COUNCIL FOR DEVELOPMENT & RECONSTRUCTION
BEIRUT - LEBANON

No.: 3344/1

Beirut, 1/7/2011

Mr. Robert Watkins
Resident Representative
United Nations Development Programme
Arab African Int'l Bank bldg
Riad el-Solh str.,
Beirut, Lebanon

Dear Mr. Watkins,

We refer to the "*Technology Needs Assessment Project in Lebanon – Project ID: /00078921/*" and attach two (2) approved and signed original copies of both the Project Document and the Annual Workplan.

Please note that we have retained one original copy for our files.

Looking forward to a continued collaboration and a successful initiation of this important project, we remain,

Sincerely yours,

Council for Development and Reconstruction

REPUBLIC OF LEBANON • COUNCIL FOR DEVELOPMENT & RECONSTRUCTION •

Nabil A. El Jisr
President

Enclosure

Ec
cc. RS

UNDP OFFICE - BEIRUT
FILE: 00078921
07 JUL 2011
INFO: RRai
ACTION: JS

Project Document

Project Title:	Technology Needs Assessment
UNDAF Outcome(s):	Increased effective response to climate change reflected in national programme and external assistance programmes
Expected CP Output(s):	Climate change considerations mainstreamed in national priorities Technology needs for adaptation and mitigation of climate change assessed and technology action plan prepared and disseminated.
Responsible Party:	United Nations Development Programme
Implementing Partner:	Ministry of Environment

Decision 2/CP4 requests GEF to provide funding to developing country Parties to enable them to identify and submit to the COP their prioritized technology needs. Following a first round of Technology Needs Assessments (TNAs) conducted from 2000 to 2004 in 92 countries, the GEF allocated USD 50 million to support 35 to 45 countries to carry out improved Technology Needs Assessments within the framework of the UNFCCC. Lebanon has been selected to take part of this exercise. UNDP Lebanon was approached to implement the project with an allocated budget of USD 120,000.

The objective of the current project is to improve the assessment of technology needs, 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 EST.

The assessments will involve amongst others in-depth analysis and prioritization of technologies, analysis of potential barriers hindering the transfer of prioritized technologies as well as issues related to potential market opportunities at the national level. National Technology Action Plans (TAPs) agreed by all stakeholders at the country level will be prepared consistent with both the domestic and global objectives. Each TAP, which will outline essential elements of an enabling framework for technology transfer consisting of market development, institutional, regulatory and financial measures, and human and institutional capacity development requirements, will also include a detailed plan of action to implement the proposed policy measures and estimate the need for external assistance to cover additional implementation costs. Targeted training and supporting materials related to methodology for prioritization of technologies, market assessment, access and links to data on technologies will be developed and tested and made available to all participant countries.

Programme Period:	2011- 2012
Atlas Award ID:	00061088
Atlas Project ID:	00078921
Start date:	June 2011
End Date	September 2012
PAC Meeting Date	12 April 2011
Management Arrangements	NIM

Total resources required	120,000 USD
Total allocated resources:	120,000 USD
UNDP F&A 7%:	7,850 USD

Agreed by Ministry of Environment

Agreed by CDR

Agreed by UNDP 10.6.2011

Republic of Lebanon * Ministry of Environment *

REPUBLIC OF LEBANON * COUNCIL FOR DEVELOPMENT & RECONSTRUCTION *

I. SITUATION ANALYSIS

Technology transfer has been under focus since the Rio Summit in 1992, where issues related to technology transfer were included in Agenda 21 as well as in various articles of the UNFCC Convention. This was concretized in Decision 2/CP4 where the GEF was required to provide funding to developing country Parties to enable them identify and submit to the COP, their prioritized technology needs in particular sectors of their national economies conducive to addressing climate change and minimizing its adverse effects. Subsequently, GEF provided funding to 92 countries, between 2000 and 2004 for the first round of Technology Needs Assessments (TNAs) through its enabling activities phase II (also known as "top-ups") programme. In 2008, GEF proposed the Poznan Strategic Program on Technology Transfer, which was endorsed by COP 14. It consists of three funding windows; (i) technology needs assessments (TNAs); (ii) piloting priority technology projects; and (iii) dissemination of successfully demonstrated technologies. The GEF program has an overall funding of US$50 million to assist 35-45countries in completing this exercise.

Lebanon, having submitted its Initial National Communication in 1999, participated in the first round of TNAs in 2002 where a technology needs assessment of the main sectors contributing to GHG emissions was prepared and disseminated to concerned stakeholders. In 2011, Lebanon has submitted its Second National Communication, which identified the main sources of GHG emissions in the country and the main vulnerable sectors to the impacts of climate change. The report also proposed adequate mitigation and adaptation measures that were prepared with the relevant line ministries as well as public and private institutions.

