

United Nations Development Programme

Country: Turkmenistan

Annual Work Plan 2017



Project Title: Improving Energy Efficiency in the residential Building Sector of Turkmenistan

UN PFD Outcome(s): Outcome 5: The national policy, legislative and institutional frameworks are aligned to reduce greenhouse gas emissions and to promote sustainable practices on energy efficiency, the use of renewables, urban development and waste management

Expected CP Outcome Indicator(s): 5.1. Number of current and new institutions that research, pilot and replicate energy efficiency initiatives for sustainable rural and urban development, and the use of renewables, urban development and waste management practices
5.2. Number of state laws, regulations and procedures developed or amended that incorporate energy efficiency standards and practices, and the use of renewables and sustainable waste management

Expected Output(s): Output 5.2: Laws, regulations and procedures adopted that incorporate energy efficiency standards and the use of renewables
Output 5.3: New and innovative solutions developed and implemented that promote energy efficiency for urban/rural development and waste management

Implementing partner: State Corporation "Turkmengas"

Responsible Parties: State Corporation "Turkmengas"
State Corporation "Turkmen oil and gas construction"
Ministry of Construction and Architecture of Turkmenistan
Ministry of Communal Services of Turkmenistan
Municipality of Ashgabat
Turkmen State Architecture-Construction Institute

Brief description

The proposed UNDP-GEF project will reduce greenhouse gas emissions by improving energy management and reducing energy consumption in the residential sector in Turkmenistan. The project will strengthen incentives and capacity to build highly energy-efficient buildings, develop capacity at Turkmengas to identify end-use energy savings in its housing stock and implement investments to reduce end-use energy consumption, introduce improved highly-efficient design measures to major housing designers and developers, and replicate these measures through protocols for energy-saving measures in prototype buildings and through mainstreaming energy-efficiency issues into policies and programs.

Programme period:	Country Programme 2010-2015	Total allocated resources:	\$207,542
Project Title:	Improving Energy Efficiency in the residential Building Sector of Turkmenistan	• UNDP	\$19,000
		• GEF	\$188,542
Start date:	<u>01/01/2017</u>		
End date:	<u>30/06/2017</u>		



Agreed: _____

State Corporation "Turkmengas"

Date: 07.05.2017

Agreed: _____

UNDP in Turkmenistan

Date: 03.03.2017



improved energy characteristics designed and built Output 3.2 Multifamily residential buildings are renovated with significantly improved energy-related characteristics <i>Indicator 1: Final report of monitoring and assessment of energy consumption in pilot buildings completed.</i>	3.1.2 Regular measurement of indices of energy consumption in pilot elite 12-storey 14-unit building																		PE on energy audit		
	3.1.3 Regular measurement of indices of energy consumption in pilot elite 12-storey 66-unit building																		PE on energy audit		
	3.1.4 Regular measurement of indices of energy consumption in 3 pilot retrofits																		PE on energy audit		
	3.1.5 Develop final report on energy monitoring of 6 pilot buildings.																		PE on energy audit		
	3.1.6 Regular measurement of indices of energy consumption in low-rise buildings																		PE on energy audit	71300	
	3.1.7 Develop final report on energy monitoring of low-rise buildings																		PE on energy audit	5,015	
	3.2 Develop a plan on locally producing an automated heat-supply control device and facilitating implementation of this plan																				
	3.2.1 Produce pilot pieces of automated heat-supply control device																			IC on EE design, PE on energy audit	
	3.2.2 Carry out acceptance tests for automated heat-supply control device																			IC on EE design, PE on energy audit	
	3.2.3 Carry out trial operation of an automated heat-supply control device																			IC on EE design, PE on energy audit	
3.2.4 Practical training on assembling and use of an automated heat-supply control device																			IC on EE design, PE on energy audit, PM	75700	
3.2.5 Develop documentation on energy management of heat consumption and final report on assembling and use of an automated heat-supply control device.																			IC on EE design, PE on energy audit	1,291	

Outcome 4: <i>Replication of results is carried out by development of skills and qualifications, development of typical building designs, and policy development in energy efficiency of buildings</i>		71200-International Consultant	26,432
		71300-Individual Contracts	22,519
		71400-Service Contracts	13,000
		71600-Travel	5,000
		72100-Contracted services	
		72400-Communications and Internet	1,000
		74200-Printing and publications	15,000
		74500-Miscellaneous	7,698
		75700-Training, seminars	30,000
		GEF total	120,649

EXPECTED INTERIM OUTPUTS <i>Including baseline data, annual indicators</i>	LINKS WITH SP	PLANNED ACTIVITIES <i>Activity results and associated actions</i>	TIME FRAME												PLANNED BUDGET				
			January	February	March	April	May	June	July	August	September	October	November	December	RESPONSIBLE PARTIES	Amount (USD)			
Output 4.2 Design institutes and large residential construction companies are trained and encouraged to include greater energy efficiency in design of residential buildings. <i>Indicator 1: Revised national code [SNT] "Building Thermal Engineering" adopted and</i>	1.5.2 7.7.3	<i>4.1 Support in getting official approval</i>																71200	26,432
		4.1.1 Support in getting confirmation of new editions of SNT "Building Thermal Engineering" in Ministry of Justice of Turkmenistan																NC on codes, PM	71300
		4.1.2 Support in obtaining official approval by relevant agencies for "Methodology on energy audit in residential buildings"																	
		4.1.3 Support in obtaining official approval by State Expertise agency for 11 typical energy-efficient designs of low-rise buildings																	

