

United Nations Development Program



2023 ANNUAL WORK PLAN
UNDP Kazakhstan

Project Title: Derisking renewable energy investment**Project number:** 00101058**Executive Partner:** Ministry of Energy of the Republic of Kazakhstan**Responsible partner:** United Nations Development Program in the Republic of Kazakhstan, Joint Stock Company "Entrepreneurship Development Fund "Damu"**Start date:** 19 February 2018 **Closing date:** 19 August 2024 **L PAC Meeting date:** October 10, 2017

Executive Summary

The objective of the project is to encourage private sector investment in renewable energy in Kazakhstan to achieve the objectives of the "Kazakhstan 2030" and "Kazakhstan 2050" strategies for renewable energy. The project targets both large-scale and small-scale renewable energy sources. The ultimate goal of this project is to achieve the transformation of the energy market in Kazakhstan through a significant increase in the scale of the use of renewable energy sources in the field of electricity generation, from 0.77% to 10% - the share of RES by 2030, which is a 10-fold increase in electricity generation based on RES with the assistance of the project.

In terms of large-scale renewable energy sources, the project will help promote Kazakhstan as a prime target for foreign investment. Technologies will include wind power and photovoltaic solar power (PV).

For small-scale renewable energy sources, the project will stimulate investment in "Renewable energy sources for Urban Life", small-scale renewable energy sources for grid systems, intended for urban population and enterprises; and in RES for Rural Life, small-scale renewable energy sources for both grid and off-grid systems for farms and rural SMEs. Technologies may include solar PV (on rooftops), solar water heating and small-scale wind energy.

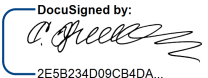
Contribution Outcome (CPD): By 2025, all people in Kazakhstan, especially the most vulnerable, will benefit from increased resilience to climate change, sustainable environmental management and clean energy, and sustainable rural and urban development.

Indicative Output(s) with gender marker¹:

Gender marker: GEN2

Required annual resources:	\$1,645,220
Allocated annual resources:	\$1,645,220
	Donor GEF: \$1,645,220

Approved (signing)²:

UNDP Kazakhstan	Ministry of Energy of the Republic of Kazakhstan
 Sukhrob Khojimatov, Deputy Resident Representative	Kassenov Zhaslan Serikovich Director of the Department on Renewable Energy
Date: 08-May-2023	Date:

¹The Gender Marker measures how much a project invests in gender equality and women's empowerment. Select one for each output: GEN3 (Gender equality as a principle objective); GEN2 (Gender equality as a significant objective); GEN1 (Limited contribution to gender equality); GEN0 (No contribution to gender quality)

²Note: Adjust signatures as needed

I. Annual work plan

All anticipated programmatic and operational costs to support the project, including development effectiveness and implementation support arrangements, need to be identified, estimated and fully costed in the project budget under the relevant output(s). This includes activities that directly support the project, such as communication, human resources, procurement, finance, audit, policy advisory, quality assurance, reporting, management, etc. All services which are directly related to the project need to be disclosed transparently in the project document.

