to support TNA and TAP processes - **Satisfactory**

As per the TE, all required tools and methods for this component were presented and discussed with the participating countries at the regional training workshop. The multi criteria analysis for identifying the technologies, although found difficult by some, was later appreciated in its use for the prioritization process and arriving at a consensus among national stakeholders. For many national stakeholders, the methodology for carrying out barriers analysis for technology options was new. Market assessment tools/guidelines were also developed and available in English, which were later translated in other languages, but the translations were delayed due to which some of countries felt at disadvantage. The project established mechanisms and structures for countries to work through the multi-stakeholder

process of the TNA project nationally; assisted the processes and the use of the tools as well as the analysis and reporting of results at the national level. It was too demanding to be able to provide complete information for all technologies considered and at all levels of detail and that could not be done fully. Reporting templates for TNA and TAP reports developed, shared with the participating countries, was used by them and the reports were reviewed by the team.

Component 3: Establishment of a cooperation mechanism that aids preparation and refinement of TNAs and TAPs implementation and dissemination **- Moderately Satisfactory**

As per the TE, no new network was formed, and the existing networks could also not be involved. A number of workshops were organized, however, as per the TE, the outcome of increased national and interregional cooperation to support technology transfer and establishing cooperation mechanisms was only partially achieved. As per the TE, the project was unable to nurture cooperation between participating countries due to budget and time limitation, the activities supporting inter-country cooperation was lower than desirable. Support was provided to the TNA country teams using e-mails and periodic follow up by project staff. Although, some countries expected more hands-on support but that couldn't be provided due to limited budget. The project website provides information on the tools and the final reports produced for dissemination. The project had produced one Global and three Regional Synthesis Reports that contain lessons learnt. Best practices and lessons learnt from participating countries were shared at the final experience sharing workshop organized in 2013 at the Asian TNA regional center.

4.3 **Efficiency**	Rating: **Moderately Satisfactory**

As per the TE, the project undertook several measures to increase efficiency by building upon pre-existing linkages with experts and institutions, such as the four regional centers and others, the agreements with the national entities, use of data sources and methods and lessons available previously as well as the earlier work done on Technology Needs Assessment (TNAs). However, the project also faced delays in many countries in signing the Memorandum of Understanding (MOU) with UDP, which slowed down the project in some countries. The delays led to delayed completion and increased the challenges in providing support to the national teams. As per the TE, the project mobilized the full amount of co-financing, but the report doesn't include details or break up of the co-financing amount from various contributors.

However, the TE mentions that the project had limited budget per country and the project took several measures to improve the efficiency that impacted the effectiveness of the project. For instance, steering committee meetings were organized on the side lines of the global events, in particular during COP events. This resulted in less participation in these PSC meetings and the steering committee was less useful that it could have been. On the other hand, as per the TE, the project also returned money to the GEF, thereby staying within the presumed ceiling of USD 210 000 and actual expenditures were lower per country. Effects of delays on project efficiency is not covered in the reports sufficiently.

4.4 **Sustainability**	Rating: **Likely**

The TE assesses the sustainability of the project outcomes to be 'highly likely'. Taking into account the evidence from various countries mentioned in the TE, this TER assesses sustainability to be 'likely'. Except that the project failed to develop linkages with the financial institutions and project developers, on the basis of the enabling institutional framework facilitated through the capacity building, development of tools, methodologies, TNA and TAP during the project as well as the evidence of uptake of project findings and reports in various participating countries, and the development of 'new global and regional mechanisms' to support climate change mitigation and adaptation, the sustainability of the project outcomes is assessed to be 'likely'.

