

APPROVED:  
UNDP Deputy Resident Representative  
in the Republic of Belarus

Z. Taylor

Date " " 2017

APPROVED:  
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Head of the Department for Science and Technology Policy and Foreign Economic Relations  
of the Department of Energy Efficiency of the State Committee for Standardization of the Republic of Belarus

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Date "21" "09" 2017

Detailed Annual Work Plan 2017										
Improving Energy Efficiency in Residential Buildings in the Republic of Belarus No. 00077154										
Description of activities	Costs per budget accounts, USD				Total, USD	Donor	Budget account	Responsible	Annual targets	
	I - 2017	II - 2017	III - 2017	IV - 2017						
<b>Outcome 1: Strengthened legal and regulatory framework and mechanisms to enforce the legislation for improving the energy efficiency of the building sector with the focus on new residential buildings</b>										
1.1	A formally adopted and endorsed methodology for buildings' energy performance monitoring and calculation in line with contemporary European standards and other applicable international standards.							Project Manager	Completed in 2015.	
1.2	At least 50 energy audits to obtain information on the actual energy consumption and energy balance of different types of existing residential buildings of different age and based on different construction technologies have been conducted.							Project Manager	The methodology of energy audit that was based on the results of the 2013-2016 energy survey campaign and submitted for approval in 2016 has been adopted according to the prescribed procedure.	
1	Provide necessary consultations during the approval procedure until the energy audit methodology is properly adopted.	0	0	200	200	GEF	71300 - local consultants (budget 2015) 71300 - local consultants (translation)		When necessary, during the approval process project experts provide consultations, therefore the energy audit methodology is adopted in the proper manner according to the prescribed procedure. Deadline - December 31, 2017.	
1.3	Review and cost-efficiency analysis of different technical options to improve buildings' energy efficiency and the use of renewable energy sources, including the analysis of the cost-efficiency of different heat supply and distribution methods to serve low or close to zero energy buildings.							Project Manager	Cost-efficiency analysis of different proposed and implemented technical options to improve demonstration buildings' energy efficiency as part of the project has been completed and submitted to decision makers for subsequent use in the design and construction of low or close to zero energy buildings.	
1.3.1	Based on the actual outcomes of the design and construction of pilot apartment buildings perform cost-efficiency analysis of different technical options for the space heating and DHW supply systems, including such analysis for various heating patterns for designing low to zero energy buildings.	0	0	0	0	GEF	71300 local consultants (budget 2015)		The report with recommendations and proposals prepared with due regard for the rate of return of the technical solutions developed for space heating systems and tested as part of the project during the design and construction of pilot buildings has been presented to the stakeholders and published on the Internet. Deadline - December 31, 2017.	
1.4	Analysis of the compatibility of new low energy buildings with the space heating systems most widespread in Belarus, including with district heating and hot water supply systems. Preparation of respective long-term recommendations.							Project Manager	The analysis of the compatibility of existing heating systems with the new buildings with low energy consumption has been completed and respective recommendations have been formulated and submitted to decision makers.	
1.4.1	Based on the actual results of the construction and operation of apartment buildings perform a technical and economic analysis of the impact of the new low energy buildings on the cost of various standard heat supply systems typically used in Belarus for space heating and DHW supply.	0	0	0	0	GEF	71300 local consultants (budget 2015)		The report on the findings of the technical and economic assessment of the interrelations between new low energy buildings and various heat supply systems along with recommendations for their further development has been presented to the stakeholders, published on the Internet and taken into account in the course of the design of residential construction programmes and building projects for residential buildings until 2020. Deadline - September 30, 2017.	
	A finalized draft of new national energy consumption standards for new buildings and, as applicable, buildings undergoing a major renovation, to be used first of all in residential buildings.							Project Manager	Completed (within the scope of the project) in 2016.	
1.6	Design and adoption by the Government of Belarus of practical procedures for the establishment of a mandatory system of EE certification of buildings, including issuing of EE passports and a system of monitoring and compliance checking with corresponding random on-site checks.							Project Manager	Completed (within the scope of the project) in 2016.	
1.7	Further developed and adopted quality standards and a system of EE certification for the construction materials, equipment and component parts used in construction.							Project Manager	The quality standards and a system of energy efficiency certification for the materials, equipment and component parts used in residential construction have been formally submitted for adoption.	
1.7.1	Based on the results of respective activities implemented in 2015-2016 conduct a round table for the discussion of the principles, organizational and legal framework and practical procedure for the system of energy efficiency certification of the materials, component parts and equipment used in residential construction.			2,725	2,725	GEF	72100 - contract. serv. companies		At least 50 professionals and decision makers, including the representatives of the Gosstandart, Ministry of Architecture and Construction, Gosstroinadzor and respective certification companies participated in the round table, discussed and proposed legal, procedural and organizational mechanisms for the practical functioning of the system of energy efficiency certification of the materials, component parts and equipment used in residential construction. Deadline - September 30, 2017.	
1.7.2	Based on the results of respective activities implemented in 2015-2016 conduct a round table for the discussion of best practices and corresponding tools for the monitoring and assessment of the conformity of residential buildings with the energy efficiency standards.			2,725	2,725	GEF	72100 - contract. serv. companies		At least 50 professionals and decision makers, including the representatives of the Gosstandart, Ministry of Architecture and Construction, Gosstroinadzor and respective energy audit and certification companies participated in the round table to develop recommendations on the adoption of best practices and corresponding tools for the monitoring and assessment of the conformance of residential buildings with the energy efficiency standards, to whose development the Project contributed. Deadline - September 30, 2017.	
1.7.3	Based on the results of the above round table discussions, , revise the draft practical procedures along with the methodologies and relevant monitoring and compliance checking tools for energy efficiency certification and validation systems for materials, component parts and appliances used in residential buildings and submit it for approval and adoption. Provide necessary consultations in the process of approval and adoption.	0	0	0	0	GEF	71300 local consultants (budget 2016)		The revised draft practical procedures and institutional arrangements for the energy efficiency certification and validation systems of materials, component parts and appliances used in residential buildings have been officially submitted for review and adopted according to the prescribed procedure. Deadline - December 31, 2017.	
	Bank fee	13	13	13	13	50	GEF	74510 - bank charges		Bank charges. During the year
Outcome 1, total GEF:		13	13	5,463	213	5,700	GEF			

