



GEF-6 REQUEST FOR PROJECT ENDORSEMENT/APPROVAL

PROJECT TYPE: FULL-SIZED PROJECT
TYPE OF TRUST FUND: GEF TRUST FUND

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PART I: PROJECT INFORMATION

Project Title: Derisking renewable energy investment in Kazakhstan			
Country(ies):	Kazakhstan	GEF Project ID: ¹	9192
GEF Agency(ies):	UNDP	GEF Agency Project ID:	5490
Other Executing Partner(s):	Ministry of Energy of Kazakhstan	Submission Date:	13 April 2017 12 June 2017
GEF Focal Area (s):	Climate change	Project Duration (Months)	60 months
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/>	Corporate Program: SGP <input type="checkbox"/>	
Name of Parent Program	N/A	Agency Fee (\$)	428,450

A. FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES²

Focal Area Objectives/Programs	Focal Area Outcomes	Trust Fund	(in \$)	
			GEF Project Financing	Co-financing
CCM-1 Program 1	Promote timely development, demonstration and financing of low-carbon technologies and mitigation options	GEFTF	4,510,000	51,010,000
Total project costs			4,510,000	51,010,000

B. PROJECT DESCRIPTION SUMMARY

Project Objective: To promote private-sector investment in large and small-scale renewable energy in order to achieve Kazakhstan's 2030 renewable energy target						
Project Components/ Programs	Financing Type ³	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Confirmed Co-financing
Component 1: Large Scale Renewable Energy: Policy and Financial Derisking Measures	TA	Outcome 1: Appropriate policies, programmes and regulations are in place to reduce investors' risks, scale-up investment and enable the achievement of 2030 RES target	Output 1.1 Technical, economic, financial, environmental and social analysis carried out to support the Ministry of Energy and other stakeholders in the design and implementation of appropriate policies, programmes and regulations, including development of briefings for decision-makers. Output 1.2 Capacity building of key stakeholders through coaching and training seminars / study tour	GEFTF	700,000	1,250,000

¹ Project ID number remains the same as the assigned PIF number.

² When completing Table A, refer to the excerpts on [GEF 6 Results Frameworks for GETF, LDCF and SCCF](#).

³ Financing type can be either investment or technical assistance.

Component 2: Renewable Energy for Life: Policy Derisking Measures	TA	Outcome 2: Appropriate policies, programmes and capacities are in place to reduce risk and attract investment in small- scale (on-grid and off-grid) renewables	Output 2.1 Appropriate policies, programmes and regulations for on- and off-grid small scale renewables designed and implemented. Output 2.2 Functioning MRV for the small-scale renewables sector. Output 2.3 Media campaigns and training for suppliers / developers to promote and market small-scale renewables in their target markets. Output 2.4 Functioning and enforced quality control system in place for small-scale technology	GEFTF	1,100,000	2,650,000
Component 3: Renewable Energy for Life: Financial Derisking and Incentives	TA	Outcome 3: Sustainable business models and financial mechanisms to support implementation for investment in small- scale urban and rural RES solutions in place	Output 3.1 Financial and business models for small-scale renewables are developed and piloted Output 3.2 Appropriate financial instruments created and piloted Output 3.3 Capacity of local financial institutions to support small-scale renewables enhanced	GEFTF	600,000	16,260,000
	Inv		Output 3.4 Investments mobilised for small-scale renewable energy projects – 9,500 small- scale projects addressing various technologies and sectors and benefiting from installation of hybrid (wind and solar PV) developments; 28,500 people as direct project beneficiaries	GEFTF	1,900,000	30,000,000
Subtotal					4,300,000	50,160,000
Project Management Cost (PMC) ⁴ (DPC cost is \$51,900)				GEFTF	210,000	850,000
Total project costs					4,510,000	51,010,000

⁴ For GEF Project Financing up to USD 2 million, PMC could be up to 10% of the subtotal; above USD 2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

C. CONFIRMED SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE

Please include evidence for co-financing for the project with this form.

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
Recipient Government	Ministry of Energy	In-kind	3,250,000
Others	Eurasian Development Bank	Loans	30,000,000
Private sector	Ergonomika Ltd.	Equity	1,500,000
Civil society	JSC International Center for Energy Efficiency "ProEco"	Equity	800,000
Private sector	JSC Astana Solar	Equity	13,960,000
Private sector	Enkom ST LL	Equity	800,000
Civil society	Kazakhstan Green Building Council (KazGBC)	In-kind	300,000
Others	Nazarbaev University (Kuntech)	In-kind	300,000
GEF Agency	UNDP	In-kind	100,000
Total Co-financing			51,010,000

D. TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country Name/Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee ^{a)} (b) ²	Total (c)=a+b
UNDP	GEFTF	Kazakhstan	Climate change	(select as applicable)	4,510,000	428,450	4,938,450
Total Grant Resources					4,510,000	428,450	4,938,450

a) Refer to the Fee Policy for GEF Partner Agencies

E. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS⁵

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	<i>hectares</i>
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	<i>hectares</i>
3. Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services	Water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 freshwater basins;	<i>Number of freshwater basins</i>
	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	<i>Percent of fisheries, by volume</i>
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO ₂ e mitigated (include both direct and indirect)	<i>Direct: 0.460 million tonnes CO₂eq Consequential: between 1.8 million tonnes CO₂eq (estimated using bottom-up methodology) and 8.0 million tonnes CO₂eq (estimated using top-down methodology)</i>
5. Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global concern	Disposal of 80,000 tons of POPs (PCB, obsolete pesticides)	<i>metric tons</i>
	Reduction of 1000 tons of Mercury	<i>metric tons</i>
	Phase-out of 303.44 tons of ODP (HCFC)	<i>ODP tons</i>
6. Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and sub-national policy, planning financial and legal frameworks	Development and sectoral planning frameworks integrate measurable targets drawn from the MEAs in at least 10 countries	<i>Number of Countries:</i>
	Functional environmental information systems are established to support decision-making in at least 10 countries	<i>Number of Countries:</i>

F. DOES THE PROJECT INCLUDE A “NON-GRANT” INSTRUMENT? No

(If non-grant instruments are used, provide an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF Trust Fund)

⁵ Update the applicable indicators provided at PIF stage. Progress in programming against these targets for the projects per the Corporate Results Framework in the [GEF-6 Programming Directions](#), will be aggregated and reported during mid-term and at the conclusion of the replenishment period.

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN WITH THE ORIGINAL PIF⁶

A.1. Project Description. Elaborate on: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed; 2) the baseline scenario or any associated baseline projects, 3) the proposed alternative scenario, GEF focal area⁷ strategies, with a brief description of expected outcomes and components of the project, 4) [incremental/additional cost reasoning](#) and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and [co-financing](#); 5) [global environmental benefits](#) (GEFTF) and/or [adaptation benefits](#) (LDCF/SCCF); and 6) innovativeness, sustainability and potential for scaling up.

1) The global environmental problem, root causes and barriers that need to be addressed

1. The global environmental problem, root causes and barriers to be addressed remain the same as those described when the PIF was approved. While there have been no changes in the risk categories, the information on underlying barriers for large-scale and small-scale renewable energy has been updated in conjunction with the results of the full Derisking Renewable Energy Investment (DREI) analysis and associated interviews. This analysis is fully consistent with the analysis in the PIF, and provides additional information about the market. The preliminary DREI modelling results are provided in section II of the UNDP Project Document.

2) The baseline scenario or any associated baseline projects

2. The PIF referred to the target of 30% share of renewable energy in generation by 2030, which also includes large-scale hydro according to the Concept of Transition to Green Economy of Kazakhstan. The target for renewable energy (excluding large-scale hydro) by 2030 is 10%, which is used in the baseline scenario and throughout the Project Document, and is consistent international practice.

3. Baseline projects and related initiatives have been updated. In the past year there has been increased activity in the renewables sector in Kazakhstan, although many initiatives related to renewable energy are in the planning or early stages. Close coordination with key stakeholders will, therefore, be of particular importance to the implementation of this project to ensure that overlaps are avoided and all efforts are fully complementary. Key related initiatives and baseline projects include:

- The EBRD intends to assist the Government of Kazakhstan with implementing the Green Economy Strategy through projects in energy, renewables, agriculture, water, waste management, transport, and other sectors. The EBRD is supporting renewable energy in terms of policy dialogue and project financing. The EBRD's Small Business Support programme has provided consulting support to over a thousand private enterprises, and with donor funds from the Kazakh government is now present in 7 regions of Kazakhstan. The EBRD is working on expanding its program of SME financing through local partner banks.
- In December 2016, the EBRD approved a financing framework of up to €200 million to finance renewable energy projects with a total generating capacity of 300 MW within the next five years in Kazakhstan. The projects are planned to cover wind and solar developments, small hydro plants and biogas. The amount of €160 million will be allocated for construction of generating capacity; €40 million will be spent on electricity grid modernisation to integrate renewable projects into the national transmission system.
- USAID's Kazakhstan Climate Change Mitigation Program (KCCMP) aims to help Kazakhstan to achieve long-term sustained reductions in greenhouse gas (GHG) emissions intensity. The KCCMP supports the Kazakh government and business community in implementing policies to reduce greenhouse gases at the national and at the corporate level. Specifically, in the renewable energy sector, USAID is currently developing a programme to support policy and legislation development for large-scale renewables. The plan is to support work on load balancing and demand forecasting for the Kazakhstan Electricity Grid Operating Company (KEGOC), as well as development of an auction mechanism. The new programme is likely to start in September 2017.
- USAID's Kazakhstan Small Business Development Project aims to: a) increase the Government of Kazakhstan's knowledge of international best practices and lessons learned in implementing SME support programs; b) transfer capacity to the Government of Kazakhstan and indigenous institutions, both public and

⁶ For questions A.1 –A.7 in Part II, if there are no changes since PIF, no need to respond, please enter “NA” after the respective question.

