



Submission Form
To
The Lebanon Recovery Fund Steering Committee

To be completed by the Recovery and Reconstruction Cell (RRC)

Meeting No:	Date of Meeting:
Item No:	Programme/project

*(To be completed by the Participating UN Organisation
and endorsed by Working Group Chair)*

To: Lebanon Recovery Trust Fund Steering Committee	Date of Submission: 16 April 2007
From: Government of Spain	Contact: Jesus Santos Aquado Embassy of Spain Palais Chehab Hadath Antounie PoBox 11/3039 Beirut Email: jesus.santos@mae.es
Through: Working Group <input type="checkbox"/> Endorsement <input type="checkbox"/> Comments	Contact: Telephone number, email
Proposed submission, if approved would result in: <input checked="" type="checkbox"/> Continuation of existing programme/project <input type="checkbox"/> New programme/project <input type="checkbox"/> Other (explain)	Proposed submission resulted from: <input type="checkbox"/> National Authorities initiative within national priorities <input type="checkbox"/> UN Agency initiative within national priorities <input checked="" type="checkbox"/> Other: Donor (Spanish Government) initiative within donor sector priorities
Programme/project title: "CEDRO" Community Energy efficiency and renewable energy Demonstration Project for Recovery Of Lebanon (South, Bekaa and Akkar)	
Amount of funds requested for proposed programme/project: 2,500,000 Euros	
Estimated number of beneficiaries: Direct: 50 – 80 public buildings and 3 main district centres Indirect: 250,000 – 300,000 individuals	
Request against specific earmarking or unearmarked: Unearmarked	
Amount of indirect costs requested: 7%: 175,000 Euros	

To be completed by the Participating UN Organisation and endorsed by Chair Working Group

1. Background

As a result of the July 2007 conflict in Lebanon, the energy sector in Lebanon deteriorated significantly, resulting in reduction in electricity supply at a national level which lead to an increase in rationalisation of electricity. Several Lebanese main infrastructure electricity generation plants and distribution substations have been damaged, thus creating much more difficulties on the Lebanese Government represented by Minsitry of Energy and Water (MEW) in meeting the local electricity demand. Ultimately, a reduced electricity supply further deteriorates living conditions in areas already facing high levels of poverty and may also negatively impacts the economic sector through decreased productivity.

The conflict only exacerbated the already existing problematic energy situation faced by the Government of Lebanon. The combined consumption of energy in residential / commercial buildings and industrial plants is high. The potential for energy savings is important in these sectors and presents a considerable percentage of the national energy bill. Lebanon imports around 97% from its needs from fossil fuel and in Year 2004, the national energy bill (Including Transportation Sector) amounted to around 1.6 billion USD (20% form the annual expenditure of the Lebanese Government and around 7.5% from the national GDP). This national energy bill increased in Year 2005 and reached 2.1 billion USD. It is worth noting that the national energy bill excluding transportation represents more than 60% of the total national energy bill.

Accordingly, any national or international effort in promoting energy efficiency and renewable energy in general and in the damaged or under developed rural areas in specific would immediately ease the burdens on the energy sector as well as provide the basis for future integration of energy efficiency and renewable energy solutions and measures within the Lebanese national energy polices and strategies.

The proposed programme is consistent with the European's initiatives in general and with the Spanish Government in specific, which aim at promoting the adoption of energy efficiency and renewable energy technologies and practices in building construction and renovation within Mediterranean countries. Such initiatives will have direct impact on the world energy resources as well as on the world climate change / global warming issues that are becoming the world critical concerns. Countries, such as Spain, that are leaders in energy efficiency and renewable energy technologies would play an essential role in transferring their long gained experience in energy efficiency and renewable energy to other countries, especially in the Mediterranean Basin, which will contribute further direct support to the Lebanese Government during its reconstruction effort.

2. Purpose of Proposed Programme/Project

The objective of the proposed programme is the assistance by the Government of Spain to the Government of Lebanon in its early recovery efforts and in alleviating poverty through the implementation of energy efficiency and renewable energy iniatives. Ultimately, the proposed programme will reduce national energy consumption and costs, and will decrease greenhouse gas (GHG) emissions by introducing and demonstrating new energy and cost efficient approaches in the context of the reconstruction of the war affected zones in Lebanon. An important aspect is the sustainability of the sinstallations implemented in this recovery phase. The use of renewable energy technologies will allow a sustainable development due ot the low costs of the operations and maintenance for the population. This will also result in financial and environmental benefits for local through direct income savings and better living conditions.