EXPECTED RESULTS <i>and baseline, related indicators and annual targets</i>	PLANNED EVENTS <i>List of events and related activities</i>	SCHEDULE				RESPON SIBLE PARTY	PLANNED BUDGET			
		1 q.	2 q.	3 q.	4 q.		Source of financing	Description of the budget	Amount	
Outcome 1: Appropriate policies, programs and regulations are developed to mitigate investor risks, increase investment and ensure that the 2030 RE goal is met.										
Outcome 1.2 Capacity building of key stakeholders through mentoring and training workshops/study tours <i>Initial level:</i> Cumulative risk of DREI 32 out of 45 (72%) – in 2016 <i>Indicators:</i> 1.1: Government Capacity to Develop and Implement Policy Incentives to Develop Renewable Energy Markets 1.2 Reducing the overall risk of DREI by the 9 risk categories of DREI <i>Goals</i> DREI cumulative risk score 25 out of 45 (56%) <i>Gender: GEN2</i>	Activity 1.2.1: Conduct a training needs assessment, develop a training program and train local staff on large-scale renewable energy development.									
	1.2.1.1 Dissemination of the Roadmap activities for the system of training, advanced training and retraining of personnel in the field of development of renewable energy sources in regional centers for advanced training. <i>(ongoing activity)</i>		X	X			UNDP	GEF	71300 - Local Consultants	10,000
			X	X			UNDP	GEF	71600 - Travel	6,000
	1.2.1.2 Training of representatives of energy sector organizations to empower women in the energy sector. (representatives of regulatory and administrative bodies, municipal employees, RES operators, employees of educational institutions, reducing the risk of social acceptability according to the DREI methodology) <i>(new activity on gender)</i>		X	X			UNDP	GEF	71300 - Local Consultants	5,000
			X	X			UNDP	GEF	71600 - Travel	6,000
									74500 - Miscellaneous	500
Subtotal for outcome 1									27,500	
Outcome 2: Appropriate policies, programs and opportunities in place to reduce risk and attract investment in small-scale (on-grid and off-grid) renewable energy sources										
Result 2.1. Appropriate policies, programs and regulations have been developed and implemented for grid and off-grid small renewable energy sources. <i>Initial level:</i> There is virtually no policy or strategy for small-scale climate change. <i>Indicators:</i> 2.1 Degree of support for the development of small renewable energy sources in policy, planning and regulation. <i>Goals</i> Solid policy and regulatory framework developed with financial/market/incentive mechanisms	Activity 2.1.1: Develop and implement appropriate policies, programs and regulations. The approach used will be in line with the UNDP DREAM framework adjusted for small renewables – this will facilitate the selection and development of appropriate risk mitigation tools. In addition, the fiscal and financial implications of small grid RES will be studied.									
	2.1.1.1 Maintenance of by-laws on small renewable energy sources, legal and advisory support for proposed amendments, including public discussion between interested parties. <i>(request of Ministry of Energy, continued)</i>	X	X	X			UNDP	GEF	71300 - Local Consultants	8,000
	Activity 2.1.2: Organize and conduct training to build the capacity of local officials and policy makers for small scale renewable energy development.									
	2.1.2.1 Organization and conduct of a capacity building training for local experts (regional municipal authorities) on the development of policies for the preparation of small renewable energy projects, taking into account gender aspects <i>(ongoing activities with SMEs)</i>		X	X	X		UNDP	GEF	75700 - Trainings and workshops	8,000

EXPECTED RESULTS <i>and baseline, related indicators and annual targets</i>	PLANNED EVENTS <i>List of events and related activities</i>	SCHEDULE				RESPON SIBLE PARTY	PLANNED BUDGET		
		1 q.	2 q.	3 q.	4 q.		Source of financing	Description of the budget	Amount
	Project Staff: Renewable Energy Finance and Investment Project Analyst	X	X	X	X	UNDP	GEF	71400 - Contractual Services -Individual	3,800
		X	X	X	X	UNDP	GEF	71600 - Travel	10,000
		X	X	X	X	UNDP	GEF	74500 - Miscellaneous	500
Output 2.2 Operation of MRV for the small renewable energy sector Initial level: RES projects are considered riskier, more expensive and second-rate energy supply options than traditional energy sources. Indicators: 2.2 Knowledge on monitoring SMEs in rural and urban areas Goals Measurement of greenhouse gas emissions (using appropriate methodologies), periodic reporting, increased transparency; verification is carried out by complex methods. Gender: GEN2	Activity 2.2.3: Establish an international standard MRV system for regular measurement, reporting and validation of relevant indicators for the small renewable energy sector.								
	2.2.3.1 Analysis and assessment of the possibility of entering the voluntary carbon international markets. (new activity)		X	X		UNDP	GEF	71300 - Local Consultants	5,000
	Activity 2.2.4: Develop and deliver training materials to support the operation of the MRV system.								
	2.2.4.1 Development and dissemination of training materials, conducting trainings for responsible persons as support for the management of the MRV system (Ministry of Environment, Ministry of Energy, etc.) (ongoing activity)	X	X	X		UNDP	GEF	71300 - Local Consultants	2,000
Outcome 2.3 Media campaigns and training for suppliers/developers on the development and promotion of small-scale renewable energy sources in their target markets Initial level: Renewable energy projects are perceived as riskier, more expensive and a secondary power supply option than traditional power sources (supply security). Indicators: 2.3 Awareness and knowledge of the implementation of small renewable energy projects in urban and rural areas. Goals At least 25% of women and 25% of men in the target stakeholder groups understand the benefits and risks of renewable energy and support their development. Gender: GEN2	Activity 2.3.3: Plan and conduct awareness raising activities in online and offline media in accordance with the developed media plan.								
	2.3.3.1 Production of printed publications / videos on the introduction and promotion of small / large renewable energy sources, including textbooks (ongoing activity)	X	X	X	X	UNDP	GEF	72100 - Contractual Services- Companies	3,000
	2.3.3.2 Communication products - once a month; Articles of medium size on 2-5 standard pages of MS Word (interviews, human stories, expert comments, photo reports, etc.) - once a month. Exclusive materials for large publications with unique analytics and size of more than 5 MS Word pages - once every six months Preparation of a video on joint UNDP and DAMU programs - in cooperation with the UNDP-GEF project "Sustainable Cities for Low-Carbon Development" Small publications on the UNDP website, including photos and / or infographics - once every 1-2 weeks. Publications on UNDP social networks (small posts on Facebook, Instagram with photos) - 1 time in 1-2 weeks.	X	X	X	X	UNDP	GEF	75700 - Trainings and workshops	7,000
		X	X	X	X	UNDP	GEF	74200 - Audio Visual&Print Prod and translation Costs	3,900
								72100 Contractual Services- Companies	3,000

