



# ANNUAL PROGRESS REPORT

**United Nations Development Programme**

**Kazakhstan**

**Project Title:** 00091328, UNDP-GEF Project «Sustainable Cities for Low-carbon Urban Development»

**Reporting Date:** February 17, 2023

Reporting Period	2022
Donor	GEF
Country	Kazakhstan
Project Title	Sustainable Cities for Low-carbon Urban Development
Project ID Outputs (Atlas Project ID and Description) Strategic Plan and/or CPD Outcomes	00091328 Outcome 3.2. By 2025, all people in Kazakhstan, in particular most vulnerable, benefit from increased climate resilience, sustainable management of environment and clean energy, and sustainable rural and urban development
Implementing Partner	Ministry of Industry and Infrastructure Development of the Republic of Kazakhstan (MIID RK)
Project Start Date	March 2015
Project End Date	April 2024
2022 Annual Work Plan Budget	USD 320 409.44
Total resources required	USD 320 409.44
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## I. Executive summary

The Project supports the identification, design, and implementation of Nationally Appropriate Mitigation Actions (NAMAs) in the urban sector. NAMAs, consisting of investments in infrastructure supported by capacity building, awareness raising and technical assistance, will contribute to achieving the country's GHG emission reduction voluntary target while improving urban services and the quality of life of citizens in Kazakhstan's towns and cities. As a result of this project direct emission reductions of 370,000 tCO<sub>2</sub>e, direct post project emissions of 275,000 tCO<sub>2</sub>e and indirect emission reductions of between 1 and 5 million tCO<sub>2</sub>e are expected. Progress during the reporting period:

- Financial Support Mechanism (FSM) review was completed. FSM was adjusted based on recommendations of the Review. FSM was re-launched in the 3d quarter 2022.
- Monitoring of implemented urban low-carbon FSM projects and preparation of final report with recommendations is on-going.
- Modernization of engineering systems in pilot residential buildings, including monitoring of results for the entire pilot project (quarter), preparation and presentation of organizational, technical and financial models of low-carbon modernization of typical residential areas of cities of Kazakhstan is completed.

During March-November 2022, the Project team worked on a diverse set of actions to invite new applications for the financial support under the updated FSM with a number of online and in-person webinars/trainings across the regions for SMEs, regional branches of Damu Fund and II tier banks. Hence, the Project started receiving new applications right after the updated FSM was re-launched in October 2022. As a result, 9 new applications were approved in 2022.

The total revised budget for 2022 year is \$320 409.44 (it is equal to the revised planned amount).

## II. Background

The project assists in the identification, design and implementation of nationally appropriate climate change mitigation (NAMA) measures in the urban sector. These measures, which include investing in efficient infrastructure, as well as capacity building, awareness raising and technical assistance, will help, along with improving urban services and improving the quality of life of people in cities and towns of Kazakhstan, to achieve the country's voluntary goals to reduce greenhouse gas emissions.

The basis of the project is the testing of support measures for investment low-carbon projects in urban infrastructure, which can be implemented through debt financing. The project plans to strengthen the capacity of urban (regional) services in low-carbon urban (regional) planning, develop goals for prioritizing urban (regional) climate change mitigation measures (Component 1), support the creation and strengthening of institutional structures to ensure public-private investing and investing under the ESCO model in specific infrastructure facilities and provide technical assistance (Component 2); assist in financing urban projects through support measures (Component 3); implement pilot projects by investing in the modernization and improvement of urban infrastructure (Component 4); to test the mechanism for trading in reduced emissions from implemented urban low-carbon projects (Component 5).

UNDP Strategic Plan Primary Outcome:

Outcome 1: Structural transformation accelerated, particularly green, inclusive and digital transitions.

Output 5.2 Transition to renewable energy accelerated capitalizing on technological gains, clean energy innovations and new financing mechanisms to support green recovery

Expected CPD Outcome (s): 3.2. By 2025, all people in Kazakhstan, in particular most vulnerable, benefit from increased climate resilience, sustainable management of environment and clean energy, and sustainable rural and urban development

Expected CPD Output (s): Output 4.2: Solutions developed, financed and applied at scale for structural transformation of energy sector and improved public health

Implementing Partner: Ministry of Industry and Infrastructure Development of the Republic of Kazakhstan, «DAMU» Entrepreneurship Development Fund» JSC (Damu Fund).

### III. Progress Review

Fill in the table with project indicators data:

Expected objective	Output indicators	Data source	Baseline		Value for the previous year if different from baseline	Target for the reported year	Actual value for the reported year
			Value	Year			
Support the Government of Kazakhstan in the development and implementation of National Appropriate Mitigation Actions (NAMAs) in the urban sector to achieve voluntary national GHG emission reduction targets	Number of Urban NAMAs under development	PIR	0	2015	15	15	15 The end of Project target was achieved
	Cumulative cofinancing realized	PIR	0	2015	70 million	70 million	The total value of the programs implemented by the cities, monitored and supported by the project reached USD 61.8 M plus USD 14.1 M investments in energy efficiency directly supported by the Project, plus additional investments worth USD 8.2 M were facilitated without direct financial support from the Project, but with indirect positive influence
	Number of Urban NAMAs under implementation	PIR	0	2015	4	4	4 The end of Project target was achieved
	Value of Urban NAMAs under implementation (USD)	PIR	0	2015	3 million	3 million	The end of Project target was achieved (about USD 5.7 M).
	Expected direct lifetime GHG emission reductions from	PIR	0	2015	370,000 t CO <sub>2</sub>	370,000 t CO <sub>2</sub>	The end of Project target was achieved

	investment in pilot NAMA implementation and NAMA Financial Mechanism						<p>The most preliminary ongoing estimation is that for the 33 supported projects the emissions reductions are 37 253 t CO2 per year. (lifetime 793,065t CO2)</p> <p>Up to date 9 applications were approved by PB under the updated FSM applications The emissions reductions are 497, 46 t CO2 per year.</p>
	Number of people benefiting from the improved transport and urban systems (including women)	PIR	0	2015	180,000 (90,000)	180,000 (90,000)	There has been no progress since the last reporting. The target is achieved - 238,936 people benefitted from the improved transport and urban systems (including 115,606 women and 23,181 children)
	Status of the establishment of financial mechanism for NAMAs	PIR	1	2015	5	5	The status of the financial mechanism: 5 - facilities operationalized / funded and have sufficient demand. The end of Project target was achieved