<b>Outcome 1 total:</b>		13	13	5,463	213	5,700	
<b>Outcome 2: Enhanced capacity of the Belarusian specialists to implement and effectively enforce new energy efficient construction standards.</b>							
2.1	Developed, published and disseminated stakeholder group specific technical guides, handbooks, guidelines and other related training materials on energy efficiency design and construction of new buildings to support the implementation of the envisaged new construction norms, including dissemination of this information through the internet based energy platform and the project's own Internet site.						Project Manager At least three booklets (450 copies in total) have been prepared and printed for the owners and occupants of pilot buildings in Minsk, Mahilioŭ and Hrodna.
2.1.1	Using the materials prepared by local and international experts in 2016, prepare, publish and disseminate three booklets with the guidance for home owners and occupants on the correct use and operation of the energy efficient appliances and equipment installed in their apartments in the pilot buildings in Minsk, Mahilioŭ and Hrodna.	784			784	GEF 71300 - local consultants	PR Specialist 450 copies of at least three titles of booklets with the guidance for the occupants of three pilot buildings constructed as part of the project on the use of the appliances and equipment installed in their apartments have been prepared, approved by the stakeholders and published. Deadline - April 30, 2017
		412	825		1,237	GEF 74200 - audio & video prod.	
2.1.2	Using the materials prepared by local and international experts in 2016, prepare, publish and disseminate three booklets with the guidance for the specialists of the relevant utility companies on ensuring the correct use and operation of the energy efficient appliances and equipment installed in the pilot buildings in Minsk, Mahilioŭ and Hrodna.		800	608	1,408	GEF 71300 - local consultants	PR Specialist In total 150 copies of at least three titles of booklets with guidance for the specialists of local utility companies on the maintenance and operation of the energy efficient appliances, equipment and systems installed in the project's pilot buildings have been prepared, approved by the stakeholders, published and transferred to the respective utility companies in Minsk, Mahilioŭ and Hrodna. Deadline - April 30, 2017
			1,600	800	2,400	GEF 74200 - audio & video prod.	
2.2	Design and integration into the curricula of all key Belarusian universities offering courses in architecture and building engineering of new courses on integrated building design and energy efficiency. At least 200 students have completed the new courses by the end of the project.						Project Manager Three courses on cost-benefit analysis, principles of monitoring energy efficiency and energy efficient technical equipment have been included in the curricula of at least two key universities.
2.2.1	Based on the instructional materials and other training materials developed in 2014-2016 introduce three sections for the corresponding subjects at the selected universities: (i) Cost-Benefit Analysis of Energy Efficient Residential Buildings; (ii) Monitoring of the Energy Efficiency of Residential Buildings; and Operation and Maintenance of the Utility Equipment of Energy Efficient Buildings.		608	800	1,408	GEF 71300 - local consultants	PR Specialist Based on the instructional materials and other training materials developed in 2014-2016 at least two selected universities (for example, Belarusian National Technical University and Brest State Technical University) and colleges offering similar courses have amended their curricula for the relevant courses by including three following sections: (i) Cost-Benefit Analysis of Energy Efficient Residential Buildings; (ii) Monitoring of the Energy Efficiency of Residential Buildings; and Operation and Maintenance of the Utility Equipment of Energy Efficient Buildings. At least 200 students have completed these new courses. Deadline - December 31, 2017.
			800	1,600	2,400	GEF 74200 - audio & video prod.	
2.3	At least 50 experts from different state and local authorities dealing with construction policies and establishing construction standards will be trained in recent international developments, international practices and lessons learnt regarding the energy efficiency of buildings and ensuring environmentally compatible construction.						Project Manager Completed in 2014
2.4	At least 50 architects and civil engineers working for the leading design and construction institutes (including NIPTIS, Belzhilproekt, Belgosproekt, design institutes in central cities of oblasts, and professional associations: Belarusian association of architects, Renewable Energy Association, etc.) will receive training on the following topics: 1) present-day international energy efficiency trends: technical and policy perspective; 2) integrated, energy efficient building design principles and techniques; 3) implications in the practical design work when moving from prescriptive norms to buildings' overall energy performance based construction standards; 4) available technical options and cost-effective design principles for optimizing buildings' energy performance; and 5) familiarization with the available state of the art applications to support integrated, energy efficient building design, and training (use of applications).						Project Manager Completed in 2014
2.5	At least 50 construction inspectors from oblast and district centres will receive training on the methodologies for assessing buildings' energy performance and the correct installation of the materials and equipment used.						Project Manager Completed in 2014
2.6	At least 50 managers of the leading construction companies will receive training on the correct installation of the materials and equipment used; and other consultations will be provided for private construction companies on how to integrate elements of energy efficient design in their investment projects throughout the project cycle from the design to construction and building management.						Project Manager At least 50 managers of the leading construction companies have been trained in the ways of integrating elements of energy efficient design in their investment projects.
2.6.1	As a follow-up of the introductory course delivered in 2015 and based on the experience of the design, construction and operation of the pilot buildings as an example, prepare instructional materials (manuals, guidelines, presentations) with the practical information about the correct installation of energy efficient materials and equipment as well as other recommendations for private construction companies on how to integrate elements of energy efficient design in their investment projects throughout the project cycle from the design to construction and building management.	0	0	0	0	GEF 71300 local consultants (budget 2016)	Instructional materials for construction companies on integrating energy efficiency improvement measures into investment and project cycles prepared and submitted to the Energy Efficiency Department and the Ministry of Architecture & Construction and published online. Deadline - September 30, 2017.
		0	0	1,200	1,200	GEF 74200 - audio & video prod.	
2.6.2	Organize and conduct, using the materials prepared under activity 2.6.1 above, at least one training workshop for construction companies with site visits.			0	0	GEF 71200 international consultants (budget 2015)	At least 50 supervisors and principal staff members of construction companies have been trained (during a two-day training workshop with site visits) in the best practices, methodologies and tools used in business models for the construction of energy efficient buildings. Instructional materials have been published (printed) and disseminated among the participants. Deadline - December 31, 2017.
				0	0	GEF 71300 local consultants (budget 2016)	PR Specialist
				5,500	5,500	GEF 72100 - contract. serv. companies	
				600	600	GEF 74200 - audio & video prod.	
2.7	A two-week training workshop for professional designers, representatives of the state expert review and building supervision in order to familiarize the target group with the experience of energy-efficient building design, organization of state supervision (including by municipal authorities) in EU countries and visiting the facilities (25 people).						Project Manager Completed in 2015
2.8	Other trainings, networking and exchange of knowledge and lessons learnt based on co-operation with other international initiatives promoting energy efficient and environmentally sustainable construction.						Project Manager All instructional materials developed by the project in 2013-2016 have been transferred to a specialized advanced training institution. At least 2 Belarusian specialists and decision-makers participated in at least one international event dedicated to energy efficient and environmentally sustainable construction and operation of buildings.