EXPECTED RESULTS <i>and baseline, related indicators and annual targets</i>	PLANNED EVENTS <i>List of events and related activities</i>	SCHEDULE				RESPON SIBLE PARTY	PLANNED BUDGET		
		1 q.	2 q.	3 q.	4 q.		Source of financing	Description of the budget	Amount
	Preparation of small educational materials on the topic of renewable energy and energy efficiency - once every six months. Organization of information campaigns, flash mobs. Participation in the organization and holding of conferences / forums								
	Activity 2.3.4: Facilitate the exchange of information through the organization of targeted training and workshops, including for small equipment suppliers.								
	2.3.4.1 Organization of trainings and seminars for suppliers / developers promoting and selling equipment for small projects in the field of renewable energy, taking into account gender balance. <i>(ongoing activity)</i>		X	X		UNDP	GEF	75700 -Trainings and workshops	7,100
	Project Staff: Renewable Energy Finance and Investment Project Analyst and Communications Expert	X	X	X	X	UNDP	GEF	71400- Contractual Services - Individuals	26,100
								71600 - Travel	9,500
Outcome 2.4 Operational and strengthened quality control system for small scale machinery <i>Initial level:</i> Lack of objective methodology for testing small renewable energy projects, lack of communication on quality assurance/standards <i>Indicators:</i> 2.4 Technical support of the quality assurance system <i>Goals</i> Quality control system provided	Activity 2.4.1: Organize and conduct appropriate training to develop skills to support the quality control system.								
	2.4.4.1 Organization and conduct of technical trainings with testing laboratories on working with test methods, algorithm of procedures for obtaining accreditation, discussion of procedures for testing RES technologies and development of an information case on compliance with technical characteristics and their impact on the efficiency of the components of RES technologies <i>(new activity)</i>		X	X		UNDP	GEF	72100 - Contractual Services- Companies	20,000
	Project Staff: Renewable Energy Finance and Investment Project Analyst	X	X	X	X	UNDP	GEF	71400- Contractual Services -Individual	3,800
		X	X	X	X	UNDP	GEF	74500 - Miscellaneous	955
	Subtotal for outcome 2								121 655
Outcome 3: Existence of sustainable business models and financial mechanisms to support the implementation of investments in small urban and rural RES.									
Outcome 3.2 Creation and testing of relevant financial instruments. <i>Initial level:</i> Small-scale developments are very rare and face a number of financial barriers. <i>Indicators:</i>	Activity3.2.5: Monitor the implementation of the financial mechanism under result 3.4, including environmental performance and adherence to agreed environmental and social safeguards.								
	3.2.5.1 Conduct project evaluation for the application of the financial support mechanism for small-scale RES projects (technical expert1) <i>(FSM advisor recommendation)</i>	X	X	X	X	UNDP	GEF	71300 - Local Consultants	16,400