Expected outputs	Output indicators	Data source	Baseline		Value for the previous year if different from baseline	Target for the reported year	Actual value for the reported year
			Value	Year			
<b>Output 1</b> Enable participating municipalities to articulate their climate-related priorities, and identified and prioritized urban mitigation actions (urban NAMAs)	<b>1.1</b> Number of municipalities for which urban GHG inventories, abatement costs curves and NAMA factsheets prepared and discussed with stakeholders	PIR	0	2015	15	15	15
	<b>1.2</b> Number of municipalities for which urban GHG reduction targets established and officially adopted by Akimats	PIR	0	2015	15	15	15
<b>Output 2</b> Put in place the enabling institutional framework to facilitate the implementation of urban mitigation	<b>1.1</b> Technical assistance delivered according to ToR agreed with each akimat (signoff between UNDP and akimat)	PIR	0	2015	15	15	15
	<b>1.2</b> Bankable project documents prepared	PIR	0	2015	The project provided support to 36 applications, and 33 successful projects were completed.	15	Up to date 9 applications were approved by PB under the updated FSM
	<b>1.3</b> Public service contracts signed / tariffs agreed	PIR	none	2015	The end of project target was achieved in the previous period. 36 projects were supported: 13 are PPPs and 6 are trust management agreements and 17 are EPCs.	up to 15, depending on needs	Up to date 9 applications were approved by PB under the updated FSM
<b>Output 3</b> New and additional financing for urban NAMAs leveraged	<b>1.1</b> Financing leveraged to urban NAMA projects enabled by the Pilot NAMA financial mechanism (USD)	PIR	0	2015	USD 14,1 M total funding	45 mln. USD	Up to date 9 applications were approved by PB under the updated FSM (the financial support amount 163,055 USD)



	<b>1.2</b> Diversification strategy developed	PIR	none	2015	The draft strategy was presented to the Beneficiary.	strategy developed	strategy developed
	<b>1.3</b> Direct lifetime GHG emission reductions from NAMA fund	PIR	0	2015	The most preliminary ongoing estimation is that for the 33 supported projects the emissions reductions are 37 253 t CO2 per year. (lifetime 793,065t CO2)	275,000 t CO2	Up to date 9 applications were approved by PB under the updated FSM applications The emissions reductions are 497, 46 t CO2 per year.
<b>Output 4</b> Identify and finance a pilot urban mitigation action to demonstrate the feasibility of urban emission reduction for future replication	<b>1.1</b> Direct annual/lifetime GHG emission reductions from pilot urban mitigation action	PIR	0	2015	The pilot modernization of the 5 buildings in Astana annual effect is estimated at 700.8 tCO2 (14,017 tCO2 life-time, 20 years); the residential building modernization in Temirtau effect may be added: 202.7 tCO2 / 4,054 tCO2 life-time, so the Project preliminary result is 903.5 tCO2 /year / 18,071 tCO2 life-time reduction	4,750 tCO2/95,000 t CO2	The works on remained 2 residential buildings were completed (approximate effect is 280 tCO2 reduction (5 608 tCO2 life-time, 20 years).
	<b>1.2</b> Status of pilot urban mitigation action demonstrating comprehensive modernization of urban district	PIR		2015	The pilot urban mitigation action demonstrates that the pilot project is implemented: status of level 8, and monitoring is going on (near level 9) for the 3 buildings, where all thermal modernization works were completed.	9	The pilot urban mitigation action demonstrates that the pilot project is implemented: status of level 9, and monitoring is going on level 8 for the 5 buildings, where all thermal modernization works were completed. The monitoring of the results will be completed in 1 quarter 2023.

<b>Output 5</b> GHG emission reductions of implemented urban NAMAs are systematically monitored, verified and reported	<b>1.1</b> NAMA MRV process allows certified emission reduction credits to be imported into the domestic Emission Trading Scheme	PIR	none	2015	The documents were finalized to issue 2,498 tradable GHG emission reduction units. The sales order was placed with the broker. The units are still waiting for the buyer	1 emission reduction purchase agreement signed	1
	<b>1.2</b> MRV system for urban NAMA set up and operational in cities	PIR	0	2015	MRV system concept for Kazakhstan was designed with help of an external consultant.  4 trainings were organized for 4 regional authorities.	4	4
<b>Output 6</b> Kazakh cities and towns are aware of, and have access to, information and guidance on urban NAMAs	<b>1.1</b> Awareness index to be defined in inception workshop incorporating knowledge and 'use of knowledge' factors at city/town level	PIR	N/a	2015	The survey was filled in by 343 individuals. It appears, that the end-of-project target is reached.	Awareness index doubled	To continue awareness raising, in May 2022 the Project provided a training on green projects and energy efficiency and FSM
	<b>1.2</b> Number of people reached out by awareness raising campaign (gender-disaggregated)	PIR	N/a	2015	The coverage reached 11,853 individuals (including 6,767 women), above end of project target, with additional efforts in 2022.	Awareness index doubled	To continue awareness raising, in May 2022 the Project provided a training on green projects and energy efficiency and FSM

**Component 1: INTEGRATED MUNICIPAL PLANNING, TARGETS AND PRIORITIZATION FOR URBAN MITIGATION ACTIONS.**

Under this component, 15 cities (regions) are supported in the collection, processing and analysis of data related to low carbon urban planning. In selected cities, priority actions in the urban sector are identified that promote energy conservation and energy efficiency.

In 2022, the project continued to monitor development plans for pilot regions of the Republic of Kazakhstan in terms of planning and implementing low-carbon urban projects.

As of the end of 2022:

- In 15 pilot cities, an inventory of greenhouse gases was carried out by utility sector using international methodology. For pilot cities, investment plans have been developed to modernize low-carbon cities.
- The identified activities were included in the officially approved regional plans and programs.
- Limited capacity of the municipalities is explained by the complete novelty of requirements to monitor the emissions and absence of relevant by-laws and regulatory base, budgets and competencies.
- Regional investment plans will be financed from the budget, as well as from the private sector through a public-private partnership (PPP) or ESCO.

In Astana city reducing GHG emissions targets were set in the “Strategy for the Low-Carbon Development of Astana City to 2030 and 2050”, but this document is still discussed with indicators for GHG emissions reduction as estimations; however, a "Comprehensive Action Plan for Improving the Environment of the City of Astana for 2018-2020" was completed, and a new plan was adopted - "Comprehensive Action Plan for Improving the Environment of the City of Nur-Sultan for 2021-2024" – those plans provided for numerous activities leading to GHG emission reductions, however, without setting the precise targets.

