

INITIATION PLAN FOR A GEF PROJECT PREPARATION GRANT (PPG)

Country: Turkmenistan

UNDAF Outcome(s)/Indicator(s): By the end of 2009 a comprehensive approach to environmentally sustainable principles and practices is integrated into policies at all levels and into community development to improve social well-being.

(Link to UNDAF outcome., If no UNDAF, leave blank)

Expected Outcome(s)/Indicator (s): Environmental policies and implementation aligned with international environmental principles, standards and commitments.

(CP outcomes linked t the SRF/MYFF goal and service line)

Expected Output(s)/Indicator(s): Targeted sectoral development strategies and plans incorporate sustainable environmental principles.

(CP outcomes linked t the SRF/MYFF goal and service line)

Programme Period: 2005-2009

Programme Component: Environment

PPG Title: Improving Energy Efficiency in the Residential Buildings Sector of Turkmenistan

ATLAS Award ID: 00058466 ATLAS Project ID: 00072640

PIMS Project ID: 4134 Duration: 14 months

Management Arrangement: (DEX)

Total budget:

\$235,000

Allocated resources:

• GEF

\$85,000

Regular UNDP

\$30,000

In kind contributions:

Government

\$120,000

Brief Description of Initiation Plan

The PPG will cover the following preparatory activities to be financed by GEF grant and co-financing: (i) baseline data collection and information gap analysis; (ii) institutional capacity assessment for promotion of energy efficiency in the residential sector; (iii) stakeholder analysis and stakeholder involvement plan; (iv) design of demonstration projects.

AGREED BY UNDP RESIDENT REPRESENTATIVE / UNDP DIRECTOR:

Mr. Richard Young, Resident

Representative, UNDP

Kepreseniative Turkmenistan Signature

Date:

5/11/00



REQUEST FOR PROJECT PREPARATION GRANT

(PPG)

PROJECT TYPE: Full-sized Project THE GEF TRUST FUND

Submission date: 22 July 2009 Re-submission date: 14 September 2009

GEF PROJECT ID¹: 4097

GEF AGENCY PROJECT ID: 4134 COUNTRY(IES): Turkmenistan

PROJECT TITLE: Improving Energy Efficiency in the Residential Buildings Sector of

Turkmenistan

GEF AGENCY(IES): UNDP

OTHER EXECUTING PARTNER(S):
GEF FOCAL AREA(S): Climate Change
GEF-4 STRATEGIC PROGRAM(S): CC-SP1

NAME OF PARENT/PROGRAM/UMBRELLA PROJECT (if applicable): FRAMEWORK FOR

PROMOTING LOW GREENHOUSE GAS EMISSION BUILDINGS (GLOBAL)

A. PROJECT PREPARATION TIMEFRAME

Start date of PPG	October 2009
Completion date of PPG	December 2010

B. PAST PROJECT PREPARATION ACTIVITIES (\$)

NOT APPLICABLE

C. PROPOSED PROJECT PREPARATION ACTIVITIES (\$)

The PPG will cover the following preparatory activities:

1. Baseline data collection and information gap analysis

The assessment will be made through desk reviews of existing reports and studies and through interviews with all key stakeholders. No new field research will be financed through the PPG. Data and information gaps will be identified that will have to be addressed in the course of the full project. In particular, the following information will be collected:

- 1.1. Existing construction practices, prototype designs, energy metering, energy management practices, and energy-efficient materials and technologies used in the residential construction sector in Turkmenistan.
- 1.2. Existing institutional, legal and policy framework for energy efficiency in construction and building maintenance. Current and proposed legal arrangements for privatized housing units at an aggregated level (i.e. condominium or home-owner association designation)
- 1.3. Building code current practice (review, approval, oversight and monitoring procedures), including estimates of enforcement levels.
- 1.4. Barriers to improved energy efficiency in construction and building maintenance, differentiated by type of housing developer.
- 1.5. Baseline data on the energy performance of the housing stock in Turkmenistan; baseline

Project ID number will be assigned by GEFSEC. If PIF has already been submitted, please use the same ID number as PIF.

activities in the residential sector, including planned government construction and estimates of private construction; estimates of regional distribution of planned construction; projected trends in tariffs; projected trends in privatization; and projected changes in the profile of the housing stock during and subsequent to the project period.