3. Evaluation of Proposal

<i>General principles and selection criteria</i>		
(a)	Must be explicitly based on Lebanon's national priorities and needs, as noted in the public domain.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
(b)	Must fall with the UN's mandate, and must address the Millennium Development Goals, directly or indirectly through a human rights-based approach.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
(c)	Must promote and ensure national ownership.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
(d)	Must be at an acceptable level of risk, within UN parameters.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
(e)	Must fall within the areas of UN's comparative advantage.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
(f)	The UN must be an appropriate system to deliver the intervention.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
(g)	The UN response must be properly designed for and within the Sector setting, must be effective, coherent, context-sensitive, and cost-efficient and the outcomes, sustainable.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
(h)	Must avoid duplication of and significant overlap with the activities of other actors.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
(i)	Must build on existing capacities, strengths and experience.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
(j)	Must promote consultation, participation and partnerships.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
If one or more of the above criteria is not met, please explain:		

Implementability

	2007	2008	2009
<i>Estimated commitments (€mill)</i>	2.5	—	—
<i>Estimated disbursements (€mill)</i>	0.7	1.8	—

Does the project correspond to national priorities? Yes No

This project is in line with the Government of Lebanon's early recovery objectives of restoring livelihoods and rehabilitating damaged areas. It also falls within the Ministry of Energy and Water's main priority to meet the national demand for electricity.

Project approved by Line Ministry: Ministry of Energy and Water on 23/4/2007 (date)



4. Review by Recovery and Reconstruction Cell (RRC)

Check on Programme/Project Proposal Format Contents

- | | | |
|--|------------------------------|-----------------------------|
| <input type="checkbox"/> Cover sheet (first page) | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| <input type="checkbox"/> Logical Framework | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| <input type="checkbox"/> Programme/Project Justification | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| <input type="checkbox"/> Programme/Project Management Arrangements | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| <input type="checkbox"/> Risks and Assumptions | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| <input type="checkbox"/> Budget | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| <input type="checkbox"/> Support Cost | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

*Overall review of programme submission
Recommendations*

Elaborate

5. Decision of the LRF Steering Committee

- Approved for a total budget of \$ 2,732,240 USD (equiv. 2,000,000 Euros)**
 Approved with modification/condition
 Deferred

Reason/Comments

Elaborate

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June 12, 2007
Date

6. Follow-up action taken by the Administrative Agent

- Project consistent with provisions of the Letter of Agreement with donors (if applicable)

.....
Signature

.....
Date



**LEBANON RECOVERY FUND
PROJECT DOCUMENT COVER SHEET**

Participating UN Organisation: United Nations Development Agency (UNDP)	Sector: Energy and Environment
Programme/Project Manager Name: Edgard Chehab Address: UNDP Lebanon Telephone: +961 (0)3 240034 E-mail: edgard.chehab@undp.org	Working Group Chair Name: Address: Telephone: E-mail:
Programme/Project Title: "CEDRO" Community Energy efficiency and renewable energy Demonstration Project for Recovery Of Lebanon (South, Bekaa and Akkar)	Programme/Project Location: South Lebanon, Bekaa and Akkar
Programme/Project Description: The project aims at alleviating poverty and supporting early recovery activities through the implementation of a public energy efficiency/renewable energy programme.	Total Programme/Project Cost: LRF: 2,732,240 USD (equiv. 2,000,000 Euros) Government Input: Other: Total: 2,732,240 USD (equiv. 2,000,000 Euros)
	Programme/Project Duration: 2007 - 2008
Development Goal: Supporting early recovery and alleviating poverty through energy efficiency and renewable energy programmes	
Immediate Objectives:	
<ol style="list-style-type: none"> Income saving for communities in conflict damaged and poor rural areas in South Lebanon, Bekaa and Akkar Reducing energy consumption and greenhouse gases Securing of electricity supply in rural areas for public buildings and insituations (hospitals, schools, public lighting, etc.) 	
Outputs and Key Activities:	
The project will install energy efficiency/renewable energy equipment in selected areas based on a comprehensive community needs assessment and will monitor the direct impacts and benefits of the installed equipment for future on the beneficiaries' energy bills to set the basis for future national energy sustainable development.	
Working Group Review Date: _____ RRC Review Date: _____ Steering Committee/Project Approval Group Approval Date: _____	