2.8.1	Provide necessary recommendations and support for the transfer and adaptation of all instructional materials (handbooks, tutorials, presentations) and curricula prepared and tested as part of the project in 2013-2016 to the Inter-branch Advanced Training and Personnel Retraining Institute of the Ministry of Education - one of the leading advanced training institutions in the field of construction.			0	0	GEF	71300 - local consultants (budget 2015)	PR Specialist	All instructional materials, tutorials, handbooks and presentations developed by the project and tested during 2013-2016 trainings, including the materials under outputs 2.3-2.7 above, have been updated, adapted to the specific needs of target audiences and transferred to the Inter-branch Advanced Training and Personnel Retraining Institute of the Ministry of Education along with necessary recommendations for further training. Deadline - December 31, 2017
				1,097	1,097	GEF	74200 - audio & video prod.		
2.8.2	Using the instructional and information materials prepared as part of Activity 2.1.1 above organize in each of the three pilot buildings at least one special meeting with home owners and tenants for the demonstration of the energy efficient equipment installed in their apartments, and conduct half-day trainings on the operation and maintenance of this equipment.	0	0		0	GEF	71300 - local consultants (budget 2015)	PR Specialist	Following the organization and conduct by the project of at least one training workshop in each of the pilot buildings, home owners and tenants of energy efficient pilot buildings have improved their knowledge and learned how to operate and maintain in a proper order the energy efficient equipment in their apartments. Deadline - June 30, 2017.
		800	800		1,600	GEF	71600 - travel		
2.8.3	Provide information and financial support to the Belarusian specialists and decision makers during their participation in at least one international event.	0	0	0	0	GEF	71300 - local consultants (budget 2015)		In total at least 2 Belarusian specialists and decision makers participated in at least one international event related to the topic of the project (for example Passive House Conference, Germany; UNECE meeting, Switzerland; IRENA Assembly, United Arab Emirates), improved their knowledge and gained experience, shared relevant information, and discussed the main provisions of the national strategy regarding energy efficient residential buildings. The number of business travellers and the number of events to be visited will be determined later with due regard for the savings of the project. During the year
				8,588	8,588	GEF	71600 - travel		
	Bank fee, GEF	25	25	25	25	GEF	74510 - bank charges		Bank charges. During the year
	Bank fee, UNDP	25	25	25	25	UNDP	74510 - bank charges		Bank charges. During the year
	Outcome 2, total UNDP:	25	25	25	25	UNDP			
	Outcome 2, total GEF:	2,021	4,050	12,629	18,210	GEF			
	<b>Outcome 2 total:</b>	<b>2,046</b>	<b>4,075</b>	<b>12,654</b>	<b>18,235</b>				
<b>Outcome 3: Demonstrated energy and cost-saving potential of new energy efficiency measures in three new residential buildings in three Belarusian cities.</b>									
3.1	Pre-feasibility study has been completed and the construction project of demonstration buildings has been designed, based on integrated building design principles and new technologies and approaches to the supply of these buildings with heat, hot water and ventilation in a cost efficient way and with low energy consumption.							Project Manager	Completed in 2015.
3.2	Completion of the construction of demonstration buildings while ensuring the compliance of construction works and equipment installation to the proposed and approved quality standards and recommendations.							Project Manager	The construction of demonstration buildings has been completed in line with the prepared design specifications and estimates, proposed energy efficiency standards and other quality standards and guidelines. The buildings have been placed in service.
3.2.1	Conduct a tender and finalize all necessary procurement of the appliances, tools and equipment specified in the design specifications and estimates to improve the energy efficiency of the pilot building in Hrodna.	5,109	3,406		8,515	GEF	71400 - contract. serv. individ.	Project Procurement Specialist	The hardware, tools, installations and equipment specified in the documents to be purchased after 2016 to improve the energy efficiency of the pilot building in Hrodna have been procured and properly put in storage. Deadline - May 31, 2017
		5,050			5,050	GEF	72200 - equipment; 72300 - materials and goods; 72805 - computer equipment		
		580			580	GEF	72130 - contract. serv. companies (transportation)		
		300			300	GEF	74520 - storage		
2	Ensure the assembly and installation of all appliances, tools, installations and equipment as specified in the design specifications and estimates to improve the energy efficiency of the three pilot buildings.	0	0		0	GEF	71300 - local consultants (budget 2015)	Project Engineer	The procured appliances, tools, installations and equipment have been assembled and installed according to the design specifications and estimates to improve the energy efficiency of the three pilot buildings. Deadline - June 30, 2017
		2,554	2,554		5,108	GEF	71400 - contract. serv. individ.		
		0	25,000		25,000	GEF	72100 - contract. serv. companies ; 73216 - construction maintenance (not UN)		
		0	0		0	GEF	72100 - contract. serv. companies (NIPTIS, budget 2014)		
3.2.3	Ensure technical supervision of the construction and assembly works to be performed at three pilot buildings so that all structures and installations conform to the developed design specifications and estimates. Provide recommendations and take measures in due time, as needed.	0	0		0	GEF	71300 - local consultants (budget 2015)	Project Engineer	Preparation of monthly reports with the description of the findings of the technical supervision of the construction works and the assembly of installations at the three pilot buildings in Hrodna, Minsk and Mahilioŭ, and submission of these reports along with recommendations to the major developers and to the Department for Energy Efficiency. Deadline - June 30, 2017
		2,554	2,554		5,108	GEF	71400 - contract. serv. individ.		
		500	500		1,000	GEF	71600 - travel		
		0	0		0	GEF	72100 - contract. serv. companies (design company, budget 2016)		