<p>confirmed in 2017.</p> <p>Output 4.3 Recommendations of the project are included in strategies and programmes on energy efficiency</p> <p><i>Indicator 1: National Action Plan including investment plan for increasing energy efficiency in the housing stock developed and presented to the relevant agencies for approval.</i></p>	<p><i>4.2 Guidance manual to SNT "Building thermal engineering" and Software "Energy passport of building"</i></p> <p>4.2.1 Support in obtaining official approval by relevant agencies for the guidance manual to SNT "Building thermal engineering" and software "Energy passport of building" for designers</p> <p>4.2.2 Train local specialists for use of the guidance manual to SNT "Building thermal engineering"</p> <p><i>4.3 Data base of "Energy passports of buildings"</i></p> <p>4.3.1 Develop the Energy Passport data base tool to create a state system of building energy passports</p> <p><i>4.4 Catalogue of solutions to prevent thermal bridges in design of building envelopes</i></p> <p>4.4.1 Finalize the catalogue of solutions to prevent thermal bridges in design of building envelopes.</p> <p>4.4.2 Prepare a layout and publish the catalogue of solutions to prevent thermal bridges in design of building envelopes</p> <p>4.4.3 Train local specialists for use of catalogue of solutions to prevent thermal bridges in design of building envelopes (jointly with 4.2.2)</p> <p>4.4.4 Support in obtaining official approval in the Ministry of Construction and Architecture for the catalogue of materials and joints for designing joints of building envelopes</p> <p><i>4.5 Development of National Action Plan on rational use of energy resources in residential sector</i></p> <p>4.5.1 Send for review of the refined National Action Plan on rational use of energy resources in residential sector</p> <p>4.5.2 Finalize the National Action Plan on rational use of energy resources in residential sector</p> <p>4.5.3 Support in obtaining official approval from national partners for National Action Plan on rational use of energy resources in residential sector</p> <p><i>4.6 Action plan on informing national partners and interested parties</i></p> <p>4.6.1 Draft Action plan on communications, publications, and other outreach</p> <p>4.6.2 Provide implementation of Action plan on communications, publications, and other public outreach</p> <p><i>4.7 Contest for students in TGASI</i></p>
	<p>PM</p> <p>71300</p> <p>4,407</p>
	<p>IC on codes, NC on codes, PM</p> <p>75700</p> <p>2,000</p>
	<p>PM</p> <p>71300</p> <p>6,972</p>
	<p>IC on codes, PM</p> <p>74200</p> <p>4,000</p>
	<p>IC on codes, NC on codes, PM</p> <p>75700</p> <p>2,000</p>
	<p>IC on codes, NC on codes</p> <p>74200</p> <p>11,000</p>

4.7.1 Organize and conduct award ceremony of the contest for students in TSIAC to develop designs of EE buildings											PE on energy audit, PM	75700	500
4.8 Conference on energy efficiency in buildings													
4.8.1 Hire an assistant to support preparation of the conference on energy efficiency in buildings											PM	71300	2,400
4.8.2 Organize and conduct the conference on energy efficiency in buildings											PM, PE on energy audit, Assistant for the conference	75700	25,500
4.9 Participation in regional seminars and conferences on energy efficiency and energy forums													
4.9.1 Deliver presentations of project results at regional forums (hosted by other UNDP/GEF projects or other agencies and projects with direct relevance)											PM	71600	4,000

Outcome 5: Project management

5.1 Component Manager, Director of Department of Project Support, Assistant													71400-Service contracts	20,000
5.2 International conferences, seminars													71600-Travel	4,000
5.3 Internet and mobile phone													72400-Communications and Internet	1,800
5.4 Office supplies for the Component Manager and project team													72500-Office supplies	1,000
5.5 Informational equipment													72800-Informational equipment	
5.6 Car maintenance, gasoline, project and PIU office equipment maintenance													73400-Rent	1,000
5.7 Bank commissions, rental of office space and other expenses													74500-Miscellaneous	1,500
5.8 Project Board meetings, Working Group meetings on Action EE Plan													75700-Training, seminars	2,500
													GEF total	32,676
5.9 Final project evaluation													71200-International consultants	15,000
5.10 Financial audit													74100-Prof.	4,000
5.11 Misc.													74500-Miscellaneous	
													UNDP total	19,000
													Total for Outcome	51,676
													TOTAL for the project	207,542

PM – Project Management
PE – Project Expert
IC – International Consultant
NC – National Consultant
CO – Country Office

*The total 2017 budget may change due to pending 2016 financial closure