Financial –Likely

The TE assigned a rating of 'highly likely' to sustainability, which this TER revises to 'likely'. Although stated in the project document about the importance of collaboration with UNFCCC for financing as well as developing linkages with the project developers and financial institutions but, as per the TE, the project didn't make sufficient efforts in this regard. However, the TE also notes that the new global and regional mechanisms (for instance, COP 21 Paris) support a bottom up, country led process, where many activities of the TNA will necessarily be sustained as they provide some of the building blocks for country strategies and their submissions to UNFCCC. This is also likely to trigger the flow of international resources. For instance, the TE notes that at the national level, the TNA project concepts have been developed into full project proposals and submitted to donors for possible funding in the case of Kenya.

The TE also notes that the sustainability of outcomes will ultimately depend on larger processes both nationally and globally. These processes are beyond the scope of the current project and include perception – nationally and globally – on the negative impacts from climate change and on the global process of negotiations, the agreements reached, like in COP21 in Paris in 2015, to help move the agenda of mitigation and adaptation forward. Some of the recent developments, such as The Climate Centre and Network (CTCN) as a technology support institution; the Green Climate Fund (GCF), and the new partnership of UNEP with financial institutions, are some of the newly established regional climate technology/center/networks, that would provide impetus to sustain and advance the direct outcome of the current project.

Institutional – Likely

This TER agrees with the rating assigned by TE for the sustainability of the institutional framework as 'likely'. The project was focused on providing technical skills (capacity building) and filling in information gaps to allow the participating countries to make better plans as required under UNFCCC. Among the reported outcomes at the time of the TE, many participating countries reported that they already included the findings into their nationally determined plans for mitigation and adaptation. The information collected during the TE confirmed that almost 20 countries included the results of TNA and TAP into their several national policies and plans. But as the TE states, the implementation of the priority action plans is contingent upon the institutional frameworks and governance in the country and its relationship to and support from the global UNFCCC process, which would vary from country to country, and was difficult to determine as it was outside the scope of the TE. However, based on the evidence available from the countries that responded to the survey conducted during the TE, most of the participating countries are 'likely' to have enabling institutional framework for sustaining the outcomes of the current project.

Socio-political – Likely

This TER agrees with the rating assigned by the TE to the socio-political aspect of the sustainability as 'likely'. As per the TE, the project facilitated developing strong national teams that were able to secure high level of stakeholder awareness and political buy-in for the project implementation and its outputs. The survey and field work undertaken during the TE, showed considerable evidence of key stakeholder awareness, interests and commitment, often demonstrated by financial and human resources allocated for the project and the related levels of uptake. Although the level of ownership by the national stakeholders was not uniform, the TE noted that in almost all of the countries visited, and for the majority of countries surveyed during evaluation, the level of ownership was sufficient to allow for the project results to be sustained. The project contributed to positive and sustained changed in some behaviors, as exemplified by follow up actions taken by governments in some of the countries.

Environmental – **Likely**

This TER agrees with the rating assigned to the environment sustainability of the project as 'likely'. The TE noted that the project elements contained steps for the inclusion of technology and innovation in confronting the environmental challenges, minimizing the environmental risks to the sustainability of the project outcomes.

5. Processes and factors affecting attainment of project outcomes

5. 5.1 Co-financing. To what extent was the reported co-financing essential to the achievement of GEF objectives? If there was a difference in the level of expected co-financing and actual co-financing, then what were the reasons for it? Did the extent of materialization of co-financing affect project's outcomes and/or sustainability? If so, in what ways and through what causal linkages?

According to the TE, the full amount of co-financing of USD 2.85 million was realized. Although there is no discussion on the co-financing, the TE notes that overall the project was constrained by its limited budget. In most of the countries, budget of around USD 120,000, was not considered sufficient.

6. 5.2 Project extensions and/or delays. If there were delays in project implementation and completion, then what were the reasons for it? Did the delay affect the project's outcomes and/or sustainability? If so, in what ways and through what causal linkages?