EXPECTED RESULTS <i>and baseline, related indicators and annual targets</i>	PLANNED EVENTS <i>List of events and related activities</i>	SCHEDULE				RESPON SIBLE PARTY	PLANNED BUDGET		
		1 q.	2 q.	3 q.	4 q.		Source of financing	Description of the budget	Amount
3.1: Financial and business models developed for small-scale RES in the urban and rural sectors 3.2 Appropriate financial instruments are in place for pilot investments in small rural and urban renewable energy sources. Goals Financial risk mitigation tools for small online and offline projects developed and implemented	3.2.5.2 Monitoring projects involved in the financial support mechanisms for small-scale RES projects (technical expert 2)(FSM advisor recommendation)	X	X	X		UNDP	GEF	71300 - Local Consultants	16,400
	3.2.5.3 Calculation of current and projected reductions in greenhouse gas emissions and electricity consumption from small-scale renewable energy projects (RTA recommendation)		X	X	X	UNDP	GEF	71300 - Local Consultants	2,000
	3.2.5.4 Development of a program, materials and organization of training for representatives of government services, NGOs and the financial sector on monitoring and evaluation of small-scale renewable energy projects (M&E)(FSM advisor recommendation)		X	X	X	UNDP	GEF	72100 - Contractual Services-Companies	20,000
	3.2.5.5 Implementation of projects on financial support mechanisms for SMEs through Damu on the use of renewable energy technologies (ongoing activity)							72100 - Contractual Services-Companies	1,280,000
			X	X	X	X	DAMU	GEF	71200 - International consultants
Project Staff: Renewable Energy Finance and Investment Project Analyst, Project Manager	X	X	X	X	UNDP	GEF	71400 - Service Contracts-Individuals	21,750	
Outcome 3.3 Increased capacity of local financial institutions to support small renewable energy sources. Baseline Lack of information, assessment skills and achievements on renewable energy projects in the domestic financial sector. Lack of special financial products for small renewable energy projects. Indicators: 3.3The ability of local financial institutions to support small-scale projects Goals At least one special financial product is being developed to support small renewable energy projects.	Activity3.3.2. Design and deliver training for 3 local financial institutions. The training will include the technical and financial aspects of small-scale renewable energy, as well as environmental and social safeguards.								
	3.3.2.1 Increasing the capacity of employees of regional banks and other financial institutions in the technical and financial aspects of small renewable energy projects(ongoing activity)	X	X	X	X	UNDP	GEF	75700 - Trainings and workshops	7,500
		X	X	X	X	UNDP	GEF	71600 - Travels	4,500
	Project Staff: Renewable Energy Finance and Investment Project Analyst, Project Manager	X	X	X	X	UNDP	GEF	71400 - Service Contracts-Individuals	21,750
		X	X	X	X	UNDP	GEF	74500 - Miscellaneous	536
Outcome 3.4 Investments attracted for small renewable energy projects Baseline 0	Activity3.4.1: Financial participation in small-scale renewable energy projects in accordance with the criteria of the established financial mechanism (according to output 3.2).								

EXPECTED RESULTS <i>and baseline, related indicators and annual targets</i>	PLANNED EVENTS <i>List of events and related activities</i>	SCHEDULE				RESPON SIBLE PARTY	PLANNED BUDGET		
		1 q.	2 q.	3 q.	4 q.		Source of financing	Description of the budget	Amount
<i>Indicators:</i> 3.4 Attracting investments to support small projects <i>Goals</i> The project supports small-scale projects with a total installed capacity of 9.5 MW, related to various technologies and sectors.	3.4.1.1 Consider some projects that could be developed in niche markets such as organic urban agriculture to demonstrate both technical and financial potential. <i>(ongoing activity)</i>	X	X	X	X	UNDP	GEF	75700 - Trainings and workshops	1,000
	Subtotal for outcome 3								1,445,766
Project management	Project Assistant	X	X	X	X	UNDP	GEF	71400 Service Contracts-Individuals	13,600
	HACT Audit	X	X	X	X	UNDP	GEF	72100 Contractual Services-Companies	5,000
	Stationery for the project office	X	X	X	X	UNDP	GEF	72500 - stationery	2,000
	Office rent	X	X	X	X	UNDP	GEF	73100 Rental & Maintenance-Premises	14,220
	Communications (Internet, phone)	X	X	X	X	UNDP	GEF	72400-Communications&AudioVisual Equip	5,943
	Publications	X	X	X	X	UNDP	GEF	74200- Audio Visual&Print Prod and translation Costs	1,845
	Miscellaneous (bank commission)	X	X	X	X	UNDP	GEF	74500 - Miscellaneous	791
	Business trips	X	X	X	X	UNDP	GEF	71600 - travel	6,900
	Subtotal for Project Management result								50,299
TOTAL									1,645,220