⁷ For biodiversity projects, in addition to explaining the project's consistency with the biodiversity focal area strategy, objectives and programs, please also describe which [Aichi Target\(s\)](#) the project will directly contribute to achieving.

private sector, to manage and evaluate entrepreneurship development programs; and c) promote a sound development of a network of small business service providers to foster growth of Small and Medium Sized Enterprises (SMEs).

- IFC's Clean Energy Infrastructure Program in Central Asia and South Caucasus works in the following areas: support on regulatory reforms needed to develop bankable projects in renewable energy; district heating; power plant rehabilitation and T&D. IFC's work focuses on the following issues: permitting, licensing, PPAs, structuring private participation through PPP etc.; distribution utilities: support with system assessment to identify measures to reduce technical and commercial energy losses, and develop a program to prioritize capital investment; IPPs: structuring projects to obtain financing.
- IFC, in close collaboration with the EBRD, has been providing ad hoc assistance to the Ministry of Energy to improve the support framework for RES, focusing on issues of projects' bankability including: refinements to RES regulations; establishment of a clearing house for RES energy purchase/sale; solving grid integration issues for RES projects; identifying training for the System Operator KEGOC.

3) *The proposed alternative scenario, GEF focal area strategies, with a brief description of expected outcomes and components of the project*

4. The proposed alternative scenario, GEF focal areas strategies, and expected outcomes and components remain the same as the PIF approval.
5. Project's targets have been identified and adjusted in accordance with the findings of the interviews, literature review, analysis and modelling, and consultations with stakeholders. The goal of this project is to achieve energy market transformation in Kazakhstan by significantly scaling-up the deployment of renewable energy in electricity generation from 0.77% share of renewable energy in 2016⁸ towards a 10% share by 2030, which is more than a 10-fold increase in renewable energy-based energy generation to be facilitated by the project. To do so, the project will adopt a comprehensive strategy to identify, assess and mitigate renewable energy investment risks thus creating attractive conditions for private sector investment and renewable energy market growth. The figures for the target and share of RES are higher in the PIF, i.e. 30% target and 3% of RES within electricity generation.
6. While the PIF included biogas as an eligible technology within the RES for Life components (Component 2 and Component 3) subject to interest of private sector partners, during project preparation little to no interest in biogas technology was identified. Throughout project preparation interest in biomass was generally low; the majority of stakeholders emphasized solar PV, small-wind and hybrid (solar PV-wind) installations as the most promising technologies for small-scale developments in Kazakhstan. The farm that expressed intention to invest in biogas when the PIF was being developed has since decided against making this investment. Furthermore, biogas and more broadly biomass energy are specialist renewable energy sectors that usually require specialist measures and have unique stakeholders. Therefore, to keep the project's scope manageable and to make a significant difference to the market, the Project is now focused on wind and solar technologies only.
7. Under Component 3, the scale of GEF-funded business models has changed and is also reflected in the GHG calculations. The PIF implied development of 140 pilots within 'RES for Urban Life' and 240 pilots within 'RES for Rural Life'. However, the PIF calculations of the tentative scale were based on costs estimates on market price/supplier specifications in Kazakhstan for 10-20kW solar PV, 50 m² solar water heating and 10m³ biogas system. These sizes are no longer appropriate for the market segments being targeted by the project; the new assumptions are based on the data retrieved from detailed interviews with small-scale developers (e.g. hybrid installations of 1 kW could be currently installed at the costs of approximately US\$ 10,000). In total, the project-funded instrument will address the partial incremental costs of 9500 small-scale installations, assuming an average size of 1kW. Financial engagement with small-scale renewable energy projects will use a business-friendly approach, both in deployment of the financial instrument for small-scale renewable energy and coordination with other financial mechanisms such as the EIB Green Economy credit lines (recently agreed), and will leverage and build upon the experience of the financial sector.

⁸ <http://energo.gov.kz/index.php?id>

4) Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF and co-financing

8. The incremental cost reasoning remains the same as what was included in the PIF.
9. The overall amount of confirmed co-financing has been increased since the PIF and is now \$51,010,000. New co-financing sources include the Eurasian Development Bank, which will provide a credit line for investment in renewable energy; and Astana Solar, for investment in large and small-scale renewable energy; and Enkom for investment in small-scale renewable energy. The “Rodina” Farming Community is no longer building a biogas installation and therefore co-financing is not confirmed.

5) Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

10. Estimates of project-related GHG emission reductions are provided in Annex M of the accompanying UNDP Project Document, the GEF GHG spreadsheets and the GEF Climate Change Tracking Tool (Annex D). Overall, the project calculations assume two primary sources of emission reductions: 1) direct emission reductions from small-scale renewable energy projects implemented under the project’s Component 3, and 2) consequential emission reductions from development of policy de-risking instruments for large and small-scale renewable energy developments under Component 1, Component 2 and Component 3.
11. The direct GHG emissions reduction is estimated at 460,000 tonnes CO₂, which is over 3 times more than noted in the PIF due to different assumptions. The Project will implement a financial instrument to address the incremental costs of small-scale renewable energy projects (Component 3). The instrument will be finalized during project implementation. Incentive payments could potentially cover up to 20% of the project costs. The calculations assume that hybrid installations of 1 kW will be installed at the costs of USD 10 000 (based on interviews with local engineering companies) with 9500 small-scale installations of hybrid (wind and solar PV) developments as a result of the Project interventions and at least 28,500 people as direct project beneficiaries.
12. Estimated consequential GHG emissions reduction is calculated using 10% target and results in 1,800,000 (bottom-up) t CO₂ or 8,000,000 (top-down) t CO₂.

6) Innovativeness, sustainability and potential for scaling up

13. **Innovativeness:** Application of DREI methodology allows demonstrating how investing in public derisking measures creates significant direct economic savings and assist policymakers with selection of the public instruments (policy de-risking measures and financial de-risking measures) for achieving RES targets for 2030 in Kazakhstan.
14. The project is one of several UNDP-implemented GEF-financed projects that are being designed and implemented based on UNDP’s DREI framework and methodology. UNDP, under output 3.1, will facilitate regular exchange of knowledge and progress in small-scale DREI implementation among “sister” projects, as well as systematic collection, analysis and presentation of a DREI case study and lessons learnt, as part of activity 3.2.5, through the corporate platform established at <http://www.undp.org/drei>. Other related approved projects with which the project will cooperate are:
 - UNDP-GEF “NAMA Support for the Tunisia Solar Plan”;
 - UNDP-GEF “Promoting Low Carbon Energy Solutions in Nigeria Energy/Power Supply”.
15. **Sustainability:** The project originates from and is driven by the Government of Kazakhstan’s ambition to establish and achieve long-term renewable energy and climate change mitigation targets. It emphasizes the private sector as the driving force for achieving the targets and transforming the market for renewable energy. By adopting a strategy that focuses foremost on reducing investment risks, the project is designed to make a long-lasting impact. Sustainability of the project’s outcomes will be based on the provisions embedded in project design:
 - RES-supportive policies will form an integral part of the broader Green Economy legislative package which spells out a set of measures to ensure Kazakhstan’s transition to more resource-efficient and green economic development pathway. The Green Economy agenda and process is under direct auspices and leadership of the President of Kazakhstan.

- The project will support selected national agencies in full compliance with their existing mandate and power of authority thus making sure that lasting institutional and human capacities are created for implementation of project-supported policy changes.
- Sustainability and lasting impact of financial derisking instruments will hinge upon their ability to lower the cost of financing for renewable energy projects. Financial derisking instruments will be designed in such a way as to achieve a sector-wide impact and low renewable energy financing costs for all perspective renewable energy projects and therefore eliminate, or at least significantly reduce the need for, additional financial derisking after project completion.

16. **Potential for scaling-up:** Promoting renewable energy in Kazakhstan – a country with huge yet unexploited potential for RES, as well as solid economic base for investment and economic growth – has vast potential. Apart from obvious opportunities for large utility-scale renewable energy projects, there are many smaller niche markets for renewable energy applications in Kazakhstan, which are yet unknown to potential investors, developers and the public. The project will look specifically at unlocking such new market opportunities under “RES for Urban Life” and “RES for Rural Life” segments; each with vast potential for scaling-up (bearing in mind projected 4.4% annual growth in electricity demand, coming mainly from residential sector).

17. In addition, about 255 settlements and 9000 farms in Kazakhstan are not connected to the national grid. There is additional potential for scaling-up in urban areas, including street lighting, rooftop PV and solar water heaters. Potential exists for scaling-up and replication of the project’s activities in other Central Asian countries, which have similar energy markets and barriers to investment in renewable energy.

18. The project’s design addresses scaling-up through the establishment of MRV for small-scale renewables, which will further expansion of the market for small-scale installations; supporting the creation of an enabling policy framework; and, the establishment of business models and financial mechanisms for the provision of financial incentives to small-scale developers. Additionally, the project management team will adhere to ‘flexible programming’ to ensure that issues related to project design, planning and implementation are immediately dealt in the most appropriate manner, thereby increasing the sustainability and potential for replication and scaling-up.