As per the TE, although the project was completed in time, the project met minor delays before the project start-up as well as during execution, for several reasons. The TE notes that the delays were caused in some countries due to the time taken in official procedures (signing MoUs), that reduced their time for participation, slowed down the implementation and increased the challenges in providing the support to their national teams. Another reason of the delay was linked to the time needed for some countries to identify national stakeholders and the national team, like in the case of Ethiopia and Rwanda. Ethiopia remained one of the countries where the project failed to achieve expected outcomes due to delays. The project was also slow at the beginning in some of the countries due to delay in availability of the guidebooks and methodological tools in languages other than English. These delays caused the project to be extended by one year. But the TE doesn't discuss the impact of these delays on the project's outcomes and/or sustainability.

7. 5.3 Country ownership. Assess the extent to which country ownership has affected project outcomes and sustainability? Describe the ways in which it affected outcomes and sustainability, highlighting the causal links:

As per the TE, the level of ownership amongst the government counterparts varied across countries. The TE notes that in most of the countries, the level of awareness and interest by the key stakeholders in government was seen to be high, evident through the financial and human resources allocated for the work and the related levels of uptake. Also, all the participating countries took considerable efforts to have relatively wider stakeholder participation, especially to involve experts, though the TE recognized gaps in the participation of financial institutions and other relevant private sector firms and representatives in these meetings. The TE highlights examples of some of the countries where the government was proactive (covered under section 8.3 below) in taking further action on the plans and reports developed through the project. But it is difficult to assess and provide an overall view of the country ownership based on the evidence in the TE, also because project was implemented in 36 countries (the original target was 35-45 countries, which according to the TE, was revised to 36).

6. Assessment of project's Monitoring and Evaluation system

Ratings are assessed on a six point scale: Highly Satisfactory=no shortcomings in this M&E component; Satisfactory=minor shortcomings in this M&E component; Moderately Satisfactory=moderate shortcomings in this M&E component; Moderately Unsatisfactory=significant shortcomings in this M&E component; Unsatisfactory=major shortcomings in this M&E component; Highly Unsatisfactory=there were no project M&E systems.

Please justify ratings in the space below each box.

6.1 **M&E Design at entry**	Rating: Satisfactory

The TE didn't assign a rating to the M&E design at entry. But based on the evidence in the PD and some information in the TE, this TER assesses the quality of M&E design at entry to be 'satisfactory'. The Project Document (PD) included a result monitoring framework that included targets specified for mid and end term tracking; responsibilities defined for Project Managers at the national level and Project Implementation Units for monitoring the progress and the role of Project Steering Committee defined for providing the overall supervision; time frame, means of verification and budget of each monitoring activity. The SMART indicators (such as development of 35-45 nationally accepted and technically grounded TNAs including TAPs) were also clearly defined for each component, due to which the rating for M&E design is assessed to be 'satisfactory'.

6.2 **M&E Implementation**	Rating: Unable to assess

There is insufficient information in the available reports to comment on the M&E design at entry.

7. Assessment of project implementation and execution

Quality of Implementation includes the quality of project design, as well as the quality of supervision and assistance provided by implementing agency(s) to execution agencies throughout

project implementation. Quality of Execution covers the effectiveness of the executing agency(s) in performing its roles and responsibilities. In both instances, the focus is upon factors that are largely within the control of the respective implementing and executing agency(s). A six point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess.

Please justify ratings in the space below each box.

7.1 **Quality of Project Implementation**	Rating: **Moderately Satisfactory**

The TE assessed the quality of project implementation as 'satisfactory', which this TER revised to be 'moderately satisfactory'. The TE notes that the achievements were possible through high dedication and competence of the project staff at UNEP. But, through the survey conducted during the TE, some national respondents expressed the need for more support from the technical support teams. The areas where the respondents clearly wished for more support included '*establishment of regional or international networks*'; and need for 'regional/inter-regional networking opportunities provided for information, for cooperation and for technology transfer' (TE, Pg 58). The TE notes that the uniform allocation of funds across countries with varying capacity and rigidity with which the project was implemented, didn't often allow for the required adaptations to the ground realities at the field level. The TE hints towards a better assessment of the capacity of the participating countries before implementing a multi-country project.