On behalf of:

Signature /

Date

Name/Title

Chair, LRF SC
UNDP Lebanon

2. Logical Framework

Objectives	Measurable indicators	Means of verification	Important assumptions
<p>Development Objective</p> <p><i>Ensure green recovery and reconstruction programmes that alleviate poverty</i></p>	<p>Decrease in energy consumption/cost at the national level</p>	<p>Comparison of annual energy consumption per GDP</p>	<p>Continued government commitment to energy saving policies and programmes</p>
<p>Immediate Objectives:</p> <p><i>Income saving for communities in conflict damaged and poor rural areas in South Lebanon, Bekaa and Akkar</i></p> <p><i>Reducing energy consumption and greenhouse gases</i></p> <p><i>Securing of electricity supply in rural areas for public buildings and insituations (hospitals, schools, public lighting, etc.)</i></p>	<p>Direct saving on beneficiary energy bills</p>	<p>Surveys of beneficiary energy bills after completion of project</p>	<p>(Immediate Objective to Development Objective)</p> <p>Beneficiaries properly use and maintain the installed equipment</p> <p>Sufficient awareness raising and capacity building achieved to sustain the project</p>
<p>OUTPUTS:</p> <p><i>Installation of energy efficiency/renewable equipment</i></p> <p><i>Energy-related data collection and analysis</i></p> <p>Increase awareness on Energy Efficiency and Renewable Energy on both private and public levels</p>	<p>Number of beneficiaries utilising installed equipment</p> <p>Estimated energy/cost savings and reductions in CO₂ emissions</p> <p>Lessons learned collected</p>	<p>Survey of beneficiaries utilising installed equipment</p> <p>Energy measuring techniques (e.g. measuring equipment/devices) used to collect data</p>	<p>(Outputs to immediate objective)</p> <p>Improper operation maintenance of equipment (e.g. absence of spare parts)</p> <p>Reduction in conventional energy prices (through subsidies or other)</p> <p>Political situation</p>
<p>ACTIVITIES:</p>	<p>INPUTS:</p>		<p>(Activity to output)</p>
<p>1. Undertake needs assessment at community level in project sites (by international and local experts)</p> <p>2. Identify energy efficient/renewable energy beneficiaries (by international and local experts)</p> <p>3. Develop technical project documentation for all identified beneficiaries (by international and local experts)</p> <p>4. Capacity building plan and development of tariff and management schemes to assure sustainability</p> <p>5. Procurement/installation/testing/commissioning of equipment and supervision</p> <p>6. Capacity building and awareness raising</p> <p>7. Data collection and impact analysis</p> <p>8. Evaluation of project</p> <p>9. Project Overhead and management</p>	<p>68,306 USD</p> <p>34,153 USD</p> <p>34,153 USD</p> <p>68,306 USD</p> <p>2,144,809 USD</p> <p>102,458 USD</p> <p>68,306 USD</p> <p>34,153 USD</p> <p>177,596 USD</p>	<p>Report on needs and energy assessments</p> <p>Report on beneficiary identification</p> <p>Set of reference documents for implementation</p> <p>Installations commissioned</p> <p>Organisation of workshops, lectures, one-on-one trainings with the different stakeholders</p> <p>Financial and technical evaluation report</p>	<p>Low level of collaboration from local communities</p> <p>Low acceptance of new technology by local communities</p> <p>Technical short-sightedness or difficulties</p> <p>Delays in equipment delivery</p> <p>Delays in sub-contracted works on site</p>

3. Programme/Project Justification

As a result of the July 2007 conflict in Lebanon, the energy sector in Lebanon deteriorated significantly, resulting in reduction in electricity supply at a national level and an increase in rationalisation of electricity. This only added to the existing energy supply problems faced by Lebanon and further deteriorated the living conditions in the concerned areas.