II. STRATEGY

Project Statement

As part of the GEF Strategic Programme on Technology Transfer, the project provides Lebanon with financial and technical support to carry out improved Technology Needs Assessments (TNA) within the framework of Article 4.5 of the UNFCCC. The project includes the identification of technology needs and the development of national technology action plans for prioritized technologies that reduce greenhouse gas emissions, support adaptation to climate change, and are consistent with national development objectives.

Project Approach

The global project is being implemented by UNEP, through its Division of Technology, Industry and Economics (DTIE), which is responsible for overseeing each country's activities, and provides overall project oversight and strategic coordination. The UNEP Risoe Centre (URC) serves as the executing partner of the project under the overall supervision of UNEP (DTIE).

The new TNA Handbook (as revised by UNDP and UNEP) will guide the project development in terms of methodology and provide a general framework for conducting the TNA.

The TNA project will build on the experiences and best practices from the first round of TNAs and will be based on the active engagement of stakeholders throughout the start-up and implementation period. Various institutions that are the repositories of data and information, and expertise needed for the TNA will be identified and collaborative arrangements will be established to engage them formally.

A prioritization of sectors and technologies, both for mitigation and adaptation, will be prepared in consultation with all stakeholders, followed by the systematic removal of barriers to the accelerated transfer of ESTs. An enabling framework will also be developed including policy, financial, legal and institutional analysis as well as market assessment and mapping. A Technology Action Plan (TAP) will finally be proposed with selected detailed technical proposals.

The TNA report will be submitted to the concerned ministries that would seek the political endorsement of the TAP from the relevant forum, with the view to get its recommendations subsequently integrated in the appropriate national policies and plans.

The project will include two (2) main workshops: The inception workshop for launching the TNA process and the final workshop for outreach and dissemination. Regional capacity building workshops for sharing experiences with other countries involved in the TNA project in the region will also be planned by the URC and regional technical centres for the TNA Coordinator and selected National Consultants / experts.

III. RESULTS AND RESOURCES FRAMEWORK

Intended Outcome as stated in the Country Programme Results and Resource Framework:
Climate change considerations mainstreamed in national priorities

Outcome indicators as stated in the Country Programme Results and Resources Framework, including baseline and targets:
Technology Needs for adaptation and mitigation of climate change assessed and technology action plan prepared and disseminated.

Project title and ID (ATLAS Award ID 00061088): Technology Needs Assessment 00078921

INTENDED OUTPUTS	OUTPUT TARGETS (YEARS)	INDICATIVE ACTIVITIES	RESPONSIBLE PARTIES	INPUTS
Output 1 **Lebanon's Technology Needs Assessment is updated and a Technology Action Plan is prepared and disseminated.** Baseline: Technology Needs Assessment is not updated Indicators: - Preparation of a TNA report - Preparation of BEE report - Development of a Technology Action Plan - Development of detailed proposals Target: - TNA report - TAP report available to all stakeholders.	**Targets (2011)** - Project coordinator recruited (Q3) - Inception workshop done (Q3) - Consultants recruited (Q4) **Targets (2012)** - Prioritized TNA report prepared (Q1) - TAP prepared and disseminated (Q2) - Final workshop done (Q3)	**Activity 1: Project Coordination and Procurement** - Recruitment of Project coordinator - Procurement of consultants **Activity 2: Prioritized TNA report** - Hold national inception workshop - Prioritize sectors and technologies and prepare TNA report - Analyse barriers and develop enabling framework for deployment and diffusion of prioritised technologies **Activity 3: Technology Action Plan (TAP)** - Prepare the TAP - Develop proposals for selected projects - Conduct consolidation workshop	UNDP	120,000 USD

IV. ANNUAL WORK PLAN

EXPECTED OUTPUTS	PLANNED ACTIVITIES	2011		2012			PLANNED BUDGET						
		Q3	Q4	Q1	Q2	Q3	Fund	Donor	B/A	Budget Description	Amount 2011 (USD)	Amount 2012 (USD)	Total
Output 1 Updated Lebanon's Technology Needs Assessment and a Technology Action Plan is prepared and disseminated.	**Activity 1: Project Coordination and Procurement**												
	Project management	x	x	x	x	x	30000	11635	71400	Contractual Services-Ind.	3,450	10,350	13,800
									74500	Miscellaneous Expenses	3,975	10,375	14,350
	Procurement of consultants		x				30000	11635	71300	Local consultants	25,200	58,800	84,000
	F&A 7%	x	x	x	x	x	30000	11635	75100	Facilities and administration	2,283.75	5,566.75	7,850
	Total										34,908.75	85,091.75	120,000

V. MANAGEMENT ARRANGEMENTS

1. The Project will be implemented under the UNDP Support to National Implementation Modality (NIM), whereby the Ministry of Environment will be the implementing partner and UNDP will act executing agency.