7.2 **Quality of Project Execution**	Rating: **Moderately Satisfactory**

The project was executed by the UNEP RISOE Centre (name of the UNEP RISOE Centre or URC was later changed to the "UNEP DTU Partnership" or UDP), the Regional Centers (RCs) and the national teams. Since this was a global project, the performance of the national teams varied across the participating countries. The TE notes that 'it was seen in many countries that the leadership of the national coordinator has often been a highly critical factor in the success or its lack within the countries reviewed'. It further notes that '*the project implementation and management were very competent both by the DTU and by the RCs. This was observed in the very careful laid out contracts, the monitoring and processing of workflows, the financial planning and management, and a degree of adjustment to different country needs and to changing circumstances'* (TE, Pg 63). The TNA helpdesk at regional offices provided support to the participating countries through the TNA and TAP processes on all tools. But the project failed to develop linkages to other key work on technology and its financing, which have been funded by UNEP and GEF during the same period and could provide concrete examples of technology issues the project grappled with.

The TE also states that the project had weak steering committee, with low priority accorded in the execution to seek their feedback and participation, due to the time constraints for the members involved and also few meetings that were held with very low inputs during these meetings. But low/tight budget for steering committee meetings was beyond the control of the Project team.

8. Assessment of Project Impacts

Note - In instances where information on any impact related topic is not provided in the terminal evaluations, the reviewer should indicate in the relevant sections below that this is indeed the case and identify the information gaps. When providing information on topics related to impact, please cite the page number of the terminal evaluation from where the information is sourced.

8.1 Environmental Change. Describe the changes in environmental stress and environmental status that occurred by the end of the project. Include both quantitative and qualitative changes documented, sources of information for these changes, and how project activities contributed to or hindered these changes. Also include how contextual factors have contributed to or hindered these changes.

None.

8.2 Socioeconomic change. Describe any changes in human well-being (income, education, health, community relationships, etc.) that occurred by the end of the project. Include both quantitative and qualitative changes documented, sources of information for these changes, and how project activities contributed to or hindered these changes. Also include how contextual factors have contributed to or hindered these changes.

None.

8.3 Capacity and governance changes. Describe notable changes in capacities and governance that can lead to large-scale action (both mass and legislative) bringing about positive environmental change. "Capacities" include awareness, knowledge, skills, infrastructure, and environmental monitoring systems, among others. "Governance" refers to decision-making processes, structures and systems, including access to and use of information, and thus would include laws, administrative bodies, trust-building and conflict resolution processes, information-sharing systems, etc. Indicate how project activities contributed to/ hindered these changes, as well as how contextual factors have influenced these changes.

a) Capacities

The project helped develop the capacity of national teams, who gained methodological experience on technology assessment, including the processes of stakeholder consultation, multi-criteria decision tools, generating consensus and customizing the methodologies to their national circumstances. According to the TE, '*given that TNAs and TAPs were produced by the national teams, ….clearly developed the capacity to undertake the processes and analysis required for their production'.* It further states that '*the TNA process will not remain a one-time exercise, as many more similar technology assessments will be required, and the capacity of the national teams built through the project will remain relevant and useful for these countries in the future'* (TE, Pg 39).

b) Governance

1. Use of TNA and TAP reports to inform international and sectoral policies

Based on the feedback received during the TE from 25 countries (no feedback was received from 7 countries), 20 (of the 25 that responded) countries reported that TAP and TNA reports were used to inform national and sectoral policies. Examples include: in the form of Intended Nationally Determined Contributions (INDCs) (which form the basis of agreements reached in Paris in December 2015) and Nationally Appropriate Mitigation and Adaptation Actions (NAMAs) (in Vietnam), submissions to ministry of agriculture and sectoral agencies to inform sectoral policies and sectoral action plans (Maldova), national climate change policy (Ghana), national climate change policy (Ghana); for national seminars and workshops (Ivory Coast); national action plans (Mali) and planning for energy efficiency in public buildings (Dominican Republic).