The following main barriers were identified by the Project:

- In some cities, especially small and single-industry towns, the process of approving investment plans and GHG targets is rather difficult due to the lack of funds in Akimats to implement these plans.
- It has to be noted that the emission inventories and carbon abatement are not properly institutionalized, while it is required by the adopted (January 2021) Ecological Code.
- Due to COVID-19 related complexities, local administrations often did not want to attract extra-budgetary funds to projects to reduce emissions (in particular PPP projects) in order not to increase the debt burden on budgets.
- Implementation of low-carbon urban projects in the housing sector has become even more problematic due to the complicated economic situation in the country caused by COVID-19. Part of the population become unemployed. Therefore, the population is reluctant to approve the implementation of energy efficiency measures (for example, modernization of heating systems, roof insulation, repairs of engineering networks), preferring to postpone these works to a later time, when the situation improves.
- Another barrier that makes it difficult for Akimats to plan and commit to reduce CO<sub>2</sub> emissions is the fact that local administrations do not keep records of GHG emissions (only at the country level such data are available). Local administrations are required to keep records of pollutants in their regions and develop low-carbon strategies after the adoption of the Environmental Code. Earlier, the UNDP-GEF Project provided appropriate recommendations. After the adoption of the Ecological Code at the end of 2020, and Akimats still do not have capacities and budgets to catch up with the new requirements. It will take time for the system to start working.

**Component 2 - INSTITUTIONAL FRAMEWORK FOR URBAN NAMAS.**

The focus of this component is promoting the creation / transformation of an institutional framework for attracting investment in urban infrastructure, including public sector facilities and communal property (through public-private partnerships or fiduciary management), as well as to the sector of multi-apartment buildings (according to ESCO models).

By the end of the project, all 15 pilot Akimats should be provided with technical assistance to develop the institutional framework, and project documentation for bank financing should be prepared.

In 2022, the UNDP-GEF project continued to aid pilot Akimats and companies involved in the preparation of the institutional framework for low-carbon urban projects, as well as continued monitoring of the implementation of PPP and ESCO initiatives.

Due to COVID-19 imposed restrictions, many public events and gatherings in the regions were cancelled and it was not possible to continue clarifying the organizational arrangements for financing of low-carbon projects (PPP, trust and ESCO). In 2021 the situation has improved: massive vaccination was underway, and the general political situation became more favourable. Independent review of the Financial Support Mechanisms (FSM) was completed. The FSM re-started in 2022 after the methodology and Rules have been enhanced and endorsed. Meetings were conducted on-line, where experts presented organizational models of PPP, ESCO and trust management and discussed the possibilities of their application to attract commercial financing for low-carbon urban projects.

Technical assistance included, inter alia, advice to the cities on application of a public-private partnership (PPP) model for implementation of urban EE projects, as well as alternative models such as the Energy Performance Contract (EPC - ESCO) or leasing, trust management, wherever applicable. For each model - ESCO, leasing, trust management and PPP – a standardized package of documents was developed, agreed with central authorities and provided to partner municipalities for implementation, along with technical assistance defined for each specific NAMA. One of the issues in Kazakhstan is that the Law on Public Procurement and the Budget Code do not provide for the EPC (though the Law on Energy Efficiency describes ESCO and EPC formats), and ESCOs working with the public organizations have to adapt other formats – PPPs, trust management or leasing agreements. Relevant recommendations to amend the legal acts mentioned were prepared by the Project.

The Project provided advisory support to the Akimat of Pavlodar region on implementing green projects (including EPCs) with financing from the payments for emissions collected from polluting companies, to offset ecological damage. The initiative was supported by the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan, with a perspective for scaling up to other regions. A preliminary list of green projects was identified in Pavlodar, comprising internal electric grid and lighting modernization in some multi-apartment residential buildings.

In order to continue the search for new organizational schemes for attracting investments into energy efficiency of the municipal economy, in partnership with the independent public association "Decenta", the Project completed testing of the Factoring tool for ESCO companies that have carried out modernization work, but due to the lack of collaterals, they cannot take new bank loans for new projects.

Work was carried out to prepare the basis for factoring transactions for ESCO companies in the sector of multi-apartment buildings, barriers were analysed. The most important result is 3 pilot factoring deals,

one in Temirtau and two in Lisakovsk. A full set of legal documents was prepared for the factoring mechanism for ESCOs, building management companies and communities of residents. Also, recommendations were given to ESCO companies planning to use a factoring tool, work was carried out to build the capacity of local financial organizations and businesses on the possibility of using factoring operations in energy efficiency.

As of the end of 2022:

- A technical support in establishing the institutional framework for urban infrastructure projects was provided to 47 cities, including 15 previously approved pilot cities.
- As part of the above support - support to the cities: Aksu, Atbasar, Satpayev, Aktobe, Kokshetau, Kostanay and Stepnogorsk, Kyzylorda consisted in accompanying the preparation of 10 PPP projects, including:
  - selection of a modernization object together with Akimats and potential business structures, which are ready to act as a private partner in the energy saving project;
  - conducting an energy survey of the facility to determine the basic indicators of energy consumption;
  - demonstration of benefits for Akimats and business;
  - consulting support of Akimats and businesses on the adaptation of standard solutions for PPP projects,
  - consulting support of the process of agreement procedures of the PPP project.
- Results of the above works made possible implementing energy service contracts under the PPP mechanism and identified hidden barriers to implementation and opportunities and gaps in new PPP legislation.
- The end-result of this work is a model package of documents for energy-saving PPP projects, which are available for each user and subsequent use.
- To date, out of the projects that were supported, the project for the modernization of boiler plants in the Kyzylorda region signed a PPP contract for the modernization of 9 educational facilities and received financial support.

### **Component 3 - FINANCING FOR URBAN NAMAs.**

The component is aimed at creating a system that allows attracting investments in energy saving projects from private organizations and banks.

By the end of the project, a system should be in place to attract investment from the private and banking sectors to urban energy conservation projects. Investments of about US \$ 45 million should be attracted to pilot projects and about 275 thousand tons of CO<sub>2</sub> eq should be reduced. In addition, a diversification strategy should be developed.

In 2020-2021, given the external socio-economic environment caused by the situation with the spread of COVID-19 and the measures taken by the Government of the Republic of Kazakhstan to introduce restrictive measures, the introduction of energy efficient projects in cities became less relevant for the businesses. Considering the risks of a decrease in entrepreneurial activity in general and in energy

efficiency, the UNDP-GEF Project in partnership with the DAMU Fund developed and implemented a financial incentive measure for low-carbon urban projects in the form of financial support to the loan principal of up to 40%, which meets the conditions and expectations of the business. Based on final recommendations of the FSM review in March 2022, necessary adjustments were made, including improving the procedures for selecting projects for support and subsequent monitoring with 2 independent Technical Experts to make eligibility approval and terminal validation of the projects and supporting them in a more transparent way and to make sure the quality of the process. A new responsible party agreement was concluded between UNDP and Damu Fund where the changes were reflected, including to the accompanying set of documents: templates of financial support agreements, ToRs, instructions, and methodologies for experts, etc. This was a time-consuming process, but it has made the FSM more robust and improved its quality. During March-November 2022, the Project team worked on a diverse set of actions to invite new applications for the financial support under the updated FSM with a number of online and in-person webinars/trainings across the regions for SMEs, regional branches of Damu Fund and II tier banks. Hence, the Project started receiving new applications right after the updated FSM was re-launched in October 2022. As a result, 9 new applications were approved by the project board in 2022. In 2022, as per the RPA between MIID and Damu Fund, financial commitments under the previously supported 36 projects were released.