A.2. Child Project? If this is a child project under a program, describe how the components contribute to the overall program impact.

N/A

A.3. Stakeholders. Identify key stakeholders and elaborate on how the key stakeholders engagement is incorporated in the preparation and implementation of the. Do they include civil society organizations (yes /no)? and indigenous peoples (yes /no)?⁹

19. The key stakeholders mentioned in the PIF remain important for the Project, and list of the Project stakeholders has been considerably expanded in comparison to that provided in the PIF (see Annex N of the UNDP Project Document). The stakeholders include the Government, the private sector, international organisations and multilateral development bodies, and civil society organisations. These stakeholders have been and will continue to be consulted regarding various components of the project, such as development of policy and financial derisking tools for small and large-scale RES, developing business and financial models to support small-scale RES, development and implementation of the media campaign, creating awareness and building capacity of the commercial banks to perform due diligence and financial assessment of small-scale RES projects. A mechanism to deal with grievances and other potential conflict issues will be set up consistent with the Social and Environmental Standards of UNDP (2015).

⁹ As per the GEF-6 Corporate Results Framework in the GEF Programming Directions and GEF-6 Gender Core Indicators in the Gender Equality Action Plan, provide information on these specific indicators on stakeholders (including civil society organization and indigenous peoples) and gender.

20. Additional civil society stakeholders have been consulted during development of the Project Document and will also be involved during Project implementation.

A.4. Gender Equality and Women's Empowerment. Elaborate on how gender equality and women's empowerment issues are mainstreamed into the project implementation and monitoring, taking into account the differences, needs, roles and priorities of women and men. In addition, 1) did the project conduct a gender analysis during project preparation (yes /no)?; 2) did the project incorporate a gender responsive project results framework, including sex-disaggregated indicators (yes /no)?; and 3) what is the share of women and men direct beneficiaries (women 50%, men 50%)? ¹⁰

21. The UNDP Project Document provides more detailed analysis, in comparison to the PIF, on how gender issues will be mainstreamed within the Project (see Project Document, section IV 'Results and Partnerships', iv 'Mainstreaming gender'). The Project will analyse gender-based differences in access to financing and capacity building, and will involve developing gender-disaggregated data and indicators to ensure an equitable gender representation in the selection process for financing, focus group discussions and training. Consultations on various components of the Project will be designed to be gender-sensitive, inclusive and responsive to the needs of the stakeholders identified.

22. Under Component 1, Component 2 and Component 3, the capacity building opportunities incorporated in the Project will ensure female participation, e.g. training on large-scale RES, establishment of RES technology MRV where users will be trained on data collection and analysis; training and awareness-raising for commercial banks; etc.

23. Component 2 and Component 3 of the Project will allow women in rural and urban areas to benefit greatly from improved energy services in the form of heat and power generated from RES. These improvements could ease women's workloads, reduce the time spent on household tasks such as cooking and cleaning, and could provide improved comfort and reduced vulnerability during the heating season. Components 2 and 3 of the project has the follows targets reflecting gender mainstreaming:

- Component 2 "Renewable Energy for Life: Policy Derisking": at least 50% of beneficiaries for training and capacity building related to RES are women and/or women-headed organizations (i.e. Associations of Apartment Owners, SMEs, farming communities);
- Component 3 "Renewable Energy for Life: Financial Derisking and Financial Incentives" at least 50% of beneficiaries for project-supported "RES for life" applications in cities and rural areas will be women.

24. The Project also addresses gender aspects in the following ways: 1) a gender marker is used as per UNDP guidance; 2) gender issues are incorporated in the Project results framework, including gender-sensitive actions, indicators, targets and budget; 3) the Project will monitor the share of women and men as direct beneficiaries; and 4) an analysis of women's inclusion in the Project activities will be included in both the mid-term review and the terminal evaluation of the Project, and will be explicitly stated in the terms of reference for those evaluations.

A.5 Risk. Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.

25. There are no major changes in the risk analysis. The risk categories remain the same, however the descriptions of certain risks have been updated slightly in conjunction with the stakeholder consultations and interviews (Refer to Table 7 of the Project Document).

26. The Project Document includes the UNDP social and environmental screening procedure (Annex F of the Project Document), which was not presented as part of the PIF. This screening was undertaken to ensure this Project complies with UNDP's Social and Environmental Standards. The overall social and environmental risk category for this project has been determined to be 'medium'. Given the type and scale of the interventions to be undertaken by the Project, during the Inception Period the project will establish an appropriate Environmental Impact Assessment (EIA) an associated action plan as required by the Government. Note that investments resulting from the barrier

¹⁰ Same as footnote 8 above.

removal activities of this project will themselves be subject to ESIA requirements according to the rules of the government of Kazakhstan and, in some cases, international lenders (such as the EBRD, IFC and EIB). The environmental categorization of the project reflects the described funded project activities, not the wider market (which is outside the scope of the EIA). The UNDP screening policy recognises that categorisation of projects is an iterative process; should stakeholders raise concerns about the Project's social and environmental aspects during implementation, the 'medium risk' designation will be reviewed.

27. The Project will eliminate several barriers to create an enabling environment for investments in small and large-scale renewable energy developments. The interventions from the technical assistance of the GEF are mainly institutional building and capacity building. The Project will also develop business and financial models to support small-scale developments, which may cause impacts such as safety risks to the community from installation and dismantling, pollution and waste related to decommissioning of small-scale installations. In addition, the Project will incentivise investments in small-scale renewables via financial intermediaries.
28. During implementation, a UNDP risk log will be regularly updated in intervals of no less than every six months in which critical risks to the Project have been identified. Consistent involvement of a diverse set of partners – including governments, financial institutions, private sector, community organizations and NGOs – will further reduce these risks. Environmental and social grievances will be reported to the GEF in the annual PIR.

A.6. Institutional Arrangement and Coordination. Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

29. The Project will be implemented following UNDP's national implementation modality (NIM), according to the Standard Basic Assistance Agreement between UNDP and the Government of Kazakhstan, and the Country Programme.
30. The Implementing Partner for this Project is the Ministry of Energy of the Republic of Kazakhstan. The Implementing Partner is responsible and accountable for managing this Project, including the monitoring and evaluation of project interventions, achieving project outcomes, and for the effective use of UNDP resources.
31. The Project Steering Committee is responsible for making, by consensus, management decisions when guidance is required by the Project Manager, including recommendation for UNDP/Ministry of Energy approval of project plans and revisions. To ensure UNDP's ultimate accountability, Project Steering Committee decisions should be made in accordance with standards that shall ensure management for development results, best value for money, fairness, integrity, transparency and effective international competition. In the case where a consensus cannot be reached within the Project Steering Committee, final decision shall rest with the UNDP Programme Manager. The terms of reference for the Project Steering Committee is contained in Annex E of the Project Document.
32. The Project Steering Committee will include representatives of the Ministry of Energy as the Executive and Senior Beneficiary and UNDP as the Senior Supplier. It will also include key national governmental and non-governmental agencies as appropriate. Independent third parties such as international organizations or national NGOs may attend augmented Project Steering Committee meetings as observers. The Project Steering Committee will be balanced in terms of gender. Potential members of the PSC will be reviewed and recommended for approval during the Project Appraisal Committee (PAC) meeting.
33. The Project Steering Committee will be responsible for making management decisions for the Project, in particular when guidance is required by the Project Manager (PM). The Project Steering Committee will play a critical role in project monitoring and evaluations by assuring the quality of these processes and associated products, and by using evaluations for improving performance, accountability and learning. The Project Steering Committee will ensure that required resources are committed. It will also arbitrate on any conflicts within the Project and negotiate solutions to any problems with external bodies. In case a consensus cannot be reached, final decision shall rest with the UNDP. Project reviews by the Project Steering Committee are made at designated decision points during the running of the Project (at least once a year), or as necessary when raised by the PM. In addition, it will approve the appointment and responsibilities of the PM and any delegation of its Project Assurance responsibilities. Based on the approved Annual Work Plan, the Project Steering Committee can also consider and approve the annual plan and also approve

modifications of the original plans. As noted above, in order to ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance with standards¹¹ that shall ensure best value for money, fairness, integrity, transparency and effective international competition.

34. The Ministry of Agriculture, Ministry of Industry and New Technologies, KEGOC, central and local authorities in rural regions, and local communities will benefit from project results through development of their capacity to participate in the decision-making and progress-monitoring processes. In addition, all stakeholders will be covered by the corresponding training, education, and outreach activities, and will also benefit from an improved environment at the central, regional and local levels.
35. The Project will continue to liaise and coordinate with other initiatives in Kazakhstan on renewable energy, in particular those initiatives by the IFC, the EBRD, IDB, EIB, and other IFIs, especially when identifying a comprehensive and complementary package of cost effective interventions including financial instruments.