3.3	Preparation of the monitoring report on the construction of the demonstration buildings documenting the experiences and lessons learnt from procuring, installing and testing the new energy efficient materials, construction techniques and appliances.							Project Manager	New energy saving materials, construction technologies and equipment have been installed, tested and operated correctly. Monitoring reports have been prepared with properly analysed and documented findings and the description of lessons learnt.	
3.3.1	Ensure the control and monitoring of the construction of three pilot buildings and record the experience of the procurement, installation and testing of new energy saving materials, construction technologies and devices. Provide recommendations and take measures in due time, as needed.	300	300			600	GEF	71300 - local consultants	Project Engineer	The reports with the findings of the supervision and monitoring of construction works completed in 2016 and 2017 for the three pilot buildings in Hrodna, Minsk and Mahilioŭ along with the documents with the description of the experience of the procurement, installation and testing of new energy efficient materials, construction technologies and equipment, and recommendations have been prepared and submitted to the major developers and to the Department for Energy Efficiency on a quarterly basis. During the year.
		6,447	6,447	6,447	6,448	25,789	GEF	71400 - contract. serv. individ.		
		1,000	1,000			2,000	GEF	71600 - travel		
		0	0			0	GEF	72100 - contract. serv. companies (NIPTIS, budget 2016)		
3.4	A report on the monitoring of energy performance of demonstration buildings specifying energy and cost saving and reduction of greenhouse gas emissions for each building as a whole and following each specific energy efficiency intervention and for each tested device.							Project Manager	Energy efficiency performance of the buildings along with actual energy and cost saving data, and the emissions of greenhouse gases have been assessed and recorded in the monitoring reports. To be continued in 2018.	
3.4.1	Ensure EE monitoring of the three pilot buildings constructed as part of the project, through dispatch systems of the utility installations in each of the pilot buildings and a remote access data channel enabling data acquisition for the monitoring.	300	300	600	600	1,800	GEF	71300 - local consultants	Project Engineer	Quarterly reports with the findings of energy efficiency monitoring of the three pilot buildings in Hrodna, Minsk, and Mahilioŭ have been prepared and submitted to the designers, developers and to the Department for Energy Efficiency. The reports should contain documents confirming the actual energy saving for the operation of the building as a whole and for each individual measure of improving energy efficiency and each individual installed unit of utility equipment. During the year. To be continued in 2018.
		1,000	1,000	1,000	1,000	4,000	GEF	71600 - travel		
				18,000		18,000	GEF	72100 - contract. serv. companies		
3.2.4	Develop and use a special application programme for the automatization of the processing of acquired data.			5,500		5,500		72100 - contract. serv. companies		The application has been developed and tested under the actual usage conditions of data receipt and transfer through the dispatch system and a remote access data channel. Deadline - October 31, 2017.
3.4.3	Ensure the analysis of the operation of the utility equipment, the analysis of the occurrence of emergencies and failures and based on this data develop proposals for eliminating such failures in contact with equipment suppliers and operating entities.			5,500		5,500		72100 - contract. serv. companies		Quarterly reports with the findings of the review of the operation of utility equipment of pilot buildings, including the occurring emergencies and failures and with proposals to eliminate such failures agreed with equipment suppliers and operating entities have been prepared and submitted to the designers, developers and to the Department for Energy Efficiency. During the year. To be continued in 2018.
3.4.4	Provide documentation with the actual figures on the energy efficiency, economic efficiency and reduction of greenhouse gas emissions for each building as a whole and for each individual energy efficiency measure and utilized technology.			4,000		4,000		72100 - contract. serv. companies		Quarterly reports with the findings of economic efficiency monitoring and monitoring of the reduction of greenhouse gas emissions for the three pilot buildings in Hrodna, Minsk, and Mahilioŭ have been prepared and submitted to the designers, developers and to the Department for Energy Efficiency. The reports should contain documents confirming the actual saving of funds and the actual reduction of greenhouse gas emissions from the operation of the building as a whole and for each individual measure of improving energy efficiency and each individual installed unit of utility equipment. During the year. To be continued in 2018.