An additional barrier to small / medium-sized businesses in attracting investments in energy efficiency is the lack of collateral for receiving loans through commercial banks for energy efficiency projects. In this connection, UNDP and the Government have initiated a joint project to create a guaranteed system that will facilitate access to debt financing for energy efficiency, create a support system and, subsequently, through turnovers, allow for attracting additional investments into energy efficiency.

#### **Component 4: IMPLEMENTATION OF PILOT URBAN NAMA.**

Under this component, one pilot project is under implementation - a comprehensive low-carbon modernization of a residential area in Astana city. 5 residential buildings in a residential quarter of Astana city, Baikonyr district at Pushkina and Zhubanova streets were selected on a competitive basis for energy efficiency modernization, including their heating networks. This component tests the blended financing of a low carbon urban project.

It is expected that by the end of the UNDP-GEF Project, the pilot quarter will directly reduce around 4,750 tons of GHG emissions (to be verified).

In 2021, in the first three pilot houses, construction and installation works on thermal modernization continued, which started in 2019. As a result, the following works were completed and commissioned at 5 residential buildings:

- Sealing and insulation of seams between wall panels;
- Wall painting;
- Restoration of the area along the perimeter of buildings;
- Restoration of cornice slabs over entrances and arrangement with gutters;
- Replacement of external entrance doors;
- Creation of unheated spaces on balconies (installation of balcony structures and ebbs);
- Modernization of heating systems, hot and cold water supply with replacement of pipelines;
- Roofs insulation was done at the expense of the Akimat.

The following works were completed at 3 buildings and under completion at 2 remaining buildings:

- Installation of a weather-compensated automated substations.

Based on the Memorandum signed between UNDP and the City Akimat in 2017, the City Akimat has repaired the roofs of the pilot residential buildings (according to the regional development program, the residents shared the costs), as well as renovated the yard of the quarter and the district heating pipelines. The UNDP-GEF Project developed and handed over to the Akimat design and cost estimates for the insulation and modernization of the roofs at the pilot residential buildings. A single apartment's refund is estimated at 325,785 tenge for the entire period or an average of 3,880 tenge per apartment every month (for 7 years).

A residential building at Zhubanov st. 1 decided not to participate in the Regional Development Program for the repair of the roof. Residents finally agreed in 2021, and so the 5th building got a new roof a year later than the others. The City Akimat of Astana has also completed works on the improvement of the courtyard and the territory of the pilot quarter, as well as the repair of the intra-quarter sewerage networks.

The installation works on modernization of the heating and hot water supply systems of two multi-apartment residential buildings in the pilot quarter of Astana are finalized. However, monitoring of the results will be conducted in early 2023. The exceptional project extension was requested for 12 additional months and depending on the decision, the terminal evaluation will be conducted either by April 2023 or postponed to late 2023.

In 2021, UNDP-GEF Project carried out an interim assessment of the results of a comprehensive low-carbon modernization of the urban quarter in Astana city (using the example of the first three buildings). As a result of the assessment, the energy, economic and environmental effects of the thermal modernization carried out were determined. Electricity savings for general building needs amounted to 30.6 kWh per year (71% of the baseline - before the modernization of buildings). The savings in thermal energy for heating of the modernized buildings amounted to 1.8 Gcal (27% of the baseline – prior to the modernization of buildings). Reduction of greenhouse gas emissions - 2 778 tons of CO<sub>2</sub> eq. per year.

One of the initial tasks of the Component 4 was to test the mechanism of ESCO - energy service contract (on a refundable basis at the expense of residents) for the modernization of the heating system (installation of the weather-adjusted heating stations, balancing the heating system, etc.) as part of the thermal modernization project. The engineering systems in these buildings were badly worn out; to fulfil the task of modernizing the heating system, in addition to heating modernization, a replacement and insulation of all distribution pipelines and valves was necessary, which has led to a significant increase in the project cost. As a result, the simple payback period of the project was 21.5 years. Even with the 40% financial support provided by the UNDP-GEF Project, a 12-year payback period was not eligible for commercial banks' financing.

The use of a blended financing scheme (grant, contribution from residents, assistance from the municipality) showed that the implementation of similar activities by attracting debt financing is possible only if there is initially accumulated investment subsidizing of at least 76%.

Due to low electricity tariffs for the population, savings that will have been generated are not sufficient to cover more than 24% of the investment. A solution to this challenge can be a financial support as a tool to motivate the modernization. However, subsidies must have a source and the bigger is the size the heavier is burden for municipalities.

Unless the modernization is viewed as something creating a sustainable infrastructure, reducing the risks associated with safety and reliability of housing and reduced chances of discontent among residents, this indicator can be justified, compared to the alternative costs to eliminate the consequences if modernization is not carried out.

Anyway, to scale up such modernization, a subsidy as a measure of motivation can be considered through the tools of solidarity contribution. 1 tenge of the subsidy must match to 1 tenge contribution of the tenants. Like that, the maximum subsidy will be 38%. The structure of the modernization funding will be as follows:

- 38% subsidy;
- 38% savings of the residents;
- 24% debt financing, repaid by residents.

Considering the above, as a result of consultations and discussions at the PSC meeting (Minutes No. 16 of May 13, 2019), it was decided to abandon the idea of the ESCO mechanism in this pilot quarter in Astana and test this scheme in the city of Temirtau to demonstrate the possibility of attracting private business funds (ESCO) through financing by a commercial bank. In this project (pilot residential building in Temirtau), the following activities were implemented through the ESCO mechanism:

- Installation of an automated heating point;
- Installation of balancing valves;
- Thermal insulation of pipelines of the heating system, hot water supply;
- Replacement of lighting for common areas (entrances).

As a result of the heat consumption reduction measures, the apartments have become more comfortable. As a result of energy monitoring, a significant actual decrease in heat consumption of 349 Gcal (55% of the baseline - prior to the modernization) was recorded, and a reduction in CO2 emissions to 189 tons per year. The investment payback period was 3 years. Refund from one apartment is 4,272 tenge per year.

The status of pilot modernization of an urban district:

- 100% of works completed at 3 buildings were completed by end of 2021 and the remaining 2 with automated heating stations were completed in December 2022.
- Inputs of the Project, based on the field experiences, were considered in preparation of the new edition of the Law on Housing Relationships.
- A preliminary monitoring shows about 27-29% reduction of heat consumption for the 3 buildings with automated heating stations, but the evaluation is for 4 months only, it has to be done for a full heating season.