Project Management

36. The Project Manager will run the project on a day-to-day basis on behalf of the Implementing Partner within the constraints laid down by the PSC. The Project Manager function will end when the final project terminal evaluation report and corresponding management response, and other documentation required by the GEF and UNDP, has been completed and submitted to UNDP (including operational closure of the project).
37. Project Team (PT) will be established comprised of core staff including: the Project Manager (PM), and Project Administrative and Financial Assistant. The PM will be recruited in accordance with UNDP's regulations to manage actual implementation of the Project and will be based in Astana. The PM will be responsible for overall project coordination and implementation, consolidation of work plans and project papers, preparation of quarterly progress reports, reporting to the project supervisory bodies, and supervising the work of the project experts and other project staff. The PM will also closely coordinate project activities with relevant government institutions and hold regular consultations with other project stakeholders and partners. Under the direct supervision of the PM and Administrative Assistant will be responsible for administrative and financial issues, and will get support from the existing UNDP administration. Legal, financial, engineering and capacity building experts, as required, will support the PM in implementation of relevant thematic project activities based on their sound professional expertise. The PM will be responsible for the consultants' timely deliverables and their contributions to the overall project outputs.
38. **Project Assurance:** The Project Assurance role supports the Project Board Executive by carrying out objective and independent project oversight and monitoring functions. The Project Assurance role at the country level will rest with UNDP Kazakhstan.
39. In order to accord proper acknowledgement to the GEF for providing grant funding, the GEF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the Project, and project hardware. Any citation on publications regarding projects funded by the GEF will also accord proper acknowledgement to the GEF. Information will be disclosed in accordance with relevant policies notably the UNDP Disclosure Policy and the GEF policy on public involvement.

¹¹ UNDP Financial Rules and Regulations: Chapter E, Regulation 16.05: a) The administration by executing entities or, under the harmonized operational modalities, implementing partners, of resources obtained from or through UNDP shall be carried out under their respective financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP; and b) Where the financial governance of an executing entity or, under the harmonized operational modalities, implementing partner, does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition that of UNDP shall apply.

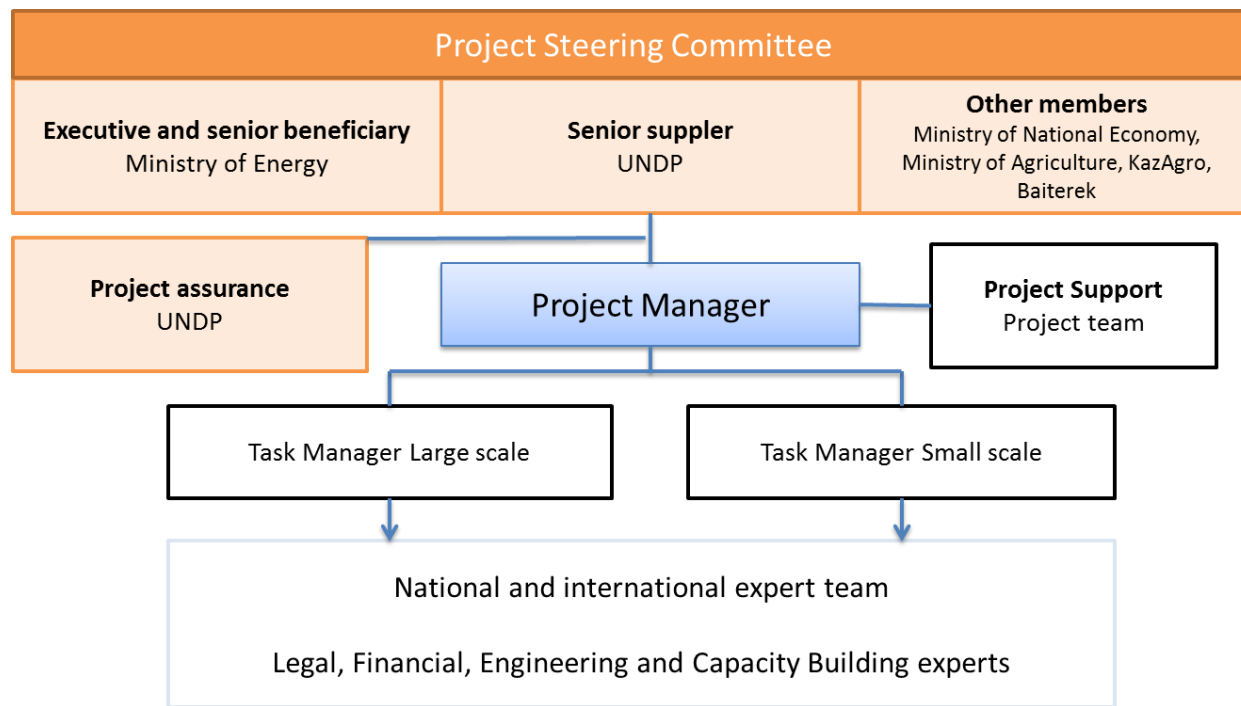


Figure 1: Project organisational chart

Additional Information not well elaborated at PIF Stage:

A.7 Benefits. Describe the socioeconomic benefits to be delivered by the Project at the national and local levels. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

40. The Project will assist the Government of Kazakhstan to develop de-risking measures that provide a cost-effective approach to achieving 2030 target. The DREI analysis concluded that achievement of the 2030 target is far from guaranteed while the prospects of reaching the much more ambitious 10% 2030 target is even less likely under the current framework. According to the modelling results, derisking measures bring down the generation cost of wind energy from US\$11 cents per kWh to US\$8.7 cents per kWh, and solar PV energy from US\$13.7 cents per kWh to US\$10.8 cents per kWh. These lower generation costs have important implications for affordability for the Kazakhstani end-users. The modelling also demonstrates that investing in de-risking measures is good value for money when measured against paying a premium price for wind energy and solar PV. The results indicate that all de-risking instruments that can be immediately implemented should, if possible, be prioritised before resorting to premium prices to compensate for any residual risks.

41. The Project will deliver a range of socioeconomic benefits for Kazakhstan including:

- *Diversification of the country's energy portfolio and an increase in economic stability:* Currently, Kazakhstan's economy is heavily dependent on fossil fuel revenues and is affected considerably by fluctuations in oil prices. According to the Concept of Transition to Green Economy, Kazakhstan's peak oil production will be reached in 2030-2040 followed by a steady decrease in oil exports.
- *Improved access to clean and reliable energy resources, especially in remote areas:* Introduction of new large-scale renewable energy capacities will address the issue of aging power plants: 57% of the power grid was deteriorated in 2013 and the number of deteriorating plants is expected to grow. Development of small-scale renewables will improve access to energy among remote rural consumers as about 255 settlements and

9000 farms in Kazakhstan are not connected to the national grid. Kazakhstan's large scale and low population density in rural areas necessitates the development of additional transmission lines, the maintenance of which will inevitably increase the energy cost. Small-scale off-grid renewables could provide an economically feasible option for consumers in remote areas of Kazakhstan.

- *Improved air quality in conjunction with increased share of clean energy in total energy mix:* In Kazakhstan, the generation mix consists of coal (73%), oil and gas (18%), hydropower (8%) and renewable energy (0.8%)¹². Air pollution from coal-fired power plants contributes to a significant number of negative environmental and health effects, and coal combustion is one of the leading sources of PM 2.5 emission in Kazakhstan. When coal is burned to generate electricity, the combustion releases a combination of toxic chemicals into the environment, and thus the human body, which results in increased mortality and morbidity rates. According to a report by the World Health Organization, coal particulates pollution is estimated to shorten approximately 1,000,000 lives annually worldwide. The contribution of air pollution to total mortality in Kazakhstan is considered to be higher than in Russia and Ukraine.¹³ An increase in the use of renewable energy sources to a level of 10% by 2030 will allow the share of coal in the energy mix to be reduced, which consequently will reduce the level of pollution and exposure of citizens in Kazakhstan.

A.8 Knowledge Management. Elaborate on the knowledge management approach for the Project, including, if any, plans for the Project to learn from other relevant projects and initiatives (e.g. participate in trainings, conferences, stakeholder exchanges, virtual networks, project twinning) and plans for the project to assess and document in a user-friendly form (e.g. lessons learned briefs, engaging websites, guidebooks based on experience) and share these experiences and expertise (e.g. participate in community of practices, organize seminars, trainings and conferences) with relevant stakeholders.

42. The Project will apply three key methods to knowledge management: (i) a comprehensive inventory and synthesis of existing knowledge base, including the lessons that have emerged from related projects and programmes in Kazakhstan, Central Asia and countries using DREI methodology; (ii) dissemination of international good policy and finance practice in large- and small-scale renewable energy development; and (iii) systematic codification of emerging lessons and knowledge during the project's implementation. Dissemination of good practice is reflected in project training and awareness-raising activities (media campaign) and indicators in each project component. This three-pronged approach to knowledge generation and dissemination will be reinforced through publications and targeted dissemination through the media and through meetings with authorities at all levels and with communities. In addition, project activities in each component will include training and capacity strengthening for targeted groups of stakeholders such as policy makers, commercial banks, government officials etc. Gender is incorporated in all three knowledge management methods, from the project gender analysis to training on gender issues at project inception to a codification of gender-disaggregated information in all project components.

43. Knowledge products in the Project will be produced by the project team, and (for general media outreach) by public relations and communications professionals. Care will be taken to ensure that the products are available in the most accessible language for their target audience. The Project will also leverage existing channels of distribution (radio, regional television, exhibitions, civil society offices, and schools and healthcare facilities) to reach this audience and will review the outreach strategy for each product to ensure that distribution is equally accessible to women and men.

¹² From <http://energo.gov.kz/index.php?id=5472>, retrieved from January-March 2016

¹³ From 'Human Health Cost of Air Pollution in Kazakshstan' (2013) http://file.scirp.org/pdf/JEP_2013080915494980.pdf

B. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1 Consistency with National Priorities. Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions such as NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, etc.:

44. Kazakhstan ratified the UNFCCC as a non-Annex I party in 1995, and in 1999 committed to join industrialized nations in their effort to limit GHG emissions and accept a binding and quantified emission limitation of 100% over the 1992 baseline. Further, in 2010 Kazakhstan announced and communicated to the Parties its additional voluntary commitments to reduce GHG emissions by 15% (in relation to 1990) by 2020 emissions and by 25% (in relation to 1990) by 2050.