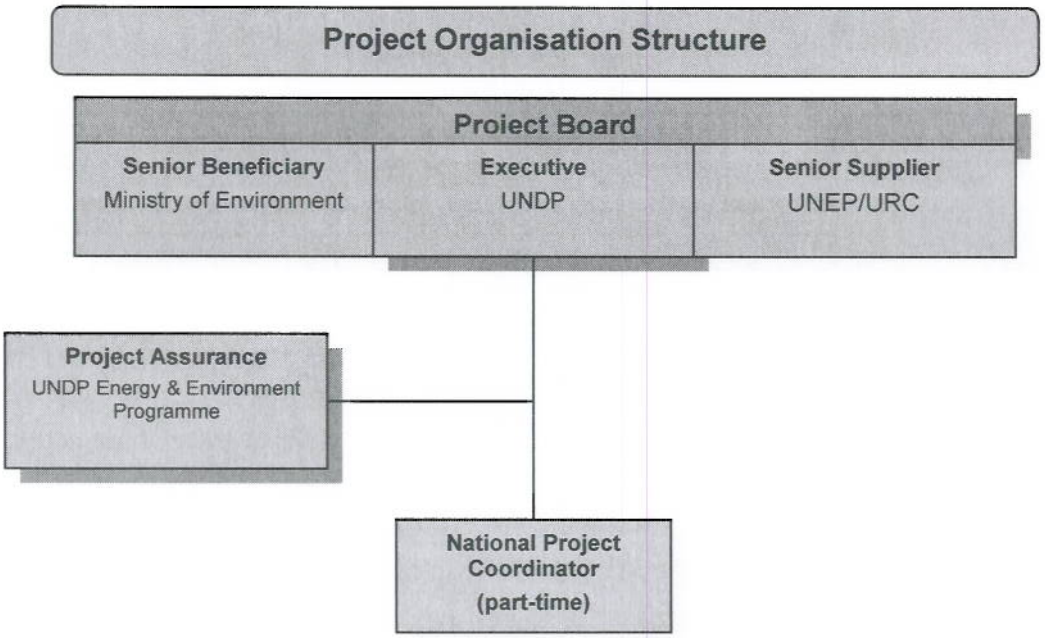
2. The objectives of the Project detailed in this UNDP project document relate to the national activities that will be implemented by UNDP Lebanon Country Office, based on UNDP's rules and regulations. The remaining project activities will be implemented directly by UNEP RISO centre in coordination with the Ministry of Environment as detailed in the UNEP project document annexed herewith (Annex C – UNEP Project Document).

3. UNDP will continue to ensure high-quality technical and financial implementation of this component of the project and will be responsible for monitoring and ensuring proper use of all funds to assigned activities, timely reporting of implementation progress as well as undertaking of mandatory and non-mandatory evaluations for each of their respective components. The project structure is elaborated below. All services for the procurement of goods and services, and the recruitment of personnel shall be provided in accordance with UNDP procedures, rules and regulations.

4. **Project Board** will be responsible for making by consensus, management decisions for the project when guidance is required by the Project coordinator, including recommendation for UNDP/Implementing Partner approval of project plans and revisions. In order to ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance to standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition. In case a consensus cannot be reached within the Board, final decision shall rest with the UNDP Programme Manager. The Project Board shall meet every 6 months or more if needed.

5. **Project Coordinator**: The Project Coordinator has the authority to run the project on a day-to-day basis on behalf of the Implementing Partner within the constraints laid down by the Board. The Project Coordinator is responsible for day-to-day management and decision-making for the project. The Project Coordinator's prime responsibility is to ensure that the project produces the results (outputs) specified in the project document, to the required standard of quality and within the specified constraints of time and cost.

6. **UNDP reporting**: the reporting related to the UNDP component of the project will follow UNDP's financial reporting system; however, this will cater to the maximum extent possible to the UNEP requirements and as detailed in the Letter of Agreement signed between UNDP and UNEP Risoe Centre.


Project Organisation Structure
Project Board
Senior Beneficiary
Ministry of Environment
Executive
UNDP
Senior Supplier
UNEP/URC
Project Assurance
UNDP Energy & Environment Programme
National Project Coordinator
(part-time)

QUALITY MANAGEMENT FOR PROJECT ACTIVITY RESULTS

OUTPUT 1: Technology Needs for adaptation and mitigation of climate change assessed and technology action plan prepared and disseminated.		
Activity Result 1	**Project Coordination and Implementation**	Start Date: June2011 End Date: September 2012
Purpose	*To coordinate the national project activities and procure the required consultants*	
Description	This is the component for which UNDP Lebanon is responsible for within the overall project. The activity will involve the recruitment of a national project coordinator and the procurement consultancy services based on the needs assessment undertaken by the UNEP Risoe centre.	
Quality Criteria	**Quality Method**	**Date of Assessment**
Terms of reference written in line with project needs	Review of terms of reference specifications	Q3 2011
Financial and technical proposals received for consultancy services	Review of technical financial offers for bids	Q3 2011

VI. LEGAL CONTEXT

This project document shall be the instrument referred to as such in Article 1 of the SBAA between the Government of Lebanon and UNDP.

Consistent with the Article III of the Standard Basic Assistance Agreement, the responsibility for the safety and security of the executing agency and its personnel and property, and of UNDP's property in the executing agency's custody, rests with the executing agency.