The Project faces the following main obstacles during the pilot implementation of the city's residential complex modernization project:

- owners of apartments in multi-apartment residential buildings still consider energy saving measures to be secondary, as the heating is a fairly cheap service (in Astana, (<http://a-tranzit.kz/vnimaniju-potrebitelej/>) is less than USD 3; for comparison, in the Baltic countries it is USD 60-80).
- the decrease in family income caused by COVID-19 restrictions, apartment owners became even more conservative towards modernization of their houses, leading to energy savings (especially the roof - they are for the cost of waterproofing it).
- Also, in the context of a worsening economic situation in the country (exchange rate fluctuations, COVID-19 restrictions), apartment owners disagreed to pay for the repairs of common property



by instalments, even if these are interest-free loans (under the regional development program). Considering that the modernized residential buildings are 40-50 years old and are mainly populated by elderly, this becomes a serious risk to the proposed model of co-financing of energy efficient repairs. A lot of government support is required in the form of grants.

- Private companies - ESCOs - are not willing to take risks and conclude contracts for energy efficient modernization of utilities (for example, smart heating or lighting systems) with condominium authorities (KSK, etc.), especially in the context of an unstable economic situation caused by COVID-19, and in the context of the announced reform of the housing relations system (transition from cooperatives of apartment owners to organizations for managing common property).

#### **Component 5: MONITORING, VERIFICATION AND KNOWLEDGE MANAGEMENT.**

By the end of the project, this Component must have completed at least one sale of GHG emission reductions in the domestic carbon market; a mechanism for reporting and checking units of greenhouse gas emissions has been developed; and increased awareness of low-carbon urban development by 50%.

In 2021, one deal for the sale of GHG emissions reductions in the domestic carbon market was fully prepared, documents were finalized to release 2,498 tradable GHG emission reductions - carbon credits ready for sale. Unfortunately, in 2021 there was no demand for emissions due to an excess of quotas issued by the state within the framework of regulation (the UTS RK system).

When preparing this transaction, UNDP-GEF Project has tested the monitoring, reporting and verification (MRV) process at the 5 facilities in Pavlodar region by an accredited company. Corresponding validation and verification of outliers was carried out. The Project supported the validation and later verification of the CO2 reduction.

4 trainings were organized for 4 regional authorities. Road maps for standard ST RK ISO 37120 in 3 pilot cities implementation were prepared for Nur-Sultan, Temirtau and Stepnogorsk (per capita emissions monitoring as an indicator).

It is worth noting that MRV systems for 4 cities could not be created under the current conditions: Ecological Code was adopted in January 2021, and the requirement for the municipalities to monitor GHG emission reductions was just introduced. Municipalities never monitored and measured any GHG emission reductions - MRV budgets, institutional arrangements, competences and trainings are still required, and in the nearest perspective the probability that the municipalities would start such monitoring is still low.

During the implementation of the project in 2020-2021, Protocols of Performance Assessment (MRV system) were prepared for the implementation of the following types of low-carbon projects:

- Buildings and constructions,
- Street lighting,
- Boiler plants,
- Pumping units.

These Protocols will be used in 2022 to assess the effectiveness of all previously implemented projects supported by the UNDP-GEF Project.

The awareness campaign since the beginning of the project was re-assessed in July 2021: the Project reached out to 11,828 individuals (including 6,761 women). During March-November 2022, the Project

team worked on a diverse set of actions to invite new applications for the financial support under the updated FSM with a number of online and in-person webinars/trainings across the regions for SMEs, regional branches of Damu Fund and II tier banks. The total number of trainings participants reached 230 (including 86 women). The Project started receiving new applications right after the updated FSM was re-launched in October 2022.

## IV. Project Risks and Issues

### a. Updated project risks and actions

Project Risk 1: There is a risk of failing to attract bank financing for approved low-carbon urban projects. Policy changes in Kazakhstan (decarbonization) and the beginning of an increase of energy tariffs. Risk level: Significant

*Actions taken:* A new mechanism of investment financial support for low-carbon urban projects was introduced. Business representatives are trained in attracting commercial financing and support applications submission in a series of seminars. Meetings were held with commercial banks, where the conditions for receiving the financial support were explained.

Policy changes in Kazakhstan (decarbonization) and the beginning of an increase of energy tariffs significantly reduce this risk. The banks and Damu had an extensive training, gained experience and are better fit for financing low-carbon projects.

Project Risk 2: There is an economic recession in the country. Economic activity, including investments, get low. Risk level: Moderate

*Actions taken:* Selective use of tools to support low-carbon projects. The results of the first supported projects have been published. The results will be of interest to business, which will contribute to the implementation of such projects even in the unfavourable context. Additional trainings on the development of such projects were held for business. Against the background of active vaccination and rising oil prices, this risk becomes less relevant. At the same time, the increase in energy tariffs encourages investors to invest in energy efficiency and renewable energy sources.

Project Risk 3: There is a risk of the exchange rate fluctuation (devaluation of the local currency). Risk level: Moderate

*Actions taken:* Recommendations to investors on choosing simpler and cheaper technologies whenever possible. Training seminars for investors were held, demonstrating the results of previously implemented pilot projects in which simple solutions were used. Against the background of active vaccination and rising oil prices, this risk becomes less relevant.

Project Risk 4: There is a risk of insufficient time for project implementation. Risk level: Low

*Actions taken:* Some project activities (Component 4) were delayed due to COVID-19. The project was extended for 14 months (GEF approval received). Additional exceptional extension for 12 months is being

requested. Financial support mechanism is reworked and under implementation, there is a pipeline of FSM projects, some applications were reviewed and approved, so this risk is minimized at present, but there is a need to get an exceptional extension for the NAMA Project to complete the implementation of the FSM activities to the goals.

Project Risk 5: There is a risk of competition with public support measures. Risk level: Low

*Actions taken:* Development of Government subsidies and special support from UNDP-GEF Project is done in coordination with the Government and the main national business support operator – Damu Fund. The Project team consulted with partners while developing this tool. Existing State-supported programs don't focus on low-carbon projects. financial support to the loan principal is a unique instrument in Kazakhstan. Finally, the Government is expected to inherit and upscale the financial support instruments developed by the UNDP-GEF Projects in Kazakhstan.