3.4.5	Provide recommendations for improving engineering and design solutions utilized in the buildings and for the dissemination of the experience.			3,820		3,820		72100 - contract. serv. companies		The report with the recommendations for improving engineering and design solutions utilized in the buildings and for the dissemination of the experience has been prepared, agreed with the designers, developers and operating entities, submitted to the Department for Energy Efficiency and published on the Internet. Draft report: deadline - December 31, 2017. Final version of the report following approvals: deadline - March 31, 2018.
3.5	At least 30 showings of the new buildings organized for Belarusian architects, designers, builders and other decision makers, including half-day training sessions with an objective to promote the solutions adopted for the demonstration projects for other buildings.							Project Manager	At least 30 visits to the sites in Minsk, Hrodna, Mahilioŭ and half-day long trainings have been organized and conducted for the local architects, designers, builders, building operators and decision makers.	
3.5.1	Prepare the necessary video materials for demonstrating to specialists the logistics and important aspects of the design and construction of pilot buildings. Prepare video tutorials, other training and demonstration aids, models for the specialists of operating companies for each pilot building with the demonstration of the contents, operating principles, maintenance and repair of the components of each of the energy efficiency utility systems installed in these buildings.	2,100	2,100			4,200	GEF	71300 - local consultants	Project Engineer	The following materials have been prepared: three video tutorials (30 minutes each), stands, models, other training aids for the specialists of operating companies (main target audience) for each pilot building with the demonstration of the contents, operating principles, maintenance and repair of the components of each of the energy efficiency utility systems installed in these buildings, which also illustrate the entire logistics and important aspects of the construction of actual buildings and its conformance to the design specification and estimates, and standards and recommendations proposed and adopted due to the project. Video tutorials and demonstration materials will be used during training (for example, see p. 3.5.2 below) and disseminated online and on CDs among the stakeholders. Deadline - December 31, 2017.
		500	500			1,000	GEF	71600 - travel		
				42,650	0	42,650	GEF	74200 - audio & video prod.		
3.5.2	Using instructional and information materials prepared ad part of activities 2.1.2. and 3.5.1 described above organize in each of the three cities where the pilot buildings are built at least 10 special demonstration events with trainings (half-day long) for the designers and specialists in residential construction, and for the specialists of utility companies responsible for the operation and maintenance of the energy efficient residential buildings.	0	0	0	0	0	GEF	71300 - local consultants (budget 2015)	Project Engineer	At least 10 special video screenings along with half-day trainings have been conducted in each of the cities (Hrodna, Mahilioŭ and Minsk) for the local architects, designers, builders, management (operating) companies and decision makers. Deadline - December 31, 2017. To be continued in 2018.
		1,000	1,000	1,000	1,000	4,000	GEF	71600 - travel		
		400	400	12,100	12,100	25,000	GEF	75700 - training		
	Bank fee, GEF	50	50	50	50	200	GEF	74510 - bank charges		Bank charges. During the year
	Outcome 3, total GEF:	29,744	47,111	100,667	21,198	198,720	GEF			
	Outcome 3 total:	29,744	47,111	100,667	21,198	198,720				
<b>Outcome 4: Documented, disseminated and institutionalized project results providing a basis for further replication</b>										
4.1	Developed and published public awareness raising materials and completed nation-wide awareness and information campaign advocating the benefits of energy efficiency measures in new buildings, including economic, social, health, environmental and aesthetic aspects and with due regard for the GEF/UNDP visibility requirements.							PR Specialist	At least 10 interviews have been conducted with the project's personnel, experts and partners and not less than 20 press releases along with at least six printed information and promotional materials have been provided for specialists and tenants. At least two PR-campaigns on promoting energy efficient housing have been launched and successfully completed.	