II. MONITORING AND EVALUATION PLAN

Schedule /Fixed timeframe	Activity	Primary Responsibility
January, 2023	Preparation and approval of the Annual Work Plan 2023	Project manager
April, 2023	Quarterly progress reports	Project manager
July, 2023		Program Manager
October, 2023		
June, 2023	GEF Project Implementation Review	Project manager
June, 2023	Meeting of the Project Board (semi-annual review of the progress of the project)	Project manager
November, 2023	Prepare draft AWP for 2024 budget and submit to PB members for consideration	Project manager
30 days prior introduction of the project financed by bank	Monitoring Visits	Project Manager
December, 2023	Review of the RP for quality assurance, alignment with UNDP strategic documents and donor requirements, results orientation and resource availability	Project manager Program Manager
December, 2023	PMC <ul style="list-style-type: none"> a) Overview of project contribution to results and budget utilization in 2023 b) Review and approval of the APR for 2023 	Project manager

III. PROJECT RISK REGISTER

#	Event	Cause	Impact(s)	Risk Category and Sub-category	Impact (I), Likelihood (probability – P) & Risk Level	Risk Valid From/To	Risk Owner (individual accountable for managing the risk)	Risk Treatment and Treatment Owner
1	There is a risk that local financial institutions do not launch financial products to support the development of small renewables	As a result of a lack of understanding of the nature of investments in renewable energy and the degree of liquidity of renewable energy devices, due to the difficulties in evaluating projects, banks either do not provide loans or put forward too stringent requirements.	Either bank lending to RES projects is completely absent, or it is becoming extremely limited	Operational	P=3 I = 4 Risk level: significant	From: 01.01.2020 To: indefinite future (after the end of Project)	Project manager	<p>Mitigation measure 1.1: Project Manager</p> <p>Training for financial officers of DAMU, including participation in monitoring visits to project sites as observers, is included in the agreement between UNDP and DAMU on the implementation of a financial mechanism, to support learning and future replication by keeping and spreading the relevant knowledge.</p> <p>Mitigation 1.2: Project Manager</p> <p>The project will provide training for local financial institutions/SMEs.</p> <p>Mitigation measure 1.3: Project Manager</p> <p>The project conducted market research to adapt financial instruments to selected technologies / niches, no adaptation is required - support is at an adequate level; : inflow of applications for support is moderate, no deviations from expectations and no indication of need for revision, but additional review scheduled for June 2023.</p>

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								<p>Mitigation measure 1.4: project manager</p> <p>In 2022, the review of the financial support mechanism by an independent expert was completed. The mechanism was simplified: only a subsidy of a part of the loans principal was left. Now the implementation is constantly monitored, corrections will be introduced if necessary. The project will avoid complicating the financial support mechanism: the mechanism's replicability is a motivating factor for DAMU .</p>
2	Climate change	As a result of climate change, either the conditions for the construction and installation of renewable energy devices worsen, or for their use (including, for example, the delivery of biofuels, damage to power lines, etc.)	Either the deadlines for the installation of devices are missed, or they stop functioning, or the people responsible for the installation and / or use of the devices are harmed to health.	Environment	<p>P=2 I = 2</p> <p>risk level: average</p>	<p>From: 04.05.2018</p> <p>To: indefinite future (after the end of Project)</p>	Project manager	<p>Mitigation measure 2.1: Project Manager</p> <p>Resource risk is mitigated by diversifying target RES to include not only solar but also wind, biogas, biomass, heat pumps, etc.</p> <p>Mitigation 2.2: Project Manager</p> <p>Current risks (travel, installation, monitoring) will be removed by organizational measures (suspension of activity during periods of - extreme frost, heat waves, snowfalls, etc.)</p>
3	Business and financial models are not replicated	As a result of the insufficiently high attractiveness of	The volume of investments in RES and	Strategic	<p>P=3 I = 3</p>	<p>From: 01.01.2020</p>	Project manager	Mitigation measure 3.1: project manager