The executing agency shall:

a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;

b) assume all risks and liabilities related to the executing agency's security, and the full implementation of the security plan.

UNDP reserves the right to verify whether such a plan is in place and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement.

The executing agency agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

VII. ANNEXES

ANNEX A – RISK LOG

#	Description	Date Identified	Type	Impact & Probability (1= low, 5=high)	Countermeasures / Management response	Owner	Submitted, updated by	Last Update	Status
1	Security Situation in Lebanon	Project initiation date	Political	I = 5 P=3	Political changes may delay the initiation of the project at all levels, including administrative, financial and other	MoE			
2	Political instability and security situation in Lebanon	Project initiation date	Political	I = 3 P= 3	Political changes may delay the implementation of the project at all levels, including administrative, financial and other	UNDP			
3	Coordination and cooperation	Project initiation date	Medium	I = 3 P=2	The project has 3 partners and it will be important to maintain close cooperation with the partners. This will be achieved by regular coordination meetings between the partners and additionally UNDP, to assess progress and discuss areas of concern.	UNDP			

ANNEX B – DRAFT TORs OF NATIONAL PROJECT COORDINATOR – PART-TIME (MAY BE CHANGED PRIOR TO RECRUITMENT)

Under the guidance and supervision of the Ministry of Environment Climate Change Advisor (CCA), the project coordinator is responsible for day-to-day management, guidance, coordination and the implementation of all the activities of the project. The Project Coordinator's prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost.

I. Functions / Key Results Expected

Management tasks

- Working according to UNDP management procedures while being in-line with and understanding the directives of the URC and the MoE;
- Assist the CCA in ensuring timely reporting as per UNDP and URC reporting requirements, in addition to regular reporting to MoE;
- Assist the CCA in preparing detailed work plan with clear objectives, activities, deliverables, budget, final outputs and detailed schedule of milestones;
- Assist the CCA in developing the scope of the work and TORs for the recruitment of experts and consultants;
- Assist the CCA in the management of the material and financial resources provided for the project such as equipment, budget, balance sheets, etc.;
- Prepare contractual documents (consulting contracts, staff employment agreements, sub-contracts, and procurement) in adherence with UNDP requirements;
- Prepare non-classical mass communication activities needed during the project;
- Coordinate and follow-up the work of national experts and institutions (in consultation with the CCA);
- Review the submitted draft and final reports and ensure that they are in compliance with the TNA guidelines;
- Draft correspondence in English and/or Arabic, and follow up on correspondence;
- Maintain an up-to-date filling structure for all documents activities of the project;
- Carry out secretariat duties in meetings and draft minutes of meetings;
- Follow-up financial matters with the UNDP - country office;
- Any additional tasks that falls within the direct and indirect scope of the project requested by the Ministry of Environment or UNDP.

Technical tasks

- Assist the CCA in setting-up guidelines for referencing data sources and archiving information for the reports and related project activities;
- Assist the CCA in identifying institutions for data and expert support and facilitating communication and information acquisition;
- Assist the CCA in establishing a network of stakeholders and clarifying roles and extent of involvement of stakeholders;
- Assist the CCA in ensuring synergy of the TNA with other relevant on-going / new projects and MoE and Government policy;
- Liaise with the relevant public administration, national and international research institutes, NGOs, and other relevant institutions in order to involve their staff in project activities, and to gather and disseminate information relevant to the project;
- Organize workshops and working sessions for identified stakeholders;
- Participate in regional capacity building workshops organized by URC, technical regional centers or any other organization as relevant to the project.

II. Qualifications

- Bachelor degree in environmental engineering, sciences or other closely related disciplines with 3 years of relevant work experience; previous experience in with public administration, development partners and the United Nations system is a plus;
- Good understanding of Lebanon's environment, climate change and development issues;
- Excellent interpersonal and communication (Written and Oral) skills;
- Excellent analytical and drafting skills in English and Arabic;
- Ability to perform a variety of standard tasks related to screening and collecting of project documentation, projects data entering, preparation of revisions, filing, provision of information
- Lebanese National

ANNEX C –UNEP PROJECT DOCUMENT

Statement of Work
"Technology Needs Assessment Project"

1. Background

Technology transfer has been under focus since the Rio Summit in 1992, where issues related to technology transfer were included in Agenda 21 as well as in Articles 4.3, 4.5 and 4.7 of the UNFCCC Convention. These were subsequently discussed in COP 1 in Berlin and COP 4 in Buenos Aires with Decision 2/ CP4 requiring GEF to provide funding to developing country Parties to enable them identify and submit to the COP, their prioritized technology needs, especially as concerns key technologies needed in particular sectors of their national economies conducive to addressing climate change and minimizing its adverse effects. Following this GEF provided funding to 92 countries between 2000 and 2004 for the first round of Technology Needs Assessments (TNAs) through its enabling activities phase II (also known as "top-ups") programme. The processes followed by various countries in the first round of TNA were diverse and, for the most part, the end results lacked implementable actions. UNDP produced a TNA handbook in 2004, but it saw limited use as many countries had already finished their TNAs by then. COP 13 in Bali asked the Expert Group on Technology Transfer (EGTT), UNDP, and UNEP to update the handbook. Also, in response to COP 13 request, GEF proposed the Poznan Strategic Program on Technology Transfer, which was endorsed by COP 14. It consists of three funding windows; (i) technology needs assessments (TNAs); (ii) piloting priority technology projects; and (iii) dissemination of successfully demonstrated technologies. The GEF program has an overall funding of US$50 million.