- 1.6. Estimated CO₂ emissions from construction and the residential housing sector in Turkmenistan.
- 1.7. Analysis of current issues regarding data collection, aggregation, analysis, and quality control related to end-use energy consumption statistics and associated CO₂ emissions in the residential sector.
- 2. Institutional capacity assessment for promotion of energy efficiency in the residential sector
- 2.1 Collection and analysis of information on existing policies and the legal and regulatory framework for energy management during the procurement, design, approval, commissioning, and operation phase of residential buildings. Deficiencies in the policy and legal framework will be identified and explained.
- 2.2 Assessment of the existing institutional framework pertaining to energy consumption and efficiency in residential buildings, including a detailed analysis of principal-agent relationships in the housing sector.
- 2.4 Assessment of the current system of professional education and training in the area of residential building development, design, construction, and management in Turkmenistan.
- 2.5 An institutional capacity scorecard will be completed and used to form the baseline and recommendations for capacity strengthening activities. Particular emphasis will be placed on defining the proposed partnership between the project and Turkmengas, the primary supplier of fuel for the residential buildings sector. Definition of capacity needs for realizing energy efficiency gains in the residential sector and development of corresponding recommendations for activities under the proposed full size project.
- 2.6 Analysis of successful institutional models and best practices from relevant previous and current EE buildings projects.
- 2.7 Drafting of institutional arrangements for effective promotion and incorporation of efficient building codes, standards, norms, and energy management mechanisms.
- 2.8 Development of an appropriate replication strategy.

3. Stakeholder analysis and stakeholder involvement plan

- 3.1. Collection and analysis of stakeholders' views, current roles, and potential roles in improved energy efficiency in the residential buildings sector through stakeholder consultations.
- 3.2 Development of a stakeholder involvement strategy and plan that will include recommendations for capacity building and awareness raising measures. Opportunities for public-private partnerships will be assessed.

4. Design of demonstration projects

- 4.1 Scoping of demonstration projects (the project will support two pilot initiatives one initial program for Turkmengas and/or a municipality and a replication initiative): consultations on the type, scope, location, co-financing and implementation arrangements will be conducted. Selection criteria for demonstration sites and potential partners in both initiatives will be established.
- 4.2 Collection of baseline information on potential demonstration sites and typical residential buildings to establish a measurable monitoring and evaluation framework for the project.
- 4.3 Assessment of average construction costs and initial and net life-cycle costs of feasible energy efficiency measures
- 4.4 Development of a project learning strategy: The full project learning strategy and plan will be developed, including identification of potential lessons and knowledge products, the institutional systems and means for replicating the project results, and the means for communicating project lessons both nationally and internationally.

List of Proposed Project	Output of the PPG	Project	G. C	Total
Preparation Activities	Activities	Preparation Amount (a)	Co-financing (b)	c = a + b
Baseline data collection	*baseline data for	16,700	30,000	46,700
and information gap	the residential	ŕ	ŕ	Í
analysis	sector			
	*data related to			
	current and planned			
	policies in housing			
	policies and			
	programs			
	*projections of			
	costs, institutional			
	arrangements, and			
	emissions during			
	and subsequent			
	project			
	implementation			
Institutional Capacity	*analysis of legal,	23,300	40,000	63,300
Analysis	institutional, and	,	,	
•	regulatory			
•	framework			
	*institutional			
	scorecard			
	*assessment of key			
	partners			
	*recommendations			
	on capacity			
	strengthening			
	activities			
Stakeholder analysis	*stakeholder	5,000	35,000	40,000
and stakeholder	consultations	,	,	
involvement plan	*stakeholder matrix			
•	*stakeholder			
	involvement plan;			
	*stakeholder			
	capacity building			
	needs and plan			
	•			
Demonstration projects	*baseline	40,000	45,000	85,000
and replication strategy	information on	, , ,	,	
_	selection criteria			
	and characteristics			
	for demonstration	1		
	sites			
	*project learning			
	strategy			
Total Project Prepara		85,000	150,000	235,000

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

	Project Preparation	Agency Fee
GEF financing	85,000	8,500
UNDP	30,000	
National Government (in-kind)	120,000	palaret saarta en
Total	235,000	

