# PROJECT PREPARATION GRANT (PPG)

PROJECT TYPE: Full-sized Project
TYPE OF TRUST FUND: GEF Trust Fund

**Submission date**: 08/28/2012

**GEF PROJECT ID:** 5063

**GEF AGENCY PROJECT ID: 5137** 

COUNTRY(IES): Iraq

**PROJECT TITLE:** Catalysing The Use Of Solar Photovoltaic Energy

GEF AGENCY(IES): UNDP, (select), (select)
GEF FOCAL AREA(s): Climate Change

#### A. PROJECT PREPARATION TIMEFRAME

Start date of PPG	12/01/2012
Completion date of PPG	08/31/2013

#### B. PROPOSED PROJECT PREPARATION ACTIVITIES (\$)

Describe the PPG activities and justifications:

The proposed project focuses on catalyzing the development and use of solar photovoltaic energy in Iraq, taking advantage of an extremely high level of irradiance throughout most of the country, most of the year, and addressing the fact that the country is not yet organized for accelerated growth in solar power service delivery. Although some solar technology development and piloting has been done in various locations in Iraq, a coherent strategy and widespread application of the most beneficial solar power options are now required. This project will therefore set a clear direction for use of the most appropriate solar PV technologies, suitable for Iraqi conditions, and will catalyze consumer awareness of these technologies and facilitate the development of the industry through policy and regulatory inducements.

A Project Preparation Grant (PPG) is required to finalise the required documentation for final CEO endorsement, particularly given the lack of baseline data currently available (Iraq is only now undertaking its first National Communication to the UNFCCC, for example), the nascent character of Government institutions and decision-making processes, and the need to bring disparate sets of (hitherto uncoordinated) stakeholders (Government, NGOs, academia and the private sector) together. While the GEF project is expected to generate significant, and sustainable, mitigation benefits for Iraq, full and diligent project preparation will be vital to the ultimate success of the project.

Specific project preparation activities will focus on: conducting a more detailed assessment of the market for decentralised PV units and utility-scale PV electricity generation (R&D for configuration of PV AC/water heating units for Iraqi climate conditions, retail, production, O&M; regulatory and technological potentials and barriers for large-scale PV generation) and GHG baseline/reduction potential in Iraq; a study/dialogue on advancing the IPP concept and the technical aspects of grid inter-connection; mapping and coordinating stakeholders; and completing GEF project documentation.

List of Proposed Project Preparation Activities	Output of the PPG Activities	Trust Fund	Grant Amount (a)	Co-financing (b)	
Conduct of Logical	Bringing disparate	GEF TF	15,000	25,000	40,000
Framework Analysis	(and hitherto				

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(LFA) workshop and	uncoordinated)				
stakeholder	Government entities,				
consultations, including	civil society actors,				
conclusion of	private sector and				
discussions on project	academia together to				
implementation and	discuss project roles				
management	and strategic				
arrangements	objectives; finalisation				
uningenienes	of project planning				
	matrix (defined project				
	goal, objective,				
	outcomes, outputs and				
	activities, including				
	success indicators);				
	concluded project				
	implementation				
0.1.1.1.	modalities.	GEF TF	15,000	40.000	55,000
Stakeholder and project	Detailed mapping of	GEF IF	15,000	40,000	55,000
mapping exercise, and	stakeholder and				
detailed design of the	policy/regulatory/instit				
activities associated	utional context (which				
with each project	is evolving rapidly);				
component: i.e.	identification of				
Component 1	ongoing and planned				
(Investment in solar	projects that have				
photovoltaic power	synergies with the				
technologies for off-	GEF project;				
grid office and	identification and				
residential application),	finalisation of co-				
Outputs 1.1-1.4;	financing				
Component 2	arrangements, notably				
(Encouragement of	formalisation of the				
investments in solar	(currently informally				
power technology in	agreed) roles of the				
Iraq and consumer	Ministry of Electricity,				
uptake of solar	the Ministry of				
appliances through	Science &				
policy reform and	Technology, the				
financial incentives),	Anbar University RE				
Outputs 2.1-2.2; and	Centre and the Najaf				
Component 3	Model Town				
(Facilitation of private	developers; detailed				
sector capacity for	gap analysis of				
technology	existing/planned				
development,	project activities vis-à-				
innovation and	vis the GEF project				
servicing in the solar	and development of				
power industry),	new and/or				
Outputs 3.1-3.4	accompanying GEF				
•	project activities.				
Conducting a more	Detailed comparative	GEF TF	25,000	25,000	50,000
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system applications (notably for air conditioning) and utility-scale PV plants	of R&D work undertaken to date (notably by MoST) on solar-powered rooftop air conditioner units configured for Iraqi				
(notably for air conditioning) and utility-scale PV plants	(notably by MoST) on solar-powered rooftop air conditioner units				
conditioning) and utility-scale PV plants	solar-powered rooftop air conditioner units				
utility-scale PV plants	air conditioner units				
	configured for Iragi				
·	comiguied for mayi				
	conditions; market				
	context and				
	capabilities for PV AC				
	(demand-side potential				
	and building/consumer				
	issues, supply-side				
	assembly, construction				
	and retail potential and				
	barriers); economic				
	analysis of market				
	conditions;				
	technological and				
	regulatory options for				
	utility-scale PV				
	electricity generation;				
	GHG reduction				
	analysis.				
$\mathcal{C}$	Detailed assessment of	GEF TF	25,000	25,000	50,000
	the technical, policy,				
-	regulatory and				
1	economic				
	requirements for				
C	successful				
	implementation of the				
	IPP modality				
	(including relevant				
	provisions required for				
	inter-connection in the				
	Grid Code), combined				
	with an assessment of the barrier removal				
	and policy actions				
	required to achieve these requirements in				
	the Iraqi context.				
	Finalized UNDP	GEF TF		35,000	35,000
_	Project Document and	OLI II		33,000	55,000
	CEO Endorsment				
	Request.				
additional analysis and	request.				
information gathering					
Total Project Preparation I	Financina		80,000	150,000	230,000