Project Risk 6: There is a risk of a lack of cost-effective low-carbon projects. Risk level: Low

*Actions taken:* A training module on the preparation of urban low-carbon projects was developed for investors and commercial banks. Extensive trainings and training materials and templates are available online as a result of the project's efforts significantly reduce this risk. In addition, electricity tariffs are increased as part of the national decarbonization policy. The Government also supported the launch of a new project in 2021 (based on a tied grant) in partnership with UNDP to provide loan guarantees (powerful impact of 85-90% irrevocable guarantees) to low-carbon projects, which should dramatically increase the number of green projects suitable for bank financing.

Project Risk 7: There is a risk of changes in the conditions for financial support of pilot low-carbon projects in the last year of the project. Risk level: Negligible

*Actions taken:* The rules of the FSM were updated considering the recommendations of the independent evaluation of the FSM, now the Rules are approved, changing them is unlikely. Support to the loan principal is a quick-to-implement tool (1-3 months) to reduce this risk. A mechanism for technical monitoring of projects upon completion of facilities is ready for operation.

## **V. Gender Related Activities**

In 2022, the Project continued monitoring the number of women, children and men who have benefited from the low carbon projects (based on the results of monitoring). For this purpose, the project reporting forms contain relevant indicators. Thus, when applying for financial support for low-carbon projects, the applicant must also indicate the expected number of women, children and men who plan to receive benefits in the form of improved comfortable living standards and etc. During March-November 2022, number of in-person webinars/trainings across the regions for SMEs, regional branches of Damu Fund and II tier banks reached 230 (including 86 women).

During the reporting period the energy efficiency projects (approved earlier) managed to mobilize additional financial support, which contributed to better living conditions of women (better energy performance of buildings, better availability of hot water), and as women stay at home more time than men, with the better energy efficiency and comfort the children get healthier, housekeeping - easier, it gives more free time to women, improves their living conditions and opportunities for personal development. Project hired National Consultant on assessing gender equality aspects and impacts of pilot low-carbon urban energy projects to be conducted by summer this year. Outcomes of the assessment will be embedded into 2023-year progress report and widely disseminated among all stakeholders.

Women activists appreciate the better conditions at home and savings on energy bills. actively helping to promote the energy efficiency agenda. For example, women - representatives of the community of homeowners of a thermally retrofitted multi-apartment building in Temirtau supported an experiment to test factoring for energy efficiency. They were also very keen on being engaged more and learn, participating in project organized webinars. Please, also see information below regarding the Project participation in Women Entrepreneurship International Congress.

## VI. Cross-Cutting Themes

The UNDP-GEF Project important side-effect is improvement of social conditions in the locations where it operates. The supported projects created or supported 215 temporary jobs during their implementation.

As a part of the South-South co-operation, the UNDP-GEF Project shared its experience of applying the financial support mechanism developed and instruments tested. The FSM was presented at several international meeting and forums and the Project contributed to several publications, including a meeting with the EU Decarbonization SECCA Project (covering all 5 Central Asian countries) on May 5, 2022, speaking at International Climate Congress "Shape a sustainable future" in Astana, organized by the EU and Ecojer Association (Jun. 2, 2022), Women Entrepreneurship International Congress organized by the Atameken with a presentation "Women, Communities and Energy in Kazakhstan" (Sep. 22, 2022) (this may also be regarded as a gender-focused activity), inputs to article published by UNDP Eurasia: <https://www.undp.org/eurasia/stories/people-friendly-city>, speaking at 4th International Energy Saving Forum (Astana, Nov. 11, 2022) and at 2nd Almaty Energy Forum (Almaty, Nov. 14-16, 2022).

## VII. Lessons Learned

Within the reporting period the following actions were completed:

- In March 2022, an independent review of the Financial support mechanism (FSM) was completed. Recommendations were received to strengthen the aspects of evaluation and monitoring of FSM projects.
- The Rules for providing financial support within the framework of the implementation of the FSM in the energy efficiency of urban infrastructure have been approved.
- Responsible party agreement was signed between UNDP and Electric Power and Energy Saving Development Institute JSC to conduct a technical assessment of applications – Technical Expert No. 1.

- A competition is underway for a short-term consultant for the validation of FSM projects - Technical Expert No. 2.
- Responsible party agreement was signed between UNDP and the Damu Entrepreneurship Development Fund for the further implementation of the FSM.
- The project has already started working on developing a potential project. There are 9 applications were accepted and approved by PSC in 2022.

Project implementation during the reporting year was put on hold pending the review of the Financial Support Mechanism, developed with the Damu Foundation. Over the past reporting year, the project has spent a lot of effort in the redesign of the Financial Support Mechanism, thereby receiving support from an international Chief Technical Advisor and a UNDP expert on financial mechanisms. However, review of the financial support mechanism from September 2020 till March 2022 and further adjustment resulted in the holding off the processing of applications for new projects and as a result the delays in the implementation (FSM) for urban low-carbon projects. Therefore, the implementation of new FSM projects will take time: applicants need 1-3 months for the preparation of business plans and other documents to apply for bank loans, implementation of FSM projects will typically take 2-5 months. Moreover, most energy efficiency projects can only be implemented beyond the heating season – during April - October.

Monitoring of the performance of the supported FSM projects should be carried out after the projects have been completed, including verification of the actual GHG emissions reductions. This must be done before the final evaluation of the UNDP-GEF Project. Taking into considerations the unusual circumstances that project faced the additional project extension until 30<sup>th</sup> of April 2024 is requested. The requested 12 months project extension is on exceptional basis and is to compensate for the time lost for the FSM review during September 2020-March 2022 and its further adjustment during March-September 2022 (*24 months in total*).

## **VIII. Conclusions and Way Forward**

The FSM review was delayed and completed in March 2022. The review covered the financial support procedures, and the performance of the energy efficiency projects that were supported through the FSM. The independent review has endorsed FSM's compliance with the GEF standards and provided general recommendations for enhancing the monitoring and evaluation procedures for the supported projects. Based on the recommendations, during March-September 2022 the FSM rules were adjusted by enhancing the quality of the review process - 2 independent Technical Review Experts were integrated to conduct eligibility approval and terminal performance validation of the supported projects, as well as a developed from scratch UNDP SESP questionnaire – making the FSM more robust and improving its quality. The updated rules and the set of documents such as FSM agreement, ToRs, instructions, and guidelines were scrutinized and endorsed by the Responsible Party - Damu Fund, and the changes were reflected in the annexes to the new Responsible Party Agreement between UNDP and Damu Fund. The prospects for new FSM clients are good considering the positive developments in the country such as Kazakhstan's renewed commitment to become carbon-neutral by 2060 as well as with the improvement of the socio-economic situation. Moreover, as an adaptive management, during March- November 2022, the Project team worked to encourage new applications for the financial support with a number of online and in-person webinars/trainings for SMEs, regional branches of Damu Fund and banks. Hence, the Project started receiving new applications right after the updated FSM was re-launched in October 2022. As a result, 9 new applications were approved in 2022.