The current Global TNA project, deriving from window (i) of the Strategic Program on Technology Transfer, is designed to support 35 to 45 countries to carry out improved Technology Needs Assessments within the framework of the UNFCCC. The assessments will involve amongst others in-depth analysis and prioritization of technologies, analysis of potential barriers hindering the transfer of prioritized technologies as well as issues related to potential market opportunities at the national level. National Technology Action Plans (TAPs) agreed by all stakeholders at the country level will be prepared consistent with both the domestic and global objectives. Each 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, will also include a detailed plan of action to implement the proposed policy measures and estimate the need for external assistance to cover additional implementation costs. Targeted training and supporting materials related to methodology for prioritization of technologies, market assessment, access and links to data on technologies will be developed and tested and made available to all participant countries. Experiences gained during the project implementation will be shared amongst participating countries to enhance cross-country learning. The project will also help provide feedback to fine tune methodologies and contribute to the revision of the new TNA Handbook through an iterative process involving the national project partners and regional centres of excellence.

The project is being implemented in two rounds, with 15 countries in the first round and the remaining 20 to 30 countries in the second round.

2. Project Objectives

The purpose of this TNA project is to assist participant developing country Parties identify and analyze 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 UNFCCC 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. The objectives thus are;

- To identify and prioritize through country-driven participatory processes, technologies that can contribute to mitigation and adaptation goals of the participant countries, while meeting their national sustainable development goals and priorities (TNA).
- To identify barriers hindering the acquisition, deployment, and diffusion of prioritized technologies.
- To develop Technology Action Plans (TAP) specifying activities and enabling frameworks to overcome the barriers and facilitate the transfer, adoption, and diffusion of selected technologies in the participant countries.

The intention is that assisted countries go beyond identifying technology needs narrowly and develop national technology action plans for prioritized technologies that reduce greenhouse gas emissions, support adaptation to climate change, and are consistent with national development objectives.

3. Institutional Framework

There is a guidance note on the institutional arrangements available at <http://tech-action.org//Guidebooks/OrganizingNationalTNAprocess.pdf>. Lebanon is encouraged to go through this, adapt it to its conditions, and come up with an appropriate institutional structure. The essential elements of the institutional arrangement within Lebanon include a National TNA Committee, Sectoral / Technology workgroups, National Consultants /Experts and a TNA Coordinator.

4. Activities and Deliverables

UNEP Risoe Centre (URC) will in general get in touch with the Ministry of Environment – Lebanon (focal ministry) which will then be responsible for initiating the process within Lebanon.

4.1 Appoint a TNA Coordinator and establish the National TNA Committee

Description and rationale of the activity

The focal ministry will appoint a TNA Coordinator and establish a National TNA Committee. The description of the tasks of both has been already covered in the section on "Institutional Framework".

Responsibility

The focal ministry responsible for TNA Project in the country

Deliverable

Contact coordinates of the TNA Coordinator and the National TNA Committee composition

4.2 Organise stakeholders[1]

Description and rationale of the activity

The experiences and best practices from the first round of TNAs call for active engagement by an organized community of stakeholders throughout the start-up and implementation period. The process of stakeholder organization, to be led by the TNA Coordinator, will include the following key steps (or sub-activities):

4.2.1 *Identify and establish a network of stakeholders*

Stakeholders are central to the TNA process because they will be intimately involved in any implementation. Identifying stakeholders is therefore important. They could include government departments with responsibility for policy formulation and regulation (e.g. power supply) and vulnerable sectors (e.g., agriculture), private and public sector industries, associations, electric utilities and regulators, technology users and/or suppliers within private sector, finance, households, small business, farmers (who are end users for selected technologies / options), relevant institutions (universities, consultants, etc.) and others (international organizations, donors). A network of stakeholders needs to be established to carry forward an implementation plan after completion of the project.

It is important to note that in many instances it has proved to be a good practice to work with two groups of stakeholders: a core group of direct participants and a wider group of affected and interested parties. It is therefore important to distinguish activities that will require direct and detailed input from these two groups, as follows:

(i) **The core group (comprised of the national consultants, and the TNA coordinator)** would deal with the most substantive issues of the TNA process such as management, resource assessment, technology costing and preparation of reports and other materials. It may prove effective to set up, during preliminary consultations, sub-teams or sectoral working groups to push ahead in specific areas;

(ii) **The wider group of affected and interested parties** would participate in consultation and engagement activities, such as workshops, public hearings and consultation papers.