PPG Template 10-13-2010

# C. FINANCING PLAN SUMMARY FOR PROJECT PREPARATION GRANT: (\$)

	Project Preparation	Agency Fee
Grant Amount	80,000	8,000
Co-financing	150,000	
Total	230,000	8,000

## D. PPG AMOUNT REQUESTED BY AGENCY(IES), FOCAL AREA(S) AND COUNTRY(IES): N.A.

#### E. PPG BUDGET

Cost Items	Total Estimated Person Weeks for Grant (PW)	Grant Amount (\$)	Co-financing (\$)	Total (\$)
Local consultants *	11.00	22,000	60,000	82,000
International consultants*	8.00	48,000	25,000	73,000
Travel		6,000	10,000	16,000
Miscellaneous (e.g. workshop organisation, office facilities)		4,000	5,000	9,000
Baseline market analysis			50,000	50,000
Total PPG Budget		80,000	150,000	230,000

<sup>\*</sup> Annex A for Consultant cost details should be prepared first before completing this table. See notes on Annex A for the required detailed information. This table is the sum of all local and international consultants presented in Annex A.

## F. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies and procedures and meets the GEF LDCF/SCCF Trust Fund criteria for project identification and preparation.

Agency Coordinator, Agency Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Yannick Glemarec UNDP/GEF Executive Coordinator	1/2	August 28, 2012	Robert Kelly Regional Technical Advisor EITT	+263 4884 580	robert.kelly@undp.org

<sup>&</sup>lt;sup>1</sup> No need to provide information for this table if it is a single focal area, single country and single GEF Agency project.

Annex A

# **Consultants Financed by the Project Preparation Grant (PPG)**

Type of Consultant	Position / Titles	\$/ Person Week <sup>1</sup>	Estimated PWs <sup>2</sup>	Tasks to be Performed
Local	Solar Energy Expert	2000	11.00	Detailed comparative technology assessment of R&D work undertaken to date (notably by MoST) on solar-powered rooftop air conditioner/water heating units configured for Iraqi conditions; market context and capabilities for PV AC/water heating (demand-side potential and building/consumer issues, supply-side assembly, construction and retail potential and barriers); economic analysis of market conditions; technological and regulatory options for utility-scale PV electricity generation; IPP study and stakeholder dialogue, including assessment of technical, policy, regulatory and economic factors and a comparative mapping of these requirements against the current Iraq context; GHG reduction analysis.
International	Project Formulation Expert	6000	8.00	Updated baseline and IPP analysis, project logframe (including facilitation of the LFA workshop), risk and GHG reduction analysis, detailed project budget, implementation and financing arrangements, terms of reference of the key project experts and analysis and other key requirements.

<sup>&</sup>lt;sup>1</sup>Provide dollar amount per person week <sup>2</sup>Provide person weeks needed to carry out the task