Annex -1-

Terms of Reference (TOR)

Project Name: CEDRO 4

Reference Number: 00088302 and 00090039

Subject: Econometrician

1. Background

The United Nations Development Programme, in partnership with the Ministry of Energy and Water, has initiated the fourth phase of the CEDRO (Community Energy Efficiency and Renewable Energy Demonstration Project for Lebanon) Programme (CEDRO 4) funded by the European Union. The CEDRO 4 project includes several sustainable energy projects that are designed to promote related renewable and energy efficiency systems and policies.

The UNDP, through support to the "Lebanon – Support to Economic Recovery, Community Security and Social Cohesion in Lebanse Communities Affected by the Syrian Crisis Program" has initiated a project of energy supply for host communities funded by the Netherlands Ministry for Foreign Trade and Development Cooperation, in partnership with the Ministry of Energy and Water.

As part of the above project, the impact of energy blackouts across the various households (of vulnerable and other income groups) in the country and how this impacts/influences these households ability and willingness to pursue more sustainable options is required in order to better align policies and programs to achieve a more sustainable energy system.

To this end, an econometric expert is required to assist the CEDRO project in evaluating the results of a two previous and two ongoing surveys on host communities and assisting in setting up a survey for general Lebanese households.

2. Scope of Work, Responsibilities and Description of the Proposed Work

The tasks that are to be expected from the consultant are;

- Task 1. Review the results of the ongoing survey on rural electrification in Lebanon, and establish the proper methodological approach for regression analysis. Provide recommendations for improving the survey (additional variables, sample size, data types, etc.)
- Task 2. Review the survey on 3 existing and ongoing data sets on energy consumption habits of Lebanese households being prepared by CEDRO and align the survey approach and structure to ensure non-bias and conformity with appropriate approaches for regression analysis
- Task 3. Undertake regression analysis for both surveys (3 data sets), undertake an analysis of the results and prepare a narrative report with clear results (report on findings) as to the relevance of various independent variables with the overall outcomes of the study

3. Qualifications Required

The Individual Consultant should possess the following minimum qualifications:

a. Academic Qualifications:

- Bachelor's degree in statistics and econometrics
- Master's degree in econometrics is desirable

b. <u>Years of Experience</u>:

- Relevant experience of not less than 7 years

c. <u>Competencies</u>:

- Strong analytical and report-writing skills
- Excellent interpersonal and communication skills
- Commitment to team and cross-disciplinary work
- Emphasis on delivery of results and reacts well to constructive criticism
- Proficiency in English

d. <u>Software</u>

- Ability to undertake statistical analysis and regression using related software
- Availability of required software must be guaranteed by expert

4. Duration of Contract

The contract is 25 man-days spread out over a period of 3 months.

5. Schedule of Implementation

ID	Task	Duration	Dates				
	Review the results of ongoing	5	Month	1			
1	survey and set proper methodology for statistical and regression analysis	Man- days	Week	1	2	3	4
					х		
2	Review the survey on 3 existing	10 Month 2					
	and ongoing data sets on energy consumption	Man- days		5	6	7	8
	consumption	aays	Week	х		х	
3	Regression on all data sets with report on findings	10 Man- days	Month	3			
				9	10	11	12
			Week				
				Х		Х	

6. Deliverables

All deliverables, including supporting documents, should be written in English and submitted in one original and one copy including one soft copy in word format on CD.

The project manager shall subsequently have five (5) working days within which to forward all comments, required modifications and adjustments to the consultant. The approval of the submitted deliverables will be based on a comprehensive review by the project. The project manager reserves the right to request additional evaluation time if other information or clarification is further needed. Payments will be issued upon satisfactory completion of the required outputs.

7. Payment terms/schedule

Task	Payment	Deliverables	Potential dates
2	First Payment (40% of the contract value)	Tasks 1 and 2: Review of past and ongoing survey and setting of appropriate methodology for analysis	

4	Second Payment (60%	Task 3: Regression analysis and final	End month 3 after contract		
	of the contract value)	report on findings	signature		