The groups should be identified both for mitigation and adaptation. Some members can be common across the two, which would be evident during the identification process.

4.2.2 *Define the goals and objectives of the process in collaboration with the stakeholders*

This involves setting up a transparent process in which the purpose of the TNA is discussed along with the expectations and privileges of stakeholder involvement. Once agreed upon, this will lead to a clear sense of the goals and objectives of the overall TNA effort.

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[1] The TNA handbook indicates the following links provide information on Stakeholder Analysis and other tools for selecting a group appropriate for the problem.

The Overseas Development Institute in the UK provides a range of tools at **http://www.odi.org.uk/RAPID/Tools/Toolkits/Communication/Stakeholder_analysis.html**

and also refers to the following additional resources:

http://www.stsc.hill.af.mil/crosstalk/2000/12/smith.html

DFID Guidance note on how to do stakeholder analysis of aid projects and programs:

www.euforic.org/gb/stake1.htm

http://www.scu.edu.au/schools/gcm/ar/arp/stake.html

http://www.scenarioplus.org.uk/stakeholders/stakeholders_template.doc

4.2.3 *Clarify stakeholder roles*

Defining roles and responsibilities is an important part of the process of stakeholder engagement. The wider group of stakeholders could be up to 20-25 persons at a maximum, of which up to 15 would be involved in any particular sector or technology analysis. In addition, a wider group of affected and interested stakeholders would also be involved. It is important to be flexible and identify activities that will require direct and detailed input from these two groups, and ensure that relative strengths and expertise are utilized as effectively as possible. The **core group** will facilitate the active participation of all relevant stakeholders in the prioritization of technologies, and in discussions on analysing barriers and developing enabling framework for accelerating technology development, deployment and diffusion, and preparing Technology Action Plans.

4.2.4 *Establish an on-going process for stakeholder engagement*

Stakeholders need to be involved in each stage of the process, not merely at the beginning to provide direction and/or at the end to provide approval to the initiatives proposed. Therefore, a mechanism will be set up to ensure adequate and effective stakeholder involvement and consultation from the very beginning of the process. Working with a small core stakeholder groups with regular feedback from wider stakeholder groups can make the process manageable. For example, focus groups for consultation with core group, and workshops / questionnaires for consultation with wider group. A communications and outreach framework for the wide involvement of stakeholders will be designed. Transparency in all decision-making and consultation activity is also required.

Responsibility

TNA coordinator, National Consultants with the help of Sectoral / Technological workgroups

Deliverables

(i) A list of core stakeholders and wider group of stakeholders both for mitigation and adaptation
(ii) Goals and objectives of the stakeholders consultation process
(iii) Stakeholders roles and responsibilities
(iv) Mechanism / process for stakeholder consultations

4.3 Set-up guidelines for the reports and related project activities

Description and rationale of the activity

The TNA best practices reveal that agreeing on a clear set of guidelines (rules and procedures) that may be developed prior to starting the work has shown to be very effective for the TNA process. The guidelines may be developed, for example, for the following:

(a) Guidelines on the structure and contents of the TNA and TAP reports. A suggested report template for the final report will be provided by the URC.
(b) Guidelines for referencing data sources, information sources, etc. This is important for documentation purposes to ensure quality, consistency and overall efficiency when the reports are updated.
(c) Guidelines on archiving information. An information storing system is important as the TNAs are intended to build upon data and information collected by other activities, and generated and processed during the TNA.

Drawing on the TNA handbook and other relevant technical guidance materials, buttressed as needed by advice on request from URC and other appropriate sources, the TNA Coordinator and National Consultants will prepare and draft the guidelines. The TNA Coordinator will then initiate and manage a fast-track consultative process leading to yield an acceptable set of guidelines to which all stakeholders agree to be committed.

Responsibility

TNA coordinator and National Consultants, in consultation with stakeholders

Deliverable

A set of guidelines for report structure, data referencing etc.

4.4 Develop a detailed draft work plan

Description and rationale of the activity

The TNA Coordinator will develop and agree with the team a detailed **draft work plan** with clear objectives, activities, deliverables, budget and final outputs. This may require, as a preparatory activity, review of the TNA and other related work already done in the country- GHG Inventory, mitigation assessment, vulnerability assessment, NAPAs, national plans and strategies etc.

A detailed schedule of milestones for deliverables should be prepared. Overall schedule, milestones and budget have been indicated in this document based on the global document for this GEF project.

Responsibility

TNA coordinator, with the help of the National TNA Committee

Deliverable

Country specific detailed draft work-plan with milestones and deliverables

4.5 Identify institutions for data and expert support

Description and rationale of the activity

It is a good practice to identify various institutions that are the repositories of data and information, and expertise needed for the TNA. Collaborative arrangements with such institutions to engage them formally (through memorandums of understanding or other type of contractual agreement)are very important.