4.1.1	Organize and conduct an ongoing information campaign (interviews, press releases, etc.) regarding project activities.	4,315	4,315	4,315	4,315	17,260	GEF	71400 - contract. serv. individ.	At least 10 interviews and not less than 20 press releases have been provided in order to inform a wider audience about the project's key achievements, progress and activities, as well two PR-campaigns have been launched to change, to extent possible, people's perception and behaviour with regard to energy efficiency improvement measures. During the year.
4.1.2	Other awareness-raising events have been initiated and conducted in Minsk and Hrodna to support the official completion of construction works and the placement into service of two pilot buildings. Different promotional goods and advertising copies, <i>videos</i> have been developed and manufactured to support the said awareness-raising campaigns and ceremonies.	250	500	1,342		1,342	GEF	71600 - travel	The ceremony along with the relevant awareness-raising campaigns and the publication of different promotional items have been organized and conducted on the occasion of the placing into service of the pilot buildings in Minsk and Hrodna. Deadline - April 30, 2017
		280	280			560	GEF	74200 - audio & video prod.	
4.1.3	Prepare and publish articles, leaflets, brochures, etc. for professionals on best practices describing the peculiarities of the construction and equipment installation in energy efficient residential buildings.			0	0	0	GEF	71300 - local consultants	At least one publication for professionals about the best practices in the construction and equipment installation in energy efficient residential buildings has been prepared and issued. Deadline - Oct 31, 2017.
				300	300	600	GEF	74200 - audio & video prod.	
4.1.4	Prepare and publish articles, leaflets, brochures, etc. for professionals on best practices describing the peculiarities of the operation and maintenance of energy efficient residential buildings.			0	0	0	GEF	71300 - local consultants	At least one publication for professionals about the best practices in the operation and maintenance of energy efficient residential buildings has been prepared and issued. Deadline - December 31, 2017.
				300	300	600	GEF	74200 - audio & video prod.	
4.1.5	In cooperation with the Department for Energy Efficiency provide information and expert support to the national Energy Efficiency Leader competition.		100	100		200	GEF	71300 - local consultants	Support has been provided (expert and information support) to the conduct of the competition, and the national Energy Efficiency Leader competition has been conducted. Deadline - August 31, 2017.
				500		500	GEF	74200 - audio & video prod.	
4.2	<b>Agreed methodology and sustainable institutional arrangements for annual market monitoring, with keeping track on buildings constructed each year as well as the sale of key building materials, accessories and appliances along with their energy performance characteristics.</b>								<b>The methodology and organizational arrangements for the system of annual monitoring of energy efficient residential buildings and the sales of basic construction materials, equipment and appliances with the indication of energy efficiency performance values have been developed, discussed and adopted.</b>
								Project Manager	
4.2.1	Finalize the development of the draft methodology and regulations on the sustainable organizational arrangements developed back in 2016 for the annual monitoring of the market of energy efficient buildings along with tracking annual construction and sales of basic construction materials, equipment and appliances with the indication of energy efficiency performance.	600	600	600		1,800	GEF	71300 - local consultants	The methodology has been developed and organizational arrangements have been proposed for the system of the annual monitoring of energy efficient residential buildings along with tracking the annual volumes of the construction and sales of basic construction materials, equipment and appliances with the indication of energy efficiency performance. Deadline - August 31, 2017.
4.2.2	Organize and conduct a round table for the discussion of the final version of the methodology and the corresponding regulations on the organizational arrangements for the annual monitoring of energy efficient residential buildings, and following the round table introduce the necessary amendments into the final documents and submit them for approval and adoption.			1,100		1,100	GEF	71300 - local consultants	During the round table attended by all stakeholders, the methodology and organizational arrangements for the system of the annual monitoring of energy efficient residential buildings along with tracking annual volumes of the construction and sales of basic construction materials, equipment and installations with the indication of energy efficiency performance have been discussed and submitted for approval. Deadline - September 30, 2017.
				600		600	GEF	72100 - contract. serv. companies	
4.2.3	Provide necessary consultations to the stakeholders during the reconciliation and approval of documents until the methodology of the annual monitoring of energy efficient residential buildings and the corresponding regulations on the organizational arrangements have been adopted in accordance with the prescribed procedure.				1,400	1,400	GEF	71300 - local consultants	The methodology and organizational arrangements for the system of the annual monitoring of energy efficient residential buildings along with the sales of basic construction materials, equipment and appliances with the indication of energy efficiency performance have been approved and adopted in accordance with the prescribed procedure. Deadline - December 31, 2017.
4.3	<b>Determining a fully mandated and authorized state agency with a responsibility to monitor the energy savings and CO2 emission reductions in residential and other buildings, including the agreed procedures and interagency agreements for the collection of the required primary data.</b>								<b>The state agency that can take on the responsibility of monitoring energy saving and GHG emissions in the residential sector, and the procedure for the collection of necessary raw data, reporting and recording of these parameters has been proposed by the project, reviewed and adopted by the authorized government body; and the respective interagency agreement has been prepared.</b>
								Project Manager	
4.3.1	Ensure the necessary information support and consultations for the stakeholders in the process of selecting the government body that could take on the responsibility of monitoring energy saving and GHG emissions in the residential sector. Prepare the respective draft interagency agreement.			0	0	0	GEF	71300 - local consultants (budget 2015)	The state agency that can take on the responsibility of monitoring energy saving and GHG emissions in the residential sector has been selected and prepared for the performance of this task, and the respective procedure for the collection of necessary raw data, reporting and recording of these parameters has been developed. The draft interagency agreement has been prepared for approval by the relevant government bodies. Deadline - December 31, 2017.
4.4	<b>An approved national energy audit program (including the required funding for its implementation) for promoting larger number of energy audits of residential and other buildings and including a mechanism for using the audit results for elaboration of the energy efficiency strategies for the building sector at the national level.</b>								<b>The mechanisms for the implementation of the key provisions of the Technical Regulations "Energy Efficiency of Buildings" related to energy audit have been proposed by the project and agreed by the interested parties.</b>
								Project Manager	
4.4.1	Conduct a round table to develop recommendations and proposals regarding the methodology, practical procedures and corresponding provisions on the organizational arrangements for the system of energy audit and annual monitoring of the state of energy efficient residential buildings.			0	0	0	GEF	71300 - local consultants (budget 2015)	At least 50 specialists and decision makers, including the representatives of the Gosstandart and the Ministry of Architecture and Construction have discussed the implementation of the Technical Regulations "Energy Efficiency of Buildings" in terms of performing energy audit along with determining the necessary legal, financial and organizational mechanisms. Deadline - Oct 31, 2017.
				1,250		1,250		72100 - contract. serv. companies	