2. Use of TNA and TAP reports in the planning process of national and sectoral policies

19 countries reported actual use of policies - INDCs and piloting NAMAs (Lebanon); Low emissions Development Strategy (Moldova), National Climate Change Action Plan (Thailand), National Action Plan (Mali), use within the energy sector (Rwanda), a National Research programme (Colombia); National Adaptation and Sectoral Plans (Dominican Republic), National Plan on Climate Change (El Salvador)

3. National mechanisms institutionalized to carry on the TNA/TAP implementation

10 (of the 25 reporting countries) countries reported to have established national mechanisms to carry on TNA/TAP implementation. A number of countries (16) reported to have applied for international funding agencies for support for their priorities as determined in the TNA project. 13 reported that financial resources from international sources were allocated to support implementation of priority projects that had been selected. 10 countries reported to mobilize resources to support implementation of priority projects from domestic sources.

8.4 Unintended impacts. Describe any impacts not targeted by the project, whether positive or negative, affecting either ecological or social aspects. Indicate the factors that contributed to these unintended impacts occurring.

None.

8.5 Adoption of GEF initiatives at scale. Identify any initiatives (e.g. technologies, approaches, financing instruments, implementing bodies, legal frameworks, information systems) that have been mainstreamed, replicated and/or scaled up by government and other stakeholders by project end. Include the extent to which this broader adoption has taken place, e.g. if plans and resources have been established but no actual adoption has taken place, or if market change and large-scale environmental benefits have begun to occur. Indicate how project activities and other contextual factors contributed to these taking place. If broader adoption has not taken place as expected, indicate which factors (both project-related and contextual) have hindered this from happening.

As per the TE, the outputs under the project were globally integrated and reported upon by UNFCCC, GEF and Climate Technology Centre and Network (CTCN) and can be said to provide an improved global

vision of technological priorities. The TE found considerable evidence of the take up of the findings through the UNFCCC (as detailed out in the section above on Governance), and not so much outside.

9. Lessons and recommendations

9.1 Briefly describe the key lessons, good practices, or approaches mentioned in the terminal evaluation report that could have application for other GEF projects.

1. Good design is one element amongst number of other factors that affect success and failure of a project. Additional factors include the capacity, skills and efforts made by the people implementing the project, which in this case included the staff at UNEP Partnership with Technical University of Denmark (UDP), Regional Centers and many of the national coordinators and experts involved at the national level.

2. The rigidity with which the budget was implemented, reported to be based on GEF rules for compliance, doesn't allow for the required adaptation to the realties on the ground.

3. Lack of feedback during project execution due to poor functioning of the steering committee, as in this particular case, could hinder the achievement of project outcomes in an effective and efficient manner.

4. For a multi-country global project such as the current project, the context, priorities and capacities of participating countries would invariably vary. Their heterogeneity requires a degree of adaptation of the support services provided by the project by implementing agencies such as the UNEP DTU and its technical partners. In addition, an assessment of the national contexts and capacity assessment should be conducted early on so that additional support could be provided to address the specific needs.

5. In a multi country project, mechanisms where countries can learn from each should be encouraged.

6. Multi-stakeholder processes need special attention and resources for their management in order to provide the positive feedback and effective governance required given that the stakeholders usually have different priorities.

7. Efforts to increase the efficiency must be balanced against the incremental costs and efforts required to maximize the effectiveness. This evaluation provides examples of increased effectiveness if some countries could have been assisted further, if the overall design and execution had greater flexibility to adapt to circumstances during execution, if additional resources could have been added at the margin, and if they had been available for the workshops for lesson learning between countries and the Project Steering Committee.

9.2 Briefly describe the recommendations given in the terminal evaluation.

For the Project Team and UNEP-UDP

1. Recognize and reach out to ongoing /completed projects on technology for climate change funded by UNEP, GEF and others, which can provide concrete lessons for TNA.