Responsibility

TNA coordinator with the help of National TNA Committee

Deliverable

List of the institutes with whom collaboration finalised for various requirements

4.6 Hold national Inception Workshop and finalize the work-plan based on stakeholders feedback

Description and rationale of the activity

This is to launch the process in the country. The TNA Coordinator will ensure that the workshop design produces maximum outcomes in terms of enhanced awareness and active engagement of a broader group of stakeholders, while generating the needed feedback on the draft work-plan.

The Core Group, in consultation with TNA Committee, will finalise the country work-plan based on feedback from the workshop and in consultation with stakeholders with milestone and deliverables including a mid-term and final national workshops for outreach and dissemination, a mid-term report (TNA) and a final report (TNA+TAP combined).

Responsibility

TNA coordinator, with National TNA Committee

Deliverables

(i) National Inception Workshop report
(ii) Final work-plan

4.7 Participate in the regional Capacity Building and Experience Sharing Workshops

Description and rationale of the activity

The project is designed to provide training on methodology and tools to accelerate the process of TNA preparations. Regional workshops for sharing experiences with other countries involved in the TNA project in the region have also been planned. See the section on "Capacity building, technical support and other support" for more details. The TNA Coordinator, in consultation with the National TNA Committee, depute National Consultants / experts, who would be responsible for delivery of end products (prioritized list of mitigation technologies, prioritized list of adaptation technologies, market assessment and enabling frameworks for mitigation technologies, enabling framework for adaptation technologies, TAP, etc.) to the relevant regional capacity building workshops. The participants to these workshops will also be responsible for providing training to other concerned members, working on these items in the country.

Similarly, appropriate representatives will be deputed to the regional experience sharing workshops to present TNA work experiences in the country and share experiences with other countries.

Responsibility

TNA coordinator and National Consultants

Deliverables

(i) Participation in the regional capacity building workshops
(ii) Participation and presentation in the regional experience-sharing workshop.

4.8 Prioritize Sectors and Technologies for Mitigation and Adaptation

Description and rationale of the activity

A core objective of the project is to enable countries meet their development priorities while maximizing sustainability outcomes, particularly GHG emission reduction and adaptation to climate change. Achieving this objective entails a prioritization of sectors, based primarily on the outcomes of the Second National Communication and technologies, followed by the systematic removal of barriers to the accelerated transfer of environmentally sustainable technologies, as elaborated in the sub-activities described below.

4.9.1 *Prioritizing mitigation technologies*

The process starts with identification of a country's development and sustainability priorities, with particular attention to GHG emission reduction potentials. This is followed by identification of priority sectors by the National TNA Committee on the basis of the GHG emission reduction potential and contribution from low carbon technology investments in these sectors to sustainable development. In general, to keep the exercise within manageable limits (in view of limited budget and time), it is recommended that Lebanon limits the number of sectors between two to three. Once this is accomplished, the National TNA Committee will constitute sectoral / technological working groups consisting of technical experts and practitioners within each of these sectors. The functioning of these working groups would be facilitated by the National Consultants. The National Consultants would first enumerate all the technological options and characterise them in terms of their costs and sustainability impacts (environmental, social and economic). A template for this would be provided by URC. In this exercise the National Consultants would be assisted by regional centres and wherever required requests would be forwarded to URC, which will either provide information on online technological databases or solicit international expertise for this. After this a prioritization of the technologies would be carried out by the group. The prioritization exercise would be done using the Multi Criteria Decision Analysis facilitated by the National Consultant. In this manner low carbon technologies are identified and characterized for the selected priority sectors.

The technologies identified for the priority sectors can also be categorized according to their short or medium to long-term availability and whether their implementation takes places on a small or large scale. The categorization allows a method for a technology strategy to be formulated over time, and assists in identifying key technologies that may not necessarily have the highest priority in the sectors, but would be useful across a number of sectors. Finally, the sector technologies in each category will be prioritized through a multi-criteria decision assessment method.

It is emphasized that this process requires the formation of stakeholder groups and is a participatory Process.

4.9.2 *Prioritizing adaptation technologies / measures*

As in case of mitigation, the process involves prioritizing sectors and developing a portfolio of prioritized technologies for adaptation. Technologies could be hard technologies involving equipment and infrastructure investment, or soft technologies, i.e. insurance schemes and crop rotation for adaptation.

Responsibility

TNA coordinator and National Consultants, with the help of sectoral / technological workgroups (having stakeholders and relevant experts)

Deliverable

Lists of prioritized of technologies for mitigation and adaptation, along with description of the process (including stakeholders engagement) followed.

Note: Detailed methodological guidelines for prioritizing mitigation and adaptation technologies will be provided at the first capacity-building workshop. Besides the methodology covered during the training, draw upon disseminated good practices, experiences and lessons learned by other countries that are more advanced in the TNA process. Lessons from other countries could be used to adapt and modify the approach to suit to national circumstances.