45. The Foreign Minister of Kazakhstan signed the Paris Agreement in August 2016, and the national parliament ratified it in October 2016. As noted in Kazakhstan's Intended Nationally Determined Contributions (INDC), Kazakhstan intends to achieve an economy-wide target of 15-25 percent GHG emissions reductions by 2030 relative to 1990 levels.¹⁴ The INDC notes that the country is following a path of low carbon economy growth and references the adoption of the law "On Supporting the Use of Renewable Energy Sources" aiming at greater use of renewable energy sources.

46. As is evident from the detailed policy analysis given in Annex L of the UNDP Project Document "Kazakhstan Renewable Energy Policy Overview", this project is fully consistent with national strategies. Relevant strategies include, among others:

- The "Kazakhstan 2050" strategy provides clear guidelines for building a sustainable and efficient economic model based on the country's transition to a green development path.
- The President of Kazakhstan approved the "Concept for Transition of the Republic of Kazakhstan to Green Economy" by the Decree No 577 dated 30 May 2012. The Concept noted that: "Transition to Green Economy will enable Kazakhstan to achieve the proclaimed goal of entering the top 30 developed countries in the world. According to estimates, the transformations to be implemented as a part of a Green Economy will additionally increase the GDP by 3%, create more than 500,000 new jobs, develop new industries and services and generally provide higher living standards all over the country by 2050. Overall investments required for transition to a Green Economy are estimated to be about 1% of GDP per annum, which is equivalent to USD 3-4 billion". The Concept for Transition to Green Economy serves as the main document for state planning and target setting in the area of renewable energy (Government decree N79, May 30, 2013) and establishes the renewable energy target of 10% share of renewable energy in generation by 2030.
- The Law on Renewable Energy Sources was adopted in 2009 to facilitate the achievement of the RES targets. The Law puts in place the following important provisions:
 - Establishment of feed-in-tariffs for different categories of renewables fixed for 15 years;
 - Establishment of priority dispatch and grid access for RES projects;
 - Establishment of obligatory purchase of RE power by the Settlement Center;
 - Adoption of a prototype Power Purchase Agreement (PPA);
 - Introduction of net-metering.

C. DESCRIBE THE BUDGETED M & E PLAN:

47. The project results as outlined in the Project Results Framework (Annex A) will be monitored annually and evaluated periodically during project implementation to help ensure that the Project achieves these results.

48. Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the [UNDP POPP and UNDP Evaluation Policy](#). While these UNDP requirements are not outlined in this document, the UNDP Country Office will work with the relevant project stakeholders to ensure UNDP M&E requirements are

¹⁴ http://www4.unfccc.int/submissions/INDC/Published%20Documents/Kazakhstan/1/INDC%20Kz_eng.pdf

met in a timely fashion and to high quality standards. Additional mandatory GEF-specific M&E requirements (as outlined below) will be undertaken in accordance with the [GEF M&E policy](#) and other relevant GEF policies.

49. In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed during the Project Inception Workshop and will be detailed in the Inception Report. This will include the exact role of project target groups and other stakeholders in project M&E activities including the GEF Operational Focal Point (OFF) and national/regional institutes assigned to undertake project monitoring. The GEF OFF will strive to ensure consistency in the approach taken to the GEF-specific M&E requirements (notably the GEF Tracking Tools) across all GEF-financed projects in the country. This could be achieved for example by using one national institute to complete the GEF Tracking Tools for all GEF-financed projects in the country, including projects supported by other GEF Agencies.¹⁵

M&E oversight and monitoring responsibilities

50. **Project Manager:** The Project Manager is responsible for day-to-day project management and regular monitoring of project results and risks, including social and environmental risks. The Project Manager will ensure that all project staff maintain a high level of transparency, responsibility and accountability in M&E and reporting of project results. The Project Manager will inform the Project Board, the UNDP Country Office and the UNDP-GEF Regional Technical Advisor of any delays or difficulties as they arise during implementation so that appropriate support and corrective measures can be adopted. The Project Manager will develop annual work plans based on the multi-year work plan included in Annex A of the Project Document, including annual output targets to support the efficient implementation of the project. The Project Manager will ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality. This includes, but is not limited to, ensuring the results framework indicators are monitored annually in time for evidence-based reporting in the GEF PIR, and that the monitoring of risks and the various plans/strategies developed to support project implementation (e.g. gender strategy, KM strategy etc.) occur on a regular basis.

51. **Project Steering Committee:** The Project Steering Committee will take corrective action as needed to ensure the project achieves the desired results. The Project Steering Committee will hold project reviews to assess the performance of the project and appraise the Annual Work Plan for the following year. In the Project's final year, the Project Steering Committee will hold an end-of-project review to capture lessons learned and discuss opportunities for scaling up and to highlight Project results and lessons learned with relevant audiences. This final review meeting will also discuss the findings outlined in the Project terminal evaluation report and the management response.

52. **Project Implementing Partner:** The Implementing Partner is responsible for providing any and all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary and appropriate. The Implementing Partner will strive to ensure project-level M&E is undertaken by national institutes, and is aligned with national systems so that the data used by and generated by the Project supports national systems.

53. **UNDP Country Office:** The UNDP Country Office will support the Project Manager as needed, including through annual supervision missions. The annual supervision missions will take place according to the schedule outlined in the annual work plan. Supervision mission reports will be circulated to the project team and Project Board within one month of the mission. The UNDP Country Office will initiate and organize key GEF M&E activities including the annual GEF PIR, the independent mid-term review and the independent terminal evaluation. The UNDP Country Office will also ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality.

54. The UNDP Country Office is responsible for complying with all UNDP project-level M&E requirements as outlined in the [UNDP POPP](#). This includes ensuring the UNDP Quality Assurance Assessment during implementation is undertaken annually; that annual targets at the output level are developed, and monitored and reported using UNDP corporate systems; the regular updating of the ATLAS risk log; and, the updating of the UNDP gender marker on an annual basis based on gender mainstreaming progress reported in the GEF PIR and the UNDP ROAR. Any quality concerns flagged during these M&E activities (e.g. annual GEF PIR quality assessment ratings) must be addressed by the UNDP Country Office and the Project Manager.

¹⁵ See https://www.thegef.org/gef/gef_agencies

55. The UNDP Country Office will retain all M&E records for this project for up to seven years after project financial closure in order to support ex-post evaluations undertaken by the UNDP Independent Evaluation Office (IEO) and/or the GEF Independent Evaluation Office (IEO).
56. UNDP-GEF Unit: Additional M&E and implementation quality assurance and troubleshooting support will be provided by the UNDP-GEF Regional Technical Advisor and the UNDP-GEF Directorate as needed.
57. Audit: The Project will be audited according to UNDP Financial Regulations and Rules and applicable audit policies on NIM implemented projects.¹⁶

Additional GEF monitoring and reporting requirements

58. Inception Workshop and Report: The Project inception workshop will be held within two months after the Project document has been signed by all relevant parties to, among others:
- Re-orient project stakeholders to the Project strategy and discuss any changes in the overall context that influence Project implementation;
 - Discuss the roles and responsibilities of the project team, including reporting and communication lines and conflict resolution mechanisms;
 - Review the results framework and finalize the indicators, means of verification and monitoring plan;
 - Discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E; discuss the role of the GEF OFP in M&E;
 - Update and review responsibilities for monitoring the various project plans and strategies, including the risk log; Environmental and Social Management Plan and other safeguard requirements; the gender strategy; the knowledge management strategy, and other relevant strategies;
 - Review financial reporting procedures and mandatory requirements, and agree on the arrangements for the annual audit; and
 - Plan and schedule Project Board meetings and finalize the first year annual work plan.
59. The Project Manager will prepare the inception report no later than one month after the inception workshop. The inception report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and will be approved by the Project Steering Committee.
60. GEF Project Implementation Report (PIR): The Project Manager, the UNDP Country Office, and the UNDP-GEF Regional Technical Advisor will provide objective input to the annual GEF PIR covering the reporting period July (previous year) to June (current year) for each year of project implementation. The Project Manager will ensure that the indicators included in the project results framework are monitored annually in advance of the PIR submission deadline so that progress can be reported in the PIR. Any environmental and social risks and related management plans will be monitored regularly, and progress will be reported in the PIR. The PIR submitted to the GEF will be shared with the Project Steering Committee. The UNDP Country Office will coordinate the input of the GEF Operational Focal Point and other stakeholders to the PIR as appropriate. The quality rating of the previous year's PIR will be used to inform the preparation of the subsequent PIR.
61. Lessons learned and knowledge generation: Results from the Project will be disseminated within and beyond the project intervention area through existing information sharing networks and forums. The Project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to the Project. The Project will identify, analyse and share lessons learned that might be beneficial to the design and implementation of similar projects and disseminate these lessons widely. There will be continuous information exchange between this project and other projects of similar focus in the same country, region and globally.
62. GEF Focal Area Tracking Tools: The following GEF Tracking Tool(s) will be used to monitor global environmental benefit results: The baseline/CEO Endorsement GEF Focal Area Tracking Tool(s) – submitted in Annex D of the Project Document – will be updated by the Project Manager/Team and shared with the mid-term review consultants

¹⁶ See guidance here: <https://info.undp.org/global/popp/frm/pages/financial-management-and-execution-modalities.aspx>

and terminal evaluation consultants (not the evaluation consultants hired to undertake the MTR or the TE) before the required review/evaluation missions take place. The updated GEF Tracking Tool(s) will be submitted to the GEF along with the completed Mid-term Review report and Terminal Evaluation report.