4.4.2	Based on the corresponding provisions of the Technical Regulations "Energy Efficiency of Buildings" justify and propose mechanisms for (i) the organization and conduct of energy audit in the residential sector, (ii) financing energy audit services, and (iii) use of the energy audit findings for the development of further strategies to improve energy efficiency in the residential sector.		0	0	0	0	GEF	71300 - local consultants (budget 2015)		Based on the Technical Regulations "Energy Efficiency" and its Article 6 <i>Energy audit of buildings</i> develop and submit for the approval by the stakeholders the procedure for the organization and conduct of energy assessments in the residential sector, the logistics of financing energy audit in the residential sector and the mechanism of adjusting the strategy of improving energy efficiency in the residential sector based on the energy audit findings. Deadline - December 31, 2017.
4.5	Energy-efficiency aspects integrated into the regional and local plans for spatial development being developed by the Institute of Urban and Regional Planning (IRUP).								Project Manager	The Belarusian Institute of Urban and Regional Planning has integrated the issues of the construction of energy efficient residential buildings into the regional and local spatial development plans.
4.5.1	Conduct a round table on the types of buildings and the patterns of the spatial organization of multi-storey residential development to minimize energy consumption for space heating and DHW supply.		1,700	1,700	3,400		GEF	71300 - local consultants		At least 50 specialists and decision makers in the area of urban planning have shared their experience and discussed the issues of spatial development with due regard for the recommendations developed by the project for the integration of the principles of improving energy efficiency into the strategies and plans of the organization of large scale multi-storey residential development. Deadline - October 31, 2017.
			1,550		1,550			72100 - contract. serv. companies		
4.5.2	Provide necessary information support and consultations to the Institute for Regional and Urban Planning (IRUP) in the development of regional and local spatial development plans based on the recommendations for the inclusion of the approaches to improve energy efficiency into these plans.		550	550	1,100		GEF	71300 - local consultants		The Institute for Regional and Urban Planning has adopted a concept for regional and local spatial development plans with due regard for the improvement of the energy efficiency of residential buildings. Deadline - December 31, 2017.
4.6	An international conference on energy efficiency in the residential sector held in Belarus, including field visits to the pilot demonstration sites; and coordination with other UNDP/GEF building energy-efficiency projects.								PR Specialist	International Conference "Best Practices in the Energy Efficiency Improvement in Residential Buildings" is organized and held annually, and a larger International Conference will be conducted by the end of the Project.
4.6.1	Organize and conduct International Conference (or separate conference sessions) on "Best Practices in the Energy Efficiency Improvement in Residential Buildings" under the auspices of the Project and in cooperation with the Department for Energy Efficiency, UNDP and other similar projects.			0	0		GEF	71200 - international consultants (budget 2014)		At least 100 professionals and decision makers have improved their knowledge and skills in implementing energy efficiency improvement projects, and shared experience, strategy and technical solutions while taking part in the International Conference "Best Practices in the Energy Efficiency Improvement in Residential Buildings" (during the conference, site visits are organized to pilot buildings) organized annually under the auspices of the project. The same for the larger international conference in 2018.
				0	0		GEF	71300 - local consultants (budget 2015)		
				697	697		GEF	71600 - travel		
				5,000	5,000		GEF	72100 - contract. serv. companies		
				200	200		GEF	74200 - audio & video prod.		
4.7	Regularly updated project website with a link to an Expanded Energy Efficiency Platform.								PR Specialist	The project's website has been transferred to the regularly updated UNDP website <a href="http://www.by.undp.org/content/belarus/ru/home/library/environment_energy/">http://www.by.undp.org/content/belarus/ru/home/library/environment_energy/</a> according to the decision of the UNDP Office.
4.7.1	Transfer the project website to the Internet page <a href="http://www.by.undp.org/">http://www.by.undp.org/</a> and regularly update the following sections of the website: Reports (project outcomes and achievements, reports, articles, etc.), Special Materials (methodologies, standards, recommendations, etc. produced by the project) and News (announcements, news and press releases, reposted relevant mass-media publications, etc.) along with technically adapted and photo (video) content. Ensure website promotion via Internet search engines and social networks.	375	375	375	375	1,500	GEF	71400 - contract. serv. individ.		The content of the project's website has been fully transferred to the UNDP Office site, including all project's technical reports with methodologies, recommendations prepared by the project personnel, published reference books, main publications and articles of the project's experts, materials and presentations from the conferences, trainings and workshops organized and conducted by the project, and all important press releases and news. The said information is regularly updated on the new website. During the year.
4.8	Annual market monitoring reports for new building construction with the emphasis on energy efficiency.								Project Manager	The report on the monitoring of the market of energy efficient buildings for 2013-2017 has been prepared. To be completed in 2018.
4.8.1	Based on the available statistics, direct survey and data obtained from the project's partners (Ministry of Architecture and Construction, Department for Energy Efficiency) conduct a study of the energy performance and respective GHG emissions of different residential buildings introduced to the housing construction market in 2013-2017, and based on this data, draft reports containing the data on market monitoring for new residential building construction, analysis results and respective recommendations with the emphasis on energy efficiency improvement and GHG emission reduction.			0	0		GEF	71300 - local consultants (budget 2015)		The report containing the data on the monitoring of the market of energy efficient buildings for 2013-2017 has been prepared along with the findings of the analysis and respective recommendations as to further possibilities for energy efficiency improvement and GHG emission reduction. The report has been presented to the stakeholders and published on the Internet. Deadline - December 31, 2017. To be completed in 2018.
4.9	Preparation of the final project report consolidating the results and lessons learnt from the implementation of the proposed project components and long-term recommendations for the required next steps.								Project Manager	The outcome is to be achieved in 2018.
	Bank fee, GEF	32	18	51	50	150	GEF	74510 - bank charges		Bank charges. During the year
	Bank fee, UNDP	25	25	25	25	100	UNDP	74510 - bank charges		Bank charges. During the year
	Outcome 4, total UNDP:	25	25	25	25	100	UNDP			
	Outcome 4, total GEF:	5,852	7,530	13,291	14,887	41,559	GEF			
	<b>Outcome 4 total:</b>	<b>5,877</b>	<b>7,555</b>	<b>13,316</b>	<b>14,912</b>	<b>41,659</b>				