#	Event	Cause	Impact(s)	Risk Category and Sub-category	Impact (I), Likelihood (probability – P) & Risk Level	Risk Valid From/To	Risk Owner (individual accountable for managing the risk)	Risk Treatment and Treatment Owner
		investments in RES or a lack of understanding of the nature of such investments, the developed mechanisms are not replicated.	RES capacities remain low.		risk level: significant	To: indefinite future (after the end of Project)		Raising awareness, expanding access to small-scale finance, securing interest and commitment from small stakeholders. Mitigation measure 3.2: Project Manager Support mechanism customization and simplification See measures 1.2-1.4.
4	Loss of political support	As a result of the loss of political support, the project initiatives are not implemented	RES do not receive budgetary support and simplification of regulation	Political	P=3 I = 3 risk level: significant	From: 05/29/2019 To: 08/19/2024 (end of Project)	Project manager	Mitigation measure 4.1: Project Manager Seeking support early in the implementation of regulatory initiatives. Any proposed policy changes, as well as new ones that will be proposed by the project, must be approved at the highest level, for example, by the Parliament (revision of the Law) or the Government (for example, changes in support programs, tariffs), which will increase the chances of these initiatives to success in the future. Mitigation 4.2: Project Manager Dialogue with political leaders. The project is backed by the Department of Energy, which gives the best political support for the project's goals. The project maintains a dialogue with representatives of the legislature (Mazhilis).

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								<p>Dialogue will be maintained.</p> <p>Mitigation measure 4.3: project manager</p> <p>Promotion of the positive social effect from the introduction of renewable energy. The project contributes to the positive effect of the use of renewable energy: the creation of jobs, a positive impact on the budget and public health.</p>
5	No co-financing of pilot projects occurs due to lack of interest from the private sector and/or government commitment	As a result of perception of the risk of RES projects as too high and/or profitability as too low, the number of investors and the volume of investments from the private sector remains low.	The volume of investments in RES and RES capacities remain low.	Financial	<p>P=5 I = 4</p> <p>risk level: high</p>	<p>From: 05/29/2018</p> <p>To: 08/19/2024 (end of Project)</p>	Project Manager	<p>Mitigation measure 5.1: Project Manager</p> <p>Search for budget funding. A financial mechanism developed is fit for supporting small and medium-sized businesses, which helps attracting the businesses and state financial institutions in state programs with approved budgets.</p> <p>Mitigation 5.2: Project Manager</p> <p>Expansion of the existing promising portfolio of RES projects: an information campaign is currently underway, applications for support from small RES projects are coming, applicants get consultations if needed.</p> <p>Mitigation measure 5.3: Project Manager</p>

#	Event	Cause	Impact(s)	Risk Category and Sub-category	Impact (I), Likelihood (probability – P) & Risk Level	Risk Valid From/To	Risk Owner (individual accountable for managing the risk)	Risk Treatment and Treatment Owner
								Development of a set of effective tools. The project will keep and refine more attractive and more powerful financing instruments, compared to ones available at the market, e.g. green bonds . Financial support was developed for the loans principal (up to 25%). The adequacy of the tool was confirmed during the simulation of a typical project in July 2022. Further adaptive measures will be taken after re-simulation of a typical RES project in June 2023.
6	Social: small urban and rural RES developers do not use the developed financial products Market: The developed business models and financial models for small RES are not replicated throughout Kazakhstan.	As a result of too weak effect or ignorance of the effect, RES project support instruments remain unclaimed / little demanded.	The volume of investments in RES and RES capacities remain low.	Miscellaneous	P=2 I = 2 risk level: average	From: 05/29/2018 To: indefinite future (after the end of Project)	Project Manager	Mitigation measure 6.1: Project Manager Financial products will support small projects in urban and rural areas by covering a portion of the loan principal . This enhances the support effect. Mitigation 6.2: Project Manager Information campaigns and trainings will be conducted with banks and investor communities to promote financial support products, using earlier developed information package for investors.
7	Technology: The internal supply chain and capacity for RES in Kazakhstan is very limited - this can lead to inadequate	As a result of underdevelopment of the market / suboptimal logistics / limited demand / monopolization of	The volume of investments in RES and RES capacities remain low. The reputation of the sector suffers, devices	Miscellaneous	P=3 I = 3 risk level: significant	From: 05/29/2018	Project manager	Mitigation measure 7.1: Project Manager The project attracts international and local