E. PPG REQUESTED BY AGENCY(IES), FOCAL AREA(S) AND COUNTRY(IES)1

F. PPG BUDGET REQUEST

Cost Items	Total Estimated Person Weeks for GEF Grant (PW)	GEF (\$)	Co-financing (\$)	Total (\$)
Local consultants *	117 (GEF)	23,400	45,000	68,400
International consultants*	15 (GEF)	46,500	30,000	76,500
Travel	1. 14. 14. 15. 15. 15. 15. 15. 15. 15. 15. 15. 15	15,100	25,000	40,100
Workshops			40,000	40,000
Sundries			10,000	10,000
Total PPG Budget	2. 医电影中国情况中国	85,000	150,000	235,000

^{*} Annex A for Consultant cost details should be prepared first before completing this table. See notes on Annex A for the

G. GEF AGENCY(IES) CERTIFICATION

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

Agency Coordinator, Agency name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
John Hough UNDP/ GEF Officer- in-Charge	Johnstough	September 14, 2009	Marina Olshanska ya	+421- 259 337- 285	marina.olshanskaya@undp.org

required detailed information. This table is the sum of all local and international consultants presented in Annex A.

Annex A

Consultants Financed by the Project Preparation Grant (PPG)

Position / Titles	\$/ Person	Estimated PWs ²	Tasks to be performed
Local	Week¹	PWS	
Building Code Expert	200	12	Identify all codes relevant to the residential sector and provide a description of the regulations, particularly those relevant to the energy performance of residential buildings. Provide an overview of the review, permitting, and enforcement process and an institutional assessment of all relevant stakeholder. Work with the IC Building Codes Expert to recommend the project approach and training scope, activities, timetable, and budget in the FSP under Component 1.
EE Institutional Analysis and Stakeholder Involvement Expert	200	39	Conduct and oversee data collection and analysis in the residential buildings and construction sector. Make an inventory of all relevant existing information sources in the sector., and collect and analyze any available data on energy consumption in residential buildings (and buildings more broadly if data are scarce) in Turkmenistan. Provide an overview of all relevant institutions, policies, and programs affecting energy performance in buildings. Assess the existing institutional framework on energy efficiency in the residential buildings sector, including a detailed analysis of principal-agent relationships. Identify institutional capacity gaps at all levels. Compile and institutional scorecard with indicators. Convene stakeholder consultations, draft a stakeholder matrix and stake-holder involvement plan. Provide data and analysis in support of the IC EE Buildings Specialist, and the IC Housing Policy Specialist. Provide data and analysis in support of the development of the project baseline and incrementality scenario. Work with the IC EE Buildings Specialist to develop an outreach and replication strategy.

			Assess and provide recommendations
			on the project scope and activities for
			the FSP. Develop logical framework
			and impact indicators for FSP.
Architect/Engineer	200	30	Work with IC Architect/Engineer to
			identify potential demonstration
			partners and regions. Provide
			information on construction costs and
			current design trends and prototype
			designs. Provide information in
			support for the development of a
			project baseline regarding the
DD m	200	-	performance of current buildings.
EE Training and	200	8	Describe the current system for
Education Consultant			training architects, energy managers,
			and building managers, including
			specific educational institutions,
		1	numbers of faculty and students, and
		1	specific types of curriculum, and
İ		1	materials. Make recommendations
			for education and training in support
			of energy efficiency in buildings,
•		ŀ	including recommendations on the
			specific activities, target groups,
			scope, and budget.
Construction Materials	200	8	Analyze construction materials used
and Insulation	200		in building construction sector, collect
Specialist			information on local producers of
Specialist			construction materials; propose
			locally available energy efficient
			materials that can be used for building
			construction; provide information on
			the cost of materials that are
			commonly used in construction and
			those that would be available during
			the proposed project period. Support
-			the LC and IC Architect/Engineer by
			reviewing estimates and activities
			related to the demonstration
		<u>-</u>	components of the FSP.
Energy and GHG	200	20	Describe and analyze the
Monitoring Specialist			effectiveness of collection,
			assessment, and use of data on EE in
			buildings at all levels and by different
			housing developers. Identify
			potential barriers in the processes of
			data collection, aggregation, analysis,
			and dissemination for the residential
			buildings sector. Make
			recommendations for addressing these
ļ			barriers that identify key stakeholders
•			and measures. Collect available data
		<u> </u>	on energy consumption in the
			residential sector and on associated
			GHG emissions. Provide support and information to the IC Energy and
		l	LINIOTHIANON TO THE ILL Energy and