2. Work with UNFCCC to ensure all TNA reports are also available at the UNFCCC website - Link to communication/ public awareness in the section on factors affecting performance.
3. Explore options with the key partners–countries and regional centers and the stakeholders to enhance and improve dissemination of key issues, public policy and coverage about technology issues related to climate change in more and different forums, including the mass media by providing relevant information, promoting evidence-based results of government and international programing and contributing to on-going needs for public policy formulation; explore additional options to find ways of influencing and engaging with civil society and academics on the issues.
4. Commit to a minimum agenda (could be very brief and periodic) for following up on the core outputs, resulting outcomes and examples of successful programs emerging out of the TNA efforts.
5. Review with UNEP DTIE and GEF on possible reallocations for the current budget for TNA Phase II, to ascertain the degree to which the GEF rules do allow for flexibility during execution of approved projects to take into account real experience and facts on the ground.
6. Examine the possible value of engaging external technical reviewers of the work done, for example in mid-term reviews, which would cost more than the current practice but can provide additional perspectives, complementing the useful project monitoring systems in place.
7. Make efforts towards a revitalized steering committee to improve strategic decision making in this highly complex project.
8. In any discussions of technological change and innovation pay greater attention to the broader economic and financial barriers for example the effects of subsidies and to "unintended consequences", which loom larger when a new technology is engaged at scale.
9. The issue of linkages between countries, increasing opportunities for learning between countries, linking to regional and global networks for knowledge, information, technology and finance areas area for the subsequent TNA Phase II to pay greater attention to.

TNA Participating Countries (to be incorporated in Phase II of the TNA project):

1. Countries involved in Phase II should note that many of the factors for greater national value are in their control. At the project level they include integration of such work within national decision making and climate change structures, energetic leadership at an appropriate national level with access to senior officials and to a wide range of ministries and departments, and a reasonable provision for national resources to complement the external finance.
2. Follow up at the national level after the project ends is also critical for the use of the outputs in national planning, financing and programming.

UNEP and GEF

1. UNEP FMO must work together with GEF and project team to ensure that all information on available financial resources to the project, both as provided in the GEF grant and also as co-financing are provided to the project managers in a transparent manner.

10. Quality of the Terminal Evaluation Report

A six point rating scale is used for each sub-criteria and overall rating of the terminal evaluation report (Highly Satisfactory to Highly Unsatisfactory)

Criteria	GEF IEO comments	Rating
To what extent does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives?	The report covers an assessment of outcomes and impacts with adequate details and supporting evidence.	**S**
To what extent is the report internally consistent, the evidence presented complete and convincing, and ratings well substantiated?	The report is more of less consistent except few places where the evidence presented is contradictory. It could be due to the challenge involved in consolidating evidence from various countries with different context and project implementation experience. For instance, the report notes tight budget as one of the constraints. At the same time, it reports that some funds were returned to GEF due to unspent balance, without explaining the details.	**MS**
To what extent does the report properly assess project sustainability and/or project exit strategy?	The sustainability section of the TE is complete with evidence and sufficient details.	**S**
To what extent are the lessons learned supported by the evidence presented and are they comprehensive?	Except for a few, most of the lessons are presented in a comprehensive way and backed up by evidence.	**MS**
Does the report include the actual project costs (total and per activity) and actual co-financing used?	Although TE contains information on the budget and actual cost of the project but it doesn't provide any details on co-financing. It notes that full co-financing was released without providing the breakup from different contributors. It could be that this information was not provided to the evaluators from the project.	**MU**
Assess the quality of the report's evaluation of project M&E systems:	The TE doesn't contain adequate information or analysis of the M&E systems due to which this TER was unable to assign ratings to this section.	**U**
Overall TE Rating		**MS**

11. Note any additional sources of information used in the preparation of the terminal evaluation report (excluding PIRs, TEs, and PADs).