#	Event	Cause	Impact(s)	Risk Category and Sub-category	Impact (I), Likelihood (probability – P) & Risk Level	Risk Valid From/To	Risk Owner (individual accountable for managing the risk)	Risk Treatment and Treatment Owner
	implementation of RES projects, resulting in sub-optimal performance, malfunctioning, etc.	supplies, prices are too high and / or poor-quality renewable energy equipment is supplied	become unattractive for investors			To: indefinite future (after the end of Project)		<p>technical experts with experience in implementing renewable energy projects in developing countries, which ensures quality at all stages of the development and implementation of renewable energy pilot projects.</p> <p>Mitigation 7.2: Project Manager</p> <p>Building internal capacity (both in the form of knowledge and infrastructure) is carried out for small-scale renewable energy projects through educational activities, as well as promoting quality standards and supporting a network of testing laboratories for renewable energy devices.</p>
8	Market: private investors do not consider investments in RES attractive enough	As a result of the combination of factors mentioned above in other risks, as well as the general low investment activity in the country, investors take a wait-and-see attitude towards investments in renewable energy projects	The volume of investments in RES and RES capacities remain low.	Miscellaneous	<p>P=3 I = 3</p> <p>risk level: significant</p>	<p>From: 05/29/2018</p> <p>To: indefinite future (after the end of Project)</p>	Project Manager	<p>Mitigation measure 8.1: Project Manager</p> <p>The project proposes an auction mechanism that will reduce the risks of investing in the construction of renewable energy stations. This type of auction allows investors to calculate their options, eliminate "hidden" risks and offer lower rates during the bidding process. The tariffs that the investor will offer will include fair risk compensation, in the opinion of the investor. Thus, the investment will be attractive to the winner of the auction in any case.</p>

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9	Impact of the pandemic crisis	As a result of the economic crisis due to the pandemic, investment activity remains low in the country as a whole and in the renewable energy sector in particular; in addition, project preparation and support suffers from restrictions on movement.	The volume of investments in RES and RES capacities remain low. The activities of the investment promotion project are limited.	Miscellaneous	P=2 I = 2 risk level: average	From: 03/31/2020 To: 08/19/2024 (end of Project)	Project Manager	Mitigation measure 9.1: Project Manager Solutions based on modern communication technologies compensate for the lack of mobility of the Project team, all partners are adapted to remote work Mitigation measure 9.2: Project Manager The capacity building and knowledge dissemination activities resulting from the redesign will include the use of modern communication technologies as a daily practice, and this practice has proven its effectiveness, including for reducing costs and saving time.
10	There is a risk that oil prices will remain low for a long time, which will undermine business and tax revenues in Kazakhstan	As a result of a slowdown in economic growth in the world, due to geopolitical risks and restrictions on oil transportation, the state budget and the economy of Kazakhstan will not receive the expected revenues	Decrease in the volume of budget financing and honest investments for renewable energy projects (as well as the fall in investment activity in the country as a whole)	Financial	P:2 I:3 Risk level: medium	From: 01.01.2020 To: indefinite future (after the end of Project)	Project Manager	Mitigation 10.1: Project Manager On the one hand, now the economy has adapted to new conditions, the price of oil is higher than in 2020 - it is returning to the levels of 2019, but on the other hand, the general economic situation is becoming less predictable due to geopolitical factors (the war in Ukraine, the instability of the main oil export route from Kazakhstan). The project team is ready to respond, if necessary, in the form of a review of the level of

#	Event	Cause	Impact(s)	Risk Category and Sub-category	Impact (I), Likelihood (probability – P) & Risk Level	Risk Valid From/To	Risk Owner (individual accountable for managing the risk)	Risk Treatment and Treatment Owner
								proposed support for small-scale RES projects or in other appropriate ways.