With the current project extension until 30 April 2023, the Project is fully operational and on track to achieve its EOP targets, but it won't be able to take a commitment and process new FSM applications for an estimate total amount of US\$ 1,3 mln. that are falling beyond EOP date - April 2023. Therefore, the additional project extension for 12 months is requested.

## IX. Financial Status

The financial information is based on Combined Delivery Reports.

Component	Source of Funds	Account Code	Approved Budget (as per ProDoc)	2016	2017	2018	2019	2020	2021	2022	Total	Diff
Component 1	GEF	71200	87,500.00	11135.00	0.00	0.00	1585.64	0.00	0.00	0.00	12720.64	74779.36
Component 1	GEF	71300	139,200.00	0.00	13923.80	4291.48	0.00	0.00	0.00	0.00	18215.28	120984.72
Component 1	GEF	71400	60,300.00	43753.36	54295.54	25948.41	5862.15	0.00	0.00	0.00	129859.46	-69559.46
Component 1	GEF	71600	89,480.00	51949.00	26991.30	6884.09	583.39	0.00	0.00	0.00	86407.78	3072.22
Component 1	GEF	72100	12,000.00	0.00	43274.58	8457.32	0.00	0.00	0.00	0.00	51731.90	-39731.90
Component 1	GEF	72400	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2000.00
Component 1	GEF	75700	9,520.00	8666.87	7689.73	1928.64	0.00	0.00	0.00	0.00	18285.24	-8765.24
Component 1	GEF	70000		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Component 1	GEF	72300	0	0.00	0.00	464.36	0.00	0.00	0.00	0.00	464.36	-464.36
Component 1	GEF	73400	0	0.00	0.00	1254.65	0.00	0.00	0.00	0.00	1254.65	-1254.65
Component 1	GEF	74200	0	13701.58	0.00	0.00	0.00	0.00	0.00	0.00	13701.58	-13701.58
Component 1	GEF	74500	0	336.70	10201.92	38.49	-8623.91	0.00	0.00	0.00	1953.20	-1953.20
Component 1	GEF	76100	0	216.42	-126.23	-90.90	0.00	0.00	0.00	0.00	-0.71	0.71
<b>Component 1</b>	<b>GEF</b>		<b>400,000.00</b>	<b>129758.93</b>	<b>156250.64</b>	<b>49176.54</b>	<b>-592.73</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>334593.38</b>	<b>65406.62</b>
<b>Component 1</b>	<b>TRAC</b>							<b>22.94</b>				
Component 2	GEF	71200	126,000.00	0.00	0.00	12304.00	4946.61	22927.15	20280.64	0.00	60458.40	65541.60
Component 2	GEF	71300	178,700.00	0.00	11334.18	0.00	0.00	3374.61	0.00	0.00	14708.79	163991.21
Component 2	GEF	71400	51,300.00	27135.35	36101.06	35105.43	30764.99	34315.83	0.00	0.00	163422.66	-112122.66
Component 2	GEF	71600	108,540.00	0.00	14606.38	19110.44	21005.07	-133.10	0.00	0.00	54588.79	53951.21
Component 2	GEF	72100	221,000.00	20638.62	50218.87	61674.39	35983.59	38727.46	9770.97	0.00	217013.90	3986.10
Component 2	GEF	72400	2,500.00	0.00	0.00	0.00	2.99	915.86	1737.58	0.00	2656.43	-156.43
Component 2	GEF	75700	11,960.00	14887.25	1217.49	11704.15	12579.58	0.00	0.00	0.00	40388.47	-28428.47
Component 2	GEF	70000		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Component 2	GEF	71500	0	0.00	44100.39	0.00	7547.05	1312.23	0.00	0.00	52959.67	-52959.67
Component 2	GEF	74200	0	1714.18	2787.15	0.00	12529.67	0.00	1578.85	0.00	18609.85	-18609.85

Component 2	GEF	74400	0	0.00	0.00	0.00	0.00	0.00	6.38	0.00	6.38	-6.38
Component 2	GEF	74500	0	73.43	35.77	216.24	10.38	0.00	22.87	1.60	360.29	-360.29
Component 2	GEF	76100	0	-98.01	308.45	-112.46	-15.13	-48.93	-18.60	-0.01	15.31	-15.31
<b>Component 2</b>		<b>64300</b>			<b>106.26</b>	0.00	-106.26	0.00	0.00	0.00	0.00	0.00
<b>Component 2</b>		<b>73500</b>			0.00	-49.74	0.00	0.00	0.00	0.00	-49.74	49.74
<b>Component 2</b>	<b>GEF</b>		<b>700,000.00</b>	<b>64350.82</b>	<b>160816.00</b>	<b>139952.45</b>	<b>125248.54</b>	<b>101391.11</b>	<b>33378.69</b>	<b>1.59</b>	<b>625139.20</b>	<b>74860.80</b>
Component 3	GEF	71200	56,000.00	26838.00	13600.00	10320.75	0.00	0.00	11295.00	15962.94	78016.69	-22016.69
Component 3	GEF	71300	111,250.00	5427.22	2341.42	0.00	4690.32	0.00	3380.12	18463.04	34302.12	76947.88
Component 3	GEF	71400	36,000.00	21876.68	27847.20	25948.41	12590.25	11318.92	-6470.66	0.00	93110.80	-57110.80
Component 3	GEF	71600	62,040.00	21109.67	5908.09	7850.29	6203.88	2327.10	0.00	4009.13	47408.16	14631.84
Component 3	GEF	72100	24,000.00	1431.43	3900.53	81595.19	419660.28	353465.21	197065.10	153092.98	1210210.72	-1186210.72
Component 3	GEF	72400	1,500.00	0.00	0.00	145.05	107.88	0.00	0.00	166.08	419.01	1080.99
Component 3	GEF	72600	3,000,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3000000.00
Component 3	GEF	75700	9,210.00	5448.36	212.42	-23.81	1536.35	553.44	0.00	415.04	8141.80	1068.20
Component 3	GEF	70000		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Component 3	GEF	72300	0	0.00	0.00	0.00	919.91	0.00	0.00	0.00	919.91	-919.91
Component 3	GEF	74100	0	0.00	7112.00	0.00	0.00	0.00	0.00	0.00	7112.00	-7112.00
Component 3	GEF	74200	0	0.00	0.00	0.00	4804.59	4022.14	378.02	120.00	9324.75	-9324.75
Component 3	GEF	74500	0	81.72	1079.24	36.79	11.09	20.21	16.75	13.29	1259.09	-1259.09
Component 3	GEF	76100	0	-0.09	0.62	-63.61	-13.52	-7246.57	0.00	-319.38	-7642.55	7642.55
<b>Component 3</b>	<b>GEF</b>		<b>3,300,000.00</b>	<b>82212.99</b>	<b>62001.52</b>	<b>125809.06</b>	<b>450511.03</b>	<b>364460.45</b>	<b>205664.33</b>	<b>191923.12</b>	<b>1482582.50</b>	<b>1817417.50</b>
Component 4	GEF	72100	140,000.00	0.00	4397.33	35575.17	455078.24	204214.38	-25090.01	105834.66	780009.77	-640009.77
Component 4	GEF	72600	560,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	560000.00
Component 4	GEF	70000		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Component 4	GEF	71200	0	0.00	5623.50	18491.25	0.00	0.00	0.00	0.00	24114.75	-24114.75
Component 4	GEF	71300	0	0.00	0.00	0.00	0.00	0.00	3342.97	1972.64	5315.61	-5315.61
Component 4	GEF	71400	0	10277.63	14981.90	25948.40	27085.59	22637.84	-0.29	0.00	100931.07	-100931.07
Component 4	GEF	71600	0	-642.53	0.00	0.00	0.00	0.00	0.00	209.06	-433.47	433.47
Component 4	GEF	74200	0	0.00	0.00	0.00	0.00	317.83	0.00	0.00	317.83	-317.83