63. **Independent Mid-term Review (MTR):** An independent MTR process will begin after the second PIR has been submitted to the GEF, and the MTR report will be submitted to the GEF in the same year as the 3rd PIR. The MTR findings and responses outlined in the management response will be incorporated as recommendations for enhanced implementation during the final half of the project’s duration. The terms of reference, the review process and the MTR report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the [UNDP Evaluation Resource Center \(ERC\)](#). As noted in this guidance, the evaluation will be ‘independent, impartial and rigorous’. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final MTR report will be available in English and will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and approved by the Project Board.
64. **Terminal Evaluation (TE):** An independent TE will take place upon completion of all major project outputs and activities. The terminal evaluation process will begin three months before operational closure of the project allowing the evaluation mission to proceed while the project team is still in place, yet ensuring the Project is close enough to completion for the evaluation team to reach conclusions on key aspects such as project sustainability. The Project Manager will remain on contract until the TE report and management response have been finalized. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the [UNDP Evaluation Resource Center](#). As noted in this guidance, the evaluation will be ‘independent, impartial and rigorous’. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final TE report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and will be approved by the Project Board. The TE report will be publically available in English on the UNDP ERC. The UNDP Country Office will include the planned project terminal evaluation in the UNDP Country Office evaluation plan, and will upload the final terminal evaluation report in English and the corresponding management response to the UNDP Evaluation Resource Centre (ERC). Once uploaded to the ERC, the UNDP IEO will undertake a quality assessment and validate the findings and ratings in the TE report, and rate the quality of the TE report. The UNDP IEO assessment report will be sent to the GEF IEO along with the project TE report.
65. **Final Report:** The Project’s terminal PIR along with the TE report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

Table C.1. M&E Budget

GEF M&E requirements	Primary responsibility	Indicative costs to be charged to the Project Budget ¹⁷ (US\$)		Time frame
		GEF grant	Co-financing	
Inception Workshop	UNDP Country Office	10,000		Within two months of project document signature
Inception Report	Project Manager	None	None	Within two weeks of inception workshop

¹⁷ Excluding project team staff time and UNDP staff time and travel expenses.

GEF M&E requirements	Primary responsibility	Indicative costs to be charged to the Project Budget ¹⁷ (US\$)		Time frame
		GEF grant	Co-financing	
Standard UNDP monitoring and reporting requirements as outlined in the UNDP POPP	UNDP Country Office	None	None	Quarterly, annually
Monitoring of indicators in project results framework	Project Manager	<i>Per year: 4,000 Total: 20,000</i>		Annually
GEF Project Implementation Report (PIR)	Project Manager and UNDP Country Office and UNDP-GEF team	None	None	Annually
NIM Audit as per UNDP audit policies	UNDP Country Office	<i>Per year: 5,000 Total: 25,000</i>		Annually or other frequency as per UNDP Audit policies
Lessons learned and knowledge generation	Project Manager	None		Annually
Monitoring of environmental and social risks, and corresponding management plans as relevant	Project Manager UNDP CO	None		On-going
Addressing environmental and social grievances	Project Manager UNDP Country Office BPPS as needed	None for time of Project Manager, and UNDP CO		
Project Steering Committee meetings	PSC UNDP Country Office Project Manager	None		At minimum annually
Supervision missions	UNDP Country Office	None ¹⁸		Annually
Oversight missions	UNDP-GEF team	None ¹⁸		Troubleshooting as needed
Knowledge management	Project Manager	45,000 maximum <1% of GEF grant		On-going
GEF Secretariat learning missions/site visits	UNDP Country Office and Project Manager and UNDP-GEF team	None		To be determined.
Mid-term GEF Tracking Tool to be updated	Project Manager	5,000		Before mid-term review mission takes place.
Independent Mid-term Review (MTR) and management response	UNDP Country Office and Project team and UNDP-GEF team	25,000		Between 2 nd and 3 rd PIR
Terminal GEF Tracking Tool to be updated	Project Manager	10,000		Before terminal evaluation mission takes place
Independent Terminal Evaluation (TE) included in UNDP evaluation plan, and management response	UNDP Country Office and Project team and UNDP-GEF team	28,000		At least three months before operational closure


¹⁸ The costs of UNDP Country Office and UNDP-GEF Unit's participation and time are charged to the GEF Agency Fee.

GEF M&E requirements	Primary responsibility	Indicative costs to be charged to the Project Budget ¹⁷ (US\$)		Time frame
		GEF grant	Co-financing	
Translation of MTR and TE reports into English	UNDP Country Office	5,000		2 months after MTR and TE
TOTAL indicative cost Excluding project team staff time, and UNDP staff / travel expenses		173,000		

PART III: CERTIFICATION BY GEF PARTNER AGENCY(IES)

A. GEF Agency(ies) certification

This request has been prepared in accordance with GEF policies¹⁹ and procedures and meets the GEF criteria for CEO endorsement under GEF-6.

Agency Coordinator, Agency Name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email Address
Adriana Dinu, UNDP-GEF Executive Coordinator		June 12, 2017	Marcel Alers, PTA, EITT	+1-212-906- 6199	marcel.alers@undp.org

¹⁹ GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, SCCF and CBIT

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

<p>This project will contribute to the following Sustainable Development Goals: 7. Ensure access to affordable, reliable, sustainable and modern energy for all 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all 12. Ensure sustainable consumption and production patterns 13. Take urgent action to combat climate change and its impacts</p>
<p>This project will contribute to the following country outcome included in the UNDAF/Country Programme Document: Environmental Sustainability. By 2015, communities, national and local authorities use more effective mechanisms and partnerships that promote environmental sustainability and enable them to prepare, respond and recover from natural and man-made disasters.</p>
<p>This project will be linked to the following output of the UNDP Strategic Plan: Output 1.4: Scaled up action on climate change adaptation and mitigation cross sectors which is funded and implemented.</p>

Objective / Outcome	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions
<p>Project Objective: Promote private-sector investment in renewable energy in Kazakhstan in order to achieve Kazakhstan's 2030 target for renewable energy</p>	<p>Objective indicator 1: Total Lifetime Direct and Consequential GHG Emissions Avoided (Tons CO_{2eq}) (GEF indicator 1)</p>	0	48,000 tonnes CO _{2eq} direct emissions	460,000 tonnes CO _{2eq} direct emissions plus between 1.8 and 8.0 million tonnes CO _{2eq} consequential emissions avoided	The Government is committed to declared targets and is willing to adopt and deploy supporting measures
	<p>Objective indicator 2: Increase in Installed capacity from wind and solar power (MW) and lifetime RE production (MWh) (GEF indicator 3)</p>	0	1 MW (direct, small -scale sector only) = approximately 50 GWh lifetime production	9.5 MW (direct, small-scale sector only) = approximately 500 GWh lifetime production	Political and economic stability allow for sustained interest among investors to implement projects in Kazakhstan
	<p>Objective indicator 3: Number of direct project beneficiaries (UNDP mandatory indicator 3)</p>	0	3,000 people, 50% women	28,500 people, 50% women	
<p>Component/Outcome 1 Component 1: Large Scale Renewable Energy: Policy and Financial Derisking Measures</p>	<p>Outcome indicator 1.1: Capacity of the Government to design and implement policy initiatives enabling development of renewable energy markets</p>	The Government has limited capacity to deliver renewable energy derisking strategies	Identified knowledge gaps and prepared training plan	25 policy –makers trained	The Government is willing to adopt the knowledge, best international practices and advice

Objective / Outcome	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions
Outcome 1: Appropriate policies, programmes and regulations are in place to reduce investors' risks, scale-up investment and enable the achievement of 2030 RES target	Outcome indicator 1.2: Reduction in DREI aggregate risk score across 9 DREI risk categories	Aggregate DREI risk score 32 out of 45 (72%) – in 2016 (Best in class - Germany - score 10/45 = 22%)	Aggregate DREI risk score 30 out of 45 (66%)	Aggregate DREI risk score 25 out of 45 (56%)	The Government supports and prioritizes targeted policies for development the market
Component/ Outcome 2 Component 2: Renewable Energy for Life: Policy Derisking Outcome 2: Appropriate policies, programmes and capacities are in place to reduce risk and attract investment in small-scale (on-grid and off-grid) renewables	Outcome indicator 2.1: Degree of support for small-scale renewable energy development in policy, planning and regulations	1 – Virtually no policy or strategy for small-scale climate change is in place	3 – Policy and strategy proposed and consultations ongoing (quality is good)	8 - Strong policy and regulatory frameworks designed with financial / market / incentive based mechanisms	The Government is committed to declared targets and is willing to adopt supporting measures
	Outcome indicator 2.2: Knowledge of small-scale applications in rural and urban areas	RES projects are perceived as more risky, expensive and second class energy supply options compared to traditional energy sources	Developed awareness raising media campaign and short-, medium- and long- term communication strategy to support development of RES. The communication will reflect gender perspectives, channels and needs	At least 25% of women and 25% of men in target stakeholder groups understand the benefits and risks of renewables and support their development	Key stakeholder groups are willing to participate in capacity building and awareness raising activities and have access to the right media sources