**Effective project management and monitoring ensured**

PM1	Project monitoring and reporting.	0	0	0	0	0	UNDP	71600 - travel	Project Manager	At least one Project Steering Committee meeting has been held. Deadline - December 31, 2017. All project reports have been submitted and adopted in due time. Deadline - July 15, 2017 (for the semiannual report to the GEF and for Logs) and December 31, 2017 (for the annual report to the Ministry of Economy, APR and Logs)
PM2	Project management and project office functioning.	460	460	460	460	1,840	GEF	71300 - local consultants	Project Manager	Project office successfully operated. Project plan successfully fulfilled. Throughout the Project.
		250	250	250	250	1,000	GEF	71300 - local consultants (translation)		
		0	0	0	0	0	GEF	71400 - contract. serv. individ.		
		6,350	6,350	6,350	6,369	25,419	UNDP	71400 - contract. serv. individ.		
			620		620	1,240	GEF	71600 - travel		
		38	0	0	0	38	GEF	72100 - contract. serv. companies		
		750	750	400	400	2,300	UNDP	72100 - contract. serv. companies		
		0	157	0	0	157	GEF	72300 - materials & goods		
		375	375	375	375	1,500	GEF	72400 - communication		
		352			355	707	GEF	72500 - Office Supplies		
		500	500	500	500	2,000	UNDP	73100 - utilities		
			300			300	GEF	73400 - equipment servicing		
			100			100	UNDP	73400 - equipment servicing		
			0			0	GEF	74200 - printing and publication		
			0			0	GEF	75700 - training		
		13	13	13	13	50	UNDP	74500 - miscellan.		
		13	13	13	13	50	GEF	74500 - miscellan.		
	UNDP project management, total:	7,613	7,713	7,263	7,282	29,869	UNDP			
	GEF project management, total:	1,488	2,175	1,098	2,073	6,832	GEF			
	<b>Project management total:</b>	<b>9,100</b>	<b>9,887</b>	<b>8,360</b>	<b>9,354</b>	<b>36,701</b>				
	<b>Total for UNDP</b>	<b>7,663</b>	<b>7,763</b>	<b>7,313</b>	<b>7,332</b>	<b>30,069</b>				
	<b>Total for GEF</b>	<b>39,117</b>	<b>60,878</b>	<b>133,147</b>	<b>56,580</b>	<b>289,721</b>				
	<b>Total 2017:</b>	<b>46,779</b>	<b>68,640</b>	<b>140,459</b>	<b>63,912</b>	<b>319,790</b>				

Project Manger  
A. Grebenkov 

Programme Analyst  
I. Tchoulba 