Component 4	GEF	74500	0	0.00	0.76	39.04	267.96	37.48	81.80	0.53	427.57	-427.57
Component 4	GEF	76100	0	0.00	0.00	-14.34	-22.81	740.45	-14.17	-559.40	129.73	-129.73
<b>Component 4</b>	<b>GEF</b>		<b>700,000.00</b>	<b>9635.10</b>	<b>25003.49</b>	<b>80039.52</b>	<b>482408.98</b>	<b>227947.98</b>	<b>-21679.70</b>	<b>107457.49</b>	<b>910812.86</b>	<b>-210812.86</b>
Component 5	GEF	71200	101,500.00	0.00	0.00	16500.00	3905.63	0.00	0.00	0.00	20405.63	81094.37
Component 5	GEF	71300	180,100.00	27256.84	937.67	11552.78	10126.21	0.00	0.00	0.00	49873.50	130226.50
Component 5	GEF	71400	51,300.00	33013.83	22386.46	39507.29	14339.75	0.00	0.00	0.00	109247.33	-57947.33
Component 5	GEF	71600	98,840.00	34712.38	-136.25	5030.11	9701.60	0.00	0.00	0.00	49307.84	49532.16
Component 5	GEF	72100	75,000.00	64387.32	27078.19	411.43	13915.76	0.00	0.00	0.00	105792.70	-30792.70
Component 5	GEF	72400	8,000.00	0.00	0.00	90.14	175.62	0.00	0.00	0.00	265.76	7734.24
Component 5	GEF	75700	35,260.00	20582.25	15895.70	4811.52	7810.26	0.00	0.00	0.00	49099.73	-13839.73
Component 5	GEF	70000		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Component 5	GEF	71500	0	30306.88	94192.23	4497.41	12885.66	0.77	0.00	0.00	141882.95	-141882.95
Component 5	GEF	72200	0	1560.52	0.00	0.00	0.00	0.00	0.00	0.00	1560.52	-1560.52
Component 5	GEF	72300	0	0.00	0.00	0.00	341.88	0.00	0.00	0.00	341.88	-341.88
Component 5	GEF	72800	0	5607.62	0.00	0.00	0.00	0.00	0.00	0.00	5607.62	-5607.62
Component 5	GEF	73400	0	771.79	274.81	0.00	0.00	0.00	0.00	0.00	1046.60	-1046.60
Component 5	GEF	74100	0	0.00	0.00	4276.00	0.00	0.00	0.00	0.00	4276.00	-4276.00
Component 5	GEF	74200	0	24757.20	779.84	1939.29	13901.00	0.00	0.00	0.00	41377.33	-41377.33
Component 5	GEF	74500	0	3676.15	-2343.87	243.64	20.18	0.00	0.00	0.00	1596.10	-1596.10
Component 5	GEF	74700	0	46.92	0.00	0.00	0.00	0.00	0.00	0.00	46.92	-46.92
Component 5	GEF	76100	0	190.75	-70.15	30.86	-19.58	0.01	0.00	0.00	131.89	-131.89
<b>Component 5</b>	<b>GEF</b>		<b>550,000.00</b>	<b>246870.45</b>	<b>158994.63</b>	<b>88890.47</b>	<b>87103.97</b>	<b>0.78</b>	<b>0.00</b>	<b>0.00</b>	<b>581860.30</b>	<b>-31860.30</b>
Component 6	GEF	71400	149,500.00	14122.58	36902.17	30938.78	27522.19	27306.76	0.00	0.00	136792.48	12707.52
Component 6	GEF	71600	2,500.00	0.00	0.00	0.00	635.25	0.00	0.00	0.00	635.25	1864.75
Component 6	GEF	72100	20,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20000.00
Component 6	GEF	72200	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3000.00
Component 6	GEF	72400	2,500.00	509.09	642.19	34.72	852.13	26.20	0.00	0.00	2064.33	435.67
Component 6	GEF	74500	2,500.00	159.57	10414.49	18234.11	31193.94	20990.93	-269.48	0.00	80723.56	-78223.56
Component 6	GEF	74596	100,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100000.00

Component 6	GEF	70000		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Component 6	GEF	72500	0	0.00	426.89	0.00	231.12	0.00	0.00	0.00	658.01	-658.01
Component 6	GEF	72800	0	0.00	71.45	0.00	0.00	0.00	0.00	0.00	71.45	-71.45
Component 6	GEF	73300	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Component 6	GEF	76100	0	0.73	-0.21	-3.17	-38.68	-0.01	0.00	0.00	-41.34	41.34
Component 6	GEF	74599	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Component 6</b>	<b>GEF</b>		<b>280,000.00</b>	<b>14791.97</b>	<b>48456.98</b>	<b>49204.44</b>	<b>60395.95</b>	<b>48323.88</b>	<b>-269.48</b>	<b>0.00</b>	<b>220903.74</b>	<b>59096.26</b>
Component 6	TRAC				3277.48	19397.94	12221.52	10657.38				
<b>Total</b>			<b>5,930,000.00</b>	<b>547,620.26</b>	<b>614,800.74</b>	<b>552,470.42</b>	<b>1,217,297.26</b>	<b>752,804.52</b>	<b>217,093.84</b>	<b>299,382.20</b>	<b>4,155,891.98</b>	<b>1,774,108.02</b>

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23-Mar-2023

## **X. Annex**

Insert the latest approved Annual Work Plan (AWP), relevant copies of media coverage, publications, etc. Specific reporting requirements from donors can also be inserted here.