Objective / Outcome	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions
Component/ Outcome 3 Component 3: Renewable Energy for Life: Financial Derisking and Incentives Outcome 3: Sustainable business models and financial mechanisms to support their implementation in place for investment in small-scale urban and rural RES solutions	Outcome indicator 3.1: Developed financial and business models for small-scale RES in urban and rural sectors	There are no financial or innovative models in place. Projects are funded fully without use of financial mechanisms.	Business and financial models are designed for key market sectors for testing in selected pilot projects	Standard contracts / agreements prepared to facilitate scale-up	Interest from business and finance sectors to develop the market for selected small-scale renewable energy
	Outcome indicator 3.2: Appropriate financial instruments created for pilot investments in small-scale rural and urban renewables	Small-scale developments are very scarce and face a number of financial barriers.	Financial derisking instruments for small-scale on- and off-grid projects are designed in consultation with the stakeholders and with consideration of the best international practices	Financial derisking instruments for small-scale on- and off-grid projects are designed and deployed	Government policies and regulations (developed under outcome 2) remove barriers to investments sufficiently to make them attractive
	Outcome indicator 3.3: Investment mobilized to support small-scale projects	0	1000 small-scale projects addressing various technologies and sectors (using business / financial models from 3.1 and 3.2) are implemented	9500 small-scale projects	Adequate demand for small-scale developments

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

Comment – STAP (08 May 2015)	Response of the Agency
<p>The aim of the Project is to stimulate large- and small-scale renewable electricity (RE) development by supporting policies, financing and reducing risks of private investments.</p>	<p>N/A</p>
<p>It is not clear to what degree renewable energy heating systems from biomass (including biogas and combined heat and power systems) and solar thermal (including solar water heating) are included, although they could also have a good mitigation potential and possibly at a lower investment cost per tonne of CO₂- eq avoided.</p>	<p>In the large-scale segment, the Project focuses on wind and solar PV technologies. After careful analysis and consultations within the country, demand was determined to be in wind and solar, whereas there was insufficient interest in biomass including biogas. Given the specialist needs of biomass energy, and the relatively small-scale of the GEF intervention relative to the needs, a focus on PV and wind was determined to be more efficient and impactful. The Project has been designed using DREI methodology, which is based on analysis of wind and solar PV and deployment of renewable energy in electricity generation. Heating technologies are not included for large-scale renewables, as their development would imply application of different policy and financial de-risking tools, which are not part of the analysis implemented.</p> <p>In “RES for life”, solar hot water heating is a focus of the Project. Biomass based heating systems are excluded due to the specialist nature of the market, the significant lack of interest in this technology identified during project preparation.</p>
<p>In Component 3 (paragraph 21) it states "the ultimate goal of this project is to achieve energy market transformation in Kazakhstan by significantly scaling-up the deployment of renewable energy in electricity generation" But solar water heating is included in Table 5 (though this is barely readable in the pdf) as well as in the related text and also in Table 6 on "green heating". So it is confusing whether all the targets and policies as presented throughout the PIF relate to renewable electricity alone or to renewable energy in general (including heating/cooling). Also, if solar thermal is indeed included, then why not include biomass for heating, including pellet stoves, wood-fired boilers, combined heat and power plants fueled by biogas or landfill gas etc.?</p>	<p>For large-scale renewables the Project targets the electricity generation market: the Project intends to facilitate achievement of 10% target for RES generation by 2030. For the small-scale sector the Project includes solar water heating, which seems ready for market uptake if barriers can be addressed, but also includes solar PV and wind technologies for electricity generation. It is expected that small-scale installations would produce up to 24966 MWh annually as a result of project interventions.</p> <p>Other biomass technology sectors can benefit from the Project activities but, given their specialist needs and the importance of not diluting the Project impact with trying to do everything at once, they are not the focus of the Project.</p>
<p>Table 5, though obscured, appears to show that forty 10kW solar PV plants in urban areas would benefit 5,120 people but in rural areas only 500 people would benefit for the same investment cost. Why is this? In urban areas, assuming 2000 hours per year sunshine, the beneficiaries would each receive less than 1600 kWh electricity per year on average. The annual kWh generated per person in rural areas would be far higher. So is the power generated also to be used to power farm-equipment perhaps?</p>	<p>The scale for ‘RES for Life’ Components of the Project has been adjusted as described above. Given the additional analysis conducted during project preparation, Table 5 in the PIF is no longer presented in the request for project endorsement.</p> <p>In terms of share for urban installations, the Project relies on flexible approach as it is difficult, given the substantial market barriers, to predict the demand for small renewable energy in urban environments. Regardless, the potential development of such markets could be financially justified in urban environments (especially</p>

Comment – STAP (08 May 2015)	Response of the Agency
	<p>developments by commercial and industrial users due to higher energy tariffs).</p> <p>The demand for rural applications is more predictable as small-scale off-grid renewables could provide an economically feasible option for consumers in remote areas of Kazakhstan (i.e. about 255 settlements and 9000 farms in Kazakhstan are not connected to the national grid).</p> <p>In terms of the Project scale for RES for Life, the GEF funding will allow 9500 installations (in rural and urban sectors) assuming that hybrid installations of 1 kW will be the most popular choice and will be installed at the costs of USD 10 000 (based on the interviews with the local engineering companies). The GEF funding will provide incentives that could cover up to 20% of the project costs.</p>
<p>Table 6 needs careful interpretation as only the comparison of heat prices is shown. If the electricity options are based on grid electricity with a very high GHG emission factor (0.914kg CO₂-eq/kWh due to 80% coal), displacing direct heating from coal with electricity (mainly from coal-fired plants at around 25% conversion efficiency) would produce around three times more CO₂ / Gcal of useful heat. The national GHG emission levels are already very high and need to be reduced, not increased. Therefore Table 7 (also hard to read) should be amended to include all the green heat options presented in Table 6 to give the true comparison between options.</p>	<p>The GHG calculations for the Project are adjusted and presented in Annex M of the Project Document. Direct GHG reductions are 0.46 million tonnes CO₂ over the lifetime of investments. Indirect GHG reductions are estimated between 1.8 million tonnes CO₂ (estimated using bottom-up methodology) and 8.0 million tonnes CO₂ (estimated using top-down methodology). Displacing direct heating from coal with electric heating will not be a result of this project.</p>
<p>The assumptions used to produce Tables 7 and 8 are not provided. Table 8 assumes the 2014 electricity generation level (the baseline) will be maintained in 2030, when renewable electricity would have risen to a 30% share. But what is the projected electricity demand growth from 2014 to 2030? It is likely to be far higher so the 30% share of renewables will need to account for this.</p>	<p>The assumptions for GHG calculations are presented in Annex M of the Project Document.</p>
<p>Biogas is mentioned throughout, mainly for the farming sector. However, biogas production at the small farm scale of digester plant is fraught with problems of operation and maintenance. Farmers give priority to their crops and animals so farm-scale digesters and equipment tend to be neglected and only work over the longer term if large enough scale so that someone is dedicated to running the plant. Also there is no indication of how the biogas will actually be utilized – e.g. whether it will be scrubbed of CO₂ and corrosive H₂S; used to fuel gas engines to power a generator; whether the heat can be utilized; or used as a vehicle fuel.</p>	<p>Biogas is no longer included in the Project for the reasons described above.</p>
<p>Supporting nomadic rural communities is commendable, but unclear how off-grid systems will be provided in practice. The solar PV technologies will need storage batteries to be effective, and these are heavy so not ideal for moving from place to place. Even at a fixed single location, off-grid systems are challenging due to the variable solar and wind resources usually used for such applications.</p>	<p>Based on the interviews with the Ministry of Agriculture, there is already a track record and a demand for use of small-scale portable technologies. For example, 440 solar installations were installed under the subsidy program targeting farming communities in remote areas run by the Ministry of Agriculture. Portable solar installations are very popular as they can be easily transported by those with nomadic lifestyles, which is the case for many pasture-oriented farming communities.</p>

Comment – STAP (08 May 2015)	Response of the Agency
	The Project will also provide training and capacity building to ensure full understanding of small-scale technologies, opportunities and restrictions involved.
National resource mapping of solar and biomass resources is to be undertaken (Table B, Component 1). Yet wind and hydro also have good resources with higher potential than bioenergy for electricity generation as shown in Fig. 2. So why is an assessment of these resources not included?	<p>As demonstrated by the DREI analysis, the resource mapping and assessment was not perceived as an important derisking tool by the project developers.</p> <p>The Project targets only solar and wind technologies due to the highest potential and provision of the most cost-effective opportunities, plus significant government support.</p> <p>The wind mapping for certain locations has been already implemented within the UNDP GEF Wind Power Market Development Initiative.</p>
Of all the forms of biomass, only biogas is discussed but not detailed. What about wood product waste biomass, forest residues, crop residues, etc. used for direct heating? For biogas, is animal manure the only feedstock? What about green crop residues?	Biomass energy is excluded from the Project for the reasons explained above. In the medium term, there is a need for further market development in the biomass sector. However, given the limited GEF resources and national interest, it is far more cost effective to focus on wind, solar PV and solar thermal (for small scale interventions).
It is commendable that training is to be undertaken for installing, operating and maintaining RE systems and several business models are proposed for the application of RE systems in urban and rural buildings. Employing UNDP's de-risking RE investment (DREI) methodology is a good approach. Do proponents intend to assess equity costs of different de-risking instruments (Fig. 1), if so such calculation could be informative for other GEF projects.	Full analysis of equity costs was implemented using the DREI methodology. The full analysis is available in the 'Derisking renewable energy in Kazakhstan' Report, a summary of which is presented in Section 2 of the Project Document. The methodology is fully informative for other GEF projects.
The risks are clearly outlined; many are seen as high risks but none are insurmountable. The challenge is to unlock them to encourage private sector investment. For example, variable wind and solar capacity, at low initial penetration levels in the electricity grid mix, should not be a problem, especially with 10% hydro capacity that helps make the grid more flexible and reliable. At higher penetrations, energy storage and demand side management can also be considered (see http://srren.ipcc-wg3.de/report/IPCC_SRREN_Ch08.pdf for detailed analysis).	The updated risk table is presented in Table 7 of the Project Document.
Several policies (such as a new feed-in-tariff) are in place to help meet RE targets by 2020 and beyond and increase the current 3% share of electricity generation. Baseline projects and initiatives to encourage greater RE deployment at both small and large scales are described.	n/a
UNDP experience supporting green mortgage schemes in Uzbekistan could possibly be utilized for this country also.	The Project in Kazakhstan will focus on existing buildings, rather than new buildings as is the case with green mortgage schemes developed by UNDP in Uzbekistan. The Project will develop a comprehensive inventory and synthesis of existing knowledge, including the lessons that have emerged from related projects and programmes in Kazakhstan, Central Asia and countries using DREI methodology, e.g. Tunisia. While the Project could have included activities on new buildings it was considered necessary to limit the scope of activities so that they can have a real impacts, otherwise there is a risk