The reconstruction of the war damaged areas in Lebanon, particularly South Lebanon and the Bekaa, as well as other underdeveloped areas (Akkar) presents a major challenge for the next several years for the Lebanese Government and society at large. At the moment, the main focus is on rapid reconstruction of infrastructure and housing with the limited investment capital available which may neglect or not fully take into account energy efficiency and renewable energy measures for several reasons: time constraints, lack of know-how or capacity of local building designers and constructors, lack of awareness about financial and other benefits of energy efficiency measures, lack of financial resources. The threat posed by such massive and large scale reconstruction efforts is the further dependency on external fossil fuels and increase in CO₂ emissions.

To date, Lebanon does not have dedicated demonstration schemes or special incentives that promote energy efficiency and renewable energy initiatives. Furthermore, capacity among relevant governmental and private entities to plan energy efficiency and renewable energy options and interventions is considerably underdeveloped.

The proposed programme is consistent with the European's initiatives in general and with the Spanish Government in specific, which aim at promoting the adoption of energy efficiency and renewable energy technologies and practices in building construction and renovation within Mediterranean countries. Such initiatives will have direct impact on the world energy resources as well as on the world climate change / global warming issues that are becoming the world critical concerns. Countries, such as Spain, that are leaders in energy efficiency and renewable energy technologies would play an essential role in transferring their long gained experience in energy efficiency and renewable energy to other countries in the Mediterranean Basin which will contribute further direct support to the Lebanese Government during its reconstruction effort.

Therefore, the proposed programme shall be assistance to the Government of Lebanon in implementing energy efficiency and renewable energy projects to support the early recovery programme and to reduce national energy consumption and costs. This will ultimately result in a decrease in greenhouse gas (GHG) emissions by introducing and demonstrating new energy and cost efficient approaches in the context of the reconstruction of the war affected zones in Lebanon. The programme is also envisaged to support the overall market transformation towards energy efficiency and the use of decentralized renewable energy technologies. The proposed programme will also set the ground for future Energy Efficiency and Renewable Energy programmes.

The Ministry of Energy and Water does not have any official national organization or institute which overviews and develops the energy efficiency market from various aspects. However, the Lebanese Center for Energy Conservation Project (LCECP), which is a joint project between Ministry of Energy and Water (MEW) and United Nations Development Programme (UNDP), has an essential role to play in development of the Lebanese energy efficiency and renewable energy market and has successfully implemented similar energy efficiency and renewable energy projects in Lebanon including installation of 450 solar water heater units in early 2006, and recently initiating the installation of individual and collective solar water heater systems in conflict damaged areas in Lebanon as part of the early recovery programme. On the other hand, UNDP is also currently working in various sectors within the early recovery programme through its wide network of offices and projects distributed throughout Lebanon. Several countries have participated in UNDP early recovery and reconstructions programme and committed to \$16.0 million to UNDP for early recovery interventions and additional resources are currently under negotiation

4. Management Arrangements

Implementation Arrangements

The following implementation arrangements will be undertaken:

1. Detailed quick community needs assessment will be conducted in the areas of South Lebanon, Bekaa and Akkar will be undertaken by UNDP, MEW and specialised international technical assistance
2. UNDP, MEW and the Donor Country will develop and agree upon the beneficiary selection criteria and process as well as on the villages to be nominated as beneficiaries from this programme within the specified areas.
3. Based on the criteria, the implementation sites will be selected and include the following preliminary interventions:
 - i. Solar Water Heaters for Hospitals, schools, and public buildings
 - ii. Solar Photovoltaic for external street lighting within certain municipalities
 - iii. Energy Efficiency Lamps for public buildings such as schools, hospitals, municipalities, etc...
 - iv. Thermal Insulation for public buildings mainly the roofs of the buildings
 - v. Implementation of Energy Audit studies carried out by LCECP for public buildings and municipalities
 - vi. Securing electricity supply based on PV for public buildings
 - vii. Others as might be deemed necessary
4. Develop technical project documentation for all identified beneficiaries which will include:
 - i. design and engineering
 - ii. equipment specification
 - iii. installation requirements
 - iv. Testing and commissioning procedures
 - v. Monitoring and verification methods
 - vi. Others as might be deemed necessary
5. Based on the technical documentation, an international competitive bid will be undertaken to purchase the required equipment and installation services.
6. A general capacity building programme on energy efficiency and renewable energy issues aimed at local level policy makers/decision makers will be developed, and a specific technical training programme on installation, operation and maintenance procedures catered to local engineers and technicians will be developed. This programme will be implemented during the various implementation stages to ensure the sustainability of the programme.
7. In parallel, general public awareness raising on energy efficiency and renewable energy technologies and direct benefits will be disseminated.
8. Data and information from the beneficiary sites will be collected before and after project implementation to analyse the impact of this programme on energy consumption and costs. This will provide key energy indicators that can be used to assist in the development of the national energy efficiency and renewable energy strategy which may be supported by future funding.
9. Continuous technical follow-up and monitoring by UNDP, MEW and LCECP will be undertaken during the various implementation phases to ensure the objectives of the programme are met and lessons learned are documented.
10. UNDP will financially monitor and report on all disbursements of the programme and will ensure continued reporting to the Government of Lebanon and the Donor Country. Financial disbursements will be based on UNDP procedures.

Project Timeframe

The implementation of the proposed programme is 1.5 years.

Project Partners

The programme shall involve several concerned parties to ensure proper implementation of the programme's phases. These parties are the following:

- **Government of Spain, AECI and other Spanish Energy Agencies:** Donor country and international technical backstopper to the proposed programme
- **United Nations Development Programme :** Implementation agency (technical, management, supervision) of the proposed programme
- **Ministry of Energy and Water :** Decision maker and direct beneficiary of the proposed programme
- **Lebanese Centre for Energy Conservation Project (LCECP) :** Local Technical Agency Executing the proposed programme
- **International Energy Experts :** International Experts providing technical services during the programme phases assigned by AECI/UNDP
- **Local Energy Experts :** National Experts providing technical services during the programme phases identified by LCECP / UNDP
- **Public Beneficiaries :** National public institutes or entities and individuals benefiting from the proposed programmes

5. Analysis of risks and assumptions

Since energy efficiency and renewable energy programmes and projects are relatively new approaches to the Government of Lebanon and to the general Lebanese public, the proposed programme may face some barriers and risks to proper implementation.

These barriers and risks that might face the proposed programme can be summarized as follows:

- a- Improper operation and maintenance of the installed energy efficiency and renewable energy equipment by the beneficiaries
- b- Low level of collaboration by the local communities during the programme implementation
- c- Low level of acceptance of the new installed technologies by local communities
- e- Insufficient funds to implement the proposed programme especially after the detailed needs assessment outcomes

On another level, the proper use, operations and maintenance of the installed equipment is necessary to ensure programme continuation. The proper implementation of the project through qualified national and international personnel, including adequate technical capacity building and awareness raising activities, will minimise the impact of the above listed risks.

In addition, continued or additional energy subsidisation by the Government of Lebanon may pose a risk to the continued adoption of this programme. Any changes in the political situation in Lebanon can also not be neglected. Both of these risks are beyond the control of the proposed programme.

6. Programme/Project Budget

The budget would utilise the Standard Format agreed by UNDG Financial Policies Working Group.

CATEGORY	ITEM	UNIT COST	NUMBER OF UNITS	TOTAL COST (USD)
1. Personnel Incl. staff and consultants				170,765
2. Contracts Incl. companies, professional services, grants				102,458
3. Training				47,814
4. Transport (local)				13,661
5. Supplies and commodities				13,661
6. Equipment (including installation)				2,144,809
7. Travel				27,322
8. Miscellaneous				34,153
9. Agency Management Support (7%)*				177,596
TOTAL				2,732,240

The original proposal budget submitted on 16 April 2007 to the LRF was expressed in Euros and was in the amount of 2.5million Euros. Based on the LRF steering committee decision taken during its second session on 07 May 2007, the budget was revised down to 2.0 million Euros. Accordingly, the budget was revised and expressed as an equivalent amount in US dollars (total of 2,732,240 USD) using the UN rate of exchange prevailing at the time of the LRF Steering Committee meeting (0.732Euros).