4.9 Prepare the prioritized technologies report (TNA report)

Description and rationale of the activity

This is the mid-term report of the project, signalling end of an important component of the project. It should contain a list of the prioritized technologies, both for mitigation and adaptation with complete project background and methodology, and structured in the format agreed for the project with URC.

Responsibility

TNA Coordinator and the National Consultants

Deliverable

TNA report, containing prioritized list of technologies for mitigation and adaptation, describing the process followed, and in line with the agreed format / structure with URC.

4.10 Carry out market assessment- analyze barriers and develop an Enabling Framework for deployment and diffusion of prioritized technologies

Description and rationale of the activity

Analyse barriers and develop an enabling framework (internal and external) for prioritized technologies. It could include;

- Policy Analysis
- Financial Issues Analysis
- Legal and Institutional Analysis
- Market assessment and mapping, etc.

The output from analysis would be identification of specific actions in these domains to remove barriers. Capacity building workshops will include inputs on market assessment and mapping, including barriers analysis, and development of enabling framework.

Responsibility

TNA coordinator, National Consultants, with help of the Sectoral /Technological workgroups (with stakeholders and appropriate experts)

Deliverables

(i) Market assessment / barriers analysis for the prioritized technologies
(ii) Enabling framework for prioritized technologies, indicating specific actions

4.11 Prepare a Technology Action Plan (TAP)

Description and rationale of the activity

This contains an action plan for deployment and diffusion of identified technologies in the country. Besides action to develop an enabling framework, the plan can contain ideas for projects / well-designed project proposals that come from the priority technologies selected.

Responsibility

TNA coordinator National Consultants, with the assistance of Sectoral /Technological workgroups

Deliverable

TAP in the format agreed for the project with the URC.

4.12 Seek political endorsement and integration of the TAP into national energy policy/development plans

Description and rationale of the activity

This is a bridging action between submission of the TAP and the actual implementation of the TAP. The TNA coordinator along with the National Consultants, will prepare a proposal in consultation with the National TNA Committee, and submit it to the concerned relevant ministry(ies). The ministry of Environment then would seek the political endorsement of the TAP from the relevant ministries. This is with the view to get its recommendations subsequently integrated in the appropriate national policies and plans.

Responsibility

(a) TNA coordinator & National Consultants in consultation with National TNA Committee for preparation of proposal for seeking political endorsement of the TAP and integration of TAP in the appropriate national policies and plans.

(b) Concerned ministry / inter-ministerial committee for seeking political endorsement of the TAP and integration of TAP elements in the plans and policies

Deliverable

(i) Presentation and report on identified elements of the TAP for inclusion in national plans and policies
(ii) Action taken by the concerned ministry / committee.

4.13 Conduct techno-economic appraisal and develop proposals for a few selected projects

Description and rationale of the activity

In case of countries that are in advanced stage of TNAs, some proposals could be developed. Project ideas in brief are covered by TAP. Some of these can be developed further, including the techno-economic appraisal

Responsibility

TNA coordinator, with the National Consultant and other experts

Deliverable

A few selected project proposals

4.14 Prepare and implement official launches of selected (high-profile) project proposals (set of proposals).

Description and rationale of the activity

Mainly a political/ awareness building/ stakeholder support mobilization exercise that puts the TAP into the public domain for subsequent public scrutiny, A few project proposals will be selected, funding accessed and projects officially launched.

Responsibility

Concerned ministry / inter-ministerial committee, with necessary inputs from TNA Coordinator

Deliverables

Report on official launch of a few selected projects.

4.15 Prepare and submit the Final Report

Description and rationale of the activity

The report would contain both prioritized list of technologies, and action plan to deploy and diffuse the technologies. This is the final report, which should combine TNAs and TAPs and report on subsequent actions, including on project proposals and official launches of projects.

Responsibility

TNA Coordinator with the help of National Consultants /Experts

Deliverable

Final project report in the agreed format for the project with URC

5 Budget

An amount of USD 120,000 will be available to support these activities in the country. In addition to this, project would also provide technical support through capacity building workshops, regional workshops, regional centres and URC experts. The countries are expected to provide in kind contribution in the form of staff time for working on this project.

6 Capacity Building and Technical support

A lack of technical support was identified as one of the main lacuna during first round of the TNAs. The current round has been designed to address this shortcoming as well. Capacity building workshops will be conducted in three regions. These will cover approach for prioritization of mitigation and adaptation technologies, market assessment and barriers analysis, and development of an enabling framework, leading to TAPs. Access to technology data will also be facilitated, wherever needed. The project would facilitate access to data by building up a common platform to share data between countries. Countries can identify technical support and capacity building needs and communicate to URC to enable them to address their needs. Technical support will also be provided through regional centres and other experts. Thus, depending on requirements, technical support could include methodological tools (multi criteria tool, Economic analysis, and market assessment tool), UNDP hand-book, training and related guidance documents, and support from regional centres and help desk.

7 Time Frame and Milestones

The activities in countries would require to be completed in 18 months. The second round as per the overall schedule is to start from January 2011 and should be completed by September 2012.