Comment – STAP (08 May 2015)	Response of the Agency
	of the Project being spread too thinly in such a large country.
Comments – Council Member - Germany	Response of the Agency
Suggestions for improvements to be made during the drafting of the final project proposal:	
<p>Germany welcomes the ambitious project and the alignment of the methodological approach with the recommendations of the UNDP publication “De-Risking Renewable Energy Investment” (UNDP 2013). The components provide clear perspectives on the intentions of the project. Nevertheless, due to the scope of contributing to Kazakhstan’s ambitious RES goals (from currently 0,06% to 30% (sic) of generation in 2030, most of them PV and Wind) the following suggestions should be taken into account:</p> <p><u>Component 1:</u></p> <ul style="list-style-type: none"> Far more attention should be paid explicitly to (i) RES integration issues, (ii) RES economic analysis and (iii) RES electricity system planning - not only for the benefit of individual RES investments (the focus of the PIF), but also from the government’s point of view. Otherwise significant net benefit and welfare losses will occur. 	<p>Indeed, all three aspects indicated in the comment will be systematically examined and are captured under the de-risking methodology that the project will take. Specifically, they will explicitly fall under the analysis that the project will do for the “power market risk” and “grid integration risk” categories and their underlying barriers. The project will model balancing costs also (as it has been done in the earlier application of the DREI in Tunisia). The project’s approach will also include economic analyses which look at the overall benefits and costs to society from both a private sector and public sector perspective.</p>
<p>To this end, the present Project Outputs need to be complemented by active RES integration planning and optimization of roll-out over time, location and technologies. For instance, the resource mapping could be complemented by a mapping of substations where RES would actually help (rather than hinder, as suggested by the balancing cost study) system operation and reduce system losses.</p>	<p>Yes, the project will work with KEGOC, Kazakh grid operator, to prepare RES integration and optimization plan with specific location and technologies, which will in turn make an integral part of the KEGOC investment plan (envisaged under Component 1).</p>
<p>This should be addressed from the outset, in order to avoid ex post problem fixing (as opposed to sound and transparent VRE roll-out planning) and ad hoc political “reactions” once cost and operational problems of a mostly “financial analysis-driven” VRE roll-out become apparent. Solid and credible RES expansion strategies that focus on system cost efficiency, power system stability and affordability will give the private sector confidence that future decision makers will stick to Kazakhstan’s overall commitment as well as each individual PPA rules, and thus lower risks and allow steady market development (as described for maturing nascent PV markets in GIZ 2014 – vRE Discussion Paper Series).</p>	<p>We agree fully with this observation. This is exactly what the Government of Kazakhstan expects from this project, i.e. justification and comprehensive strategy for RES roll-out which takes into account both the investors’ perspective and the societal/national aspects, such as affordability and grid stability. Such assistance will be provided under Component 1.</p>
<p>Kazakhstan, due to its geographical extension, would need special attention to the geospatial allocation and volume of RES technologies, putting system friendliness and value of the generated RES energy at the core of the RES expansion strategy (and not exclusively minimizing financial LCOE of individual projects on special purpose vehicle level).</p>	<p>Thank you for the comment, this is an excellent point. Territorial aspects will be addressed during the DREI analysis: the assumptions in the methodology will be specific to the particular region of Kazakhstan (in particular, regions with energy deficit or energy surplus profile). Additional aspects, beyond an IPP’s LCOE, such as contribution to power system stability, impact on tariff and other costs or benefits from resilience, will also be factored in.</p>
<p>Germany highly recommends that the RES policy and deployment mechanisms (FIT, Auctions) count with design features that incentivize the above-mentioned geospatial, volume and technology-specific allocation in order to assure a reliable and economic power system operation.</p>	<p>We agree fully. This recommendation will be taken into account.</p>
<p>Capacity expansion planning for thermal units, as well as hourly dispatch and grid management routines with Vs without RES would need special attention and regulations and may need to be adapted</p>	<p>Yes, these are exactly the issues to be addressed as part of Grid code revision envisaged under Component 1.</p>

thoroughly in order to result in a reliable power system when more than 2% of PV and Wind (current pipeline of RES projects) should be deployed	
Special attention should also be paid to the fiscal, macroeconomic and economic implications of the commendable RES deployment strategy. With current FIT levels, Kazakhstan’s electricity supply costs might increase by more than 50% until 2030.	Agree, current FIT levels are very high and not sustainable. This is exactly the purpose of DREI analysis to identify more cost-effective package of policy and financial de-risking tools where financial incentives would be provided at minimum level to compensate for residual risks.
Kazakhstan’s strategy for coal and gas displacement would need to be assessed. Being a natural gas and coal producer, less internal consumption might lead to more exports, shifting the emission problem to other countries.	With large and growing power deficit, we do not expect substantial displacement effect to take place, at least in the medium-run, as most RES-based capacity addition will help to meet new and suppressed demand. Analysis will be undertaken at PPG to better understand the potential scale of the displacement.
<u>Component 2:</u> Renewable Energy for Life: Policy De-risking Measures. The fiscal and financial effects of small-scale on-grid RE should be studied and explicitly mentioned (under Outputs). In general, the ongoing gradual loss of current anchor customers during RES peak times may harm the balance sheets of existing system-relevant actors, especially distribution Companies. As this process will occur anyway (sooner or later, mainly due to falling PV Capex) it would make sense to define a national strategy to balance the effects of net metering on various actors.	Comment will be addressed and additional output “Study of the fiscal and financial effects of small-scale on-grid RE” will be added.
Renewable Energy for Life: Financial De-risking & Direct Financial Incentives: To actually quantify the risk premiums in the rural RES market, the envisioned interviews with local investors are probably not enough, so that additional methods need to be applied (paragraph 26). We suggest including them into project documents.	We agree with the comment. Overall the plan is to perform an in depth analysis of the market using a structured and comprehensive taxonomy of risk categories. Interviews with private sector developers/investors (both domestic and international) who are familiar with the investment environment for small-scale RE in Kazakhstan will be an important component. Given that the market is early-stage, and the sample size and experience of private sector actors may be limited, the project would also look to gather data points for the market analysis with interviews with other sources including government actors and bilateral/multilateral development actors in Kazakhstan. The project will also analyse, draw conclusions and benchmark from the experiences of market development of small-scale RE in comparable countries.
Additional comment received from Germany via email of Oct 13, 2015: reviewing the GEF-project proposal 9192 in Kazakhstan and talking to our contacts at EBRD we stumbled upon the mention of co-financing, that would apparently be contributed by EBRD. Could you please provide us with further information on the contribution of EBRD and this planned co-financing amount, as we have received contradicting information on this matter.	EBRD’s initially was included in error as co-financing US\$5.5mln, based on the initial proposal submitted to UNDP by the Government of Kazakhstan. This error was corrected and the EBRD was removed from the list of potential co-financiers in the PIF and in this ‘Request for project endorsement’. During the PPG phase, all relevant partners were consulted including EBRD, latest at the validation workshop for this project held in January 2017.

GEF Secretariat	
None	

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS²⁰

A. Provide detailed funding amount of the PPG activities financing status in the table below:

PPG Grant Approved at PIF: 150,000			
<i>Project Preparation Activities Implemented</i>	<i>GEF/LDCF/SCCF/CBIT Amount (\$)</i>		
	<i>Budgeted Amount</i>	<i>Amount Spent To Date</i>	<i>Amount Committed</i>
Component A: Analysis of the renewable energy investment framework in Kazakhstan based on UNDP’s DREI Framework	30,000	30,000	0
Component B: UNDP-GEF project design and preparation of the full submission package	70,000	70,000	0
Component C: Financial planning and co-financing investments	35,000	35,000	0
Component D: Validation Workshop	15,000	5,000	10,000
Total	150,000	140,000	10,000

ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used)

Provide a calendar of expected reflows to the GEF/LDCF/SCCF Trust Funds or to your Agency (and/or revolving fund that will be set up)

Not applicable.

²⁰ If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue to undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities. Agencies should also report closing of PPG to Trustee in its Quarterly Report.