International Utility Partnerships Specialist	3500	2	GHG Monitoring Specialist in the development of the indicators for energy and GHG emissions in the project framework and in the development of a baseline and project scenario (including projections for direct and indirect emissions reductions from the project). Assess data provided on institutional relationships and work with key project partners to finalize the scope, activity, and budgeting for Component 2. Provide information on best practices and make recommendations to in-country
EE Buildings Specialist	3500	8	Review baseline information delivered by the local experts. Review and analyze the description of barriers to the effective promotion of EE in residential buildings and integrated building design approach. Suggest international best practices on the integrated building design approach and energy performance standards, energy audits and certification, and energy information management system in energy and building construction sectors. Assist local project team to define project scope and provide recommendations on the suggested project strategy. Carry out cost effectiveness analysis of the project strategy. Assess sustainability of suggested project outcomes and outputs. Review and finalize GHG emission reduction estimated of the project. Propose project monitoring and evaluation framework with a set of measurable impact and progress indicators. Calculate costs of expected project outcomes and outputs, co- financing sources and co-financing commitments.
Housing Policy Specialist	3500	1	Analyze information and data provided by the EE Institutional Analysis and Stakeholder Involvement Expert regarding current institutional arrangements in the housing sector and proposed reforms in the housing sector. Describe the implications of current and proposed arrangements for utility payments and for financing. Draft specific

TET Duilding Co. Lo.	2500		recommendations for Component 5 of the proposed FSP and provide expert review and commentary on proposed staffing, target groups, scoping, and budgeting for this component. Provide an overall review of the RCE and assess potential interactions with housing reform.
EE Building Codes Expert	3500	1	Work with the IC Building Codes Expert to recommend the project approach and training scope, activities, timetable, and budget in the codes sector for the FSP.
Energy and GHG Monitoring Specialist	1500	3	Estimate the local, national and global environmental benefits generated by the proposed FSP, including GHG emission reductions (direct and indirect) during the project and subsequent to the conclusion of the project. Propose a set of CC indicators (CO ₂ eq avoided, kW/h or TOE of energy saved) to track the project's progress and effectiveness. Recommend baseline and target values on indicators, develop and document assumptions for baseline and target scenarios. Review LC analysis of issues regarding data collection, aggregation, analysis, and quality control related to end-use energy consumption statistics and associated CO ₂ emissions in the residential sector and make recommendations to address any short-comings in data and optimize the quality of M&E activities.

Provide dollar amount per person week.

Provide person weeks needed to carry out the task and corresponds to the dollar amount per person week in the previous column.

Total Budget and Work Plan

Award ID:	000	00058466							
Award Title:	PIM	S 4134 CC	PPG: Improvi	ng Energy Effic	PIMS 4134 CC PPG: Improving Energy Efficiency in Residential Buildings Sector of Turkmenistan	Sector of T	urkmenistan		
Business Unit:	TK	TKM10							
Project Title:	Ene	gy Efficien	Energy Efficiency in Residential Buildings	ial Buildings					
Project ID: PIMS		00072640					1		
Implementing Partner									
(Executing Agency)		UNDP (DEX execution)	xecution)						-
	Responsible	,	Doner	Atlas		Amount	Amount		So
GEF Outcome/Atlas	Party/	Fund	Name	Budgetary	ATLAS Budget	Year 1	Year 2	Total	Budge
Activity	ampiemenun g Agent			Account Code	Description	(OSD)	(OSD)	(asn)	t Note:
				71200	International Consultants	4,000	42,500	46,500	1
	qUNIT	62000	GEF	71300	Local Consultants	1,000	22,400	23,400	
OUTCOME 1:				71600	Travel	500	14,600	15,100	
Elaboration of the					Total GEF	5,500	79,500	85,000	
Full Size Project				71200	International Consultants	0	15,000	15,000	
Proposal Submission				71300	Local Consultants	1,000	8,000	9,000	
to the GEF	UNDP	04000	UNDP	11600	Travel	0	3,500	3,500	
				74500	Miscellaneous	200	2,000	2,500	
•					Total UNDP	1,500	28,500	30,000	
					TOTAL Outcome 1	7,000	108,000	115,000	

Summary of Funds: 2

GEF	85,000
UNDP	30,000
Co-financing (3)	120,000
TOTAL	235,000

1. Detailed tasks envisaged for local and international consultants to be financed from PPG funds are given in Annex A.

² Summary table should include all financing of all kinds: GEF financing, co-financing, cash, in-kind, etc. etc