INNOVATIVE CARBON RESOURCE APPLICATION FOR ENERGY TRANSITION (iCRAFT)

Annual Report 2024

Abstract

Annual Report for 2024 activities, resulting on a mitigation of 13,7 $MtCO_2e$

Version 1.0

Contents

Monitoring report form (Version 1.1)	
MONITORING REPORT	
Title of the project/program activity	Innovative Carbon Resource Application for Energy Transition (iCRAFT)
Title of methodology applied	Methodology and model for ex-post quantification of the CO_2 emissions impact of end-user energy pricing
Version number of this monitoring report	2
Completion date of this monitoring report	December 15, 2025
Duration of this monitoring period	January 1, 2024 – December 31, 2024
Monitoring report number for this monitoring period	3
Host Party	Uzbekistan
Sectoral scopes	Energy sector (gas and electricity)
Amount of GHG emission reductions achieved by the project activity in this monitoring period	Quantity of emission reductions achieved:
	13,721,300 tCO_2e
Amount of GHG emission reductions estimated ex ante for this monitoring period	18,841,971 tCO_2e

Section 1. Description of project activity

1.1 General description of project activity

The project aims to support the implementation of energy reforms in Uzbekistan by mobilizing climate finance payments for results-based emission reductions to address the highest-priority reform needs.

Emission reductions are expected to occur as a result of the change in end-user energy demand stemming from the gradual adjustment in electricity and natural gas tariffs. The methodological and modelling approach used to quantify emission reductions from energy pricing policy reform is designed to analyse the effects of tariff reform on end-user energy demand. The model evaluates the emission reductions that can be achieved through the adoption of energy pricing policies by comparing emissions from the observed scenario ("*Withpolicy*" scenario) with the counterfactual baseline scenario ("*Withoutpolicy*" scenario). The "*Withoutpolicy*" scenario is generated to simulate what would have happened without energy pricing policies. The emission reductions resulting from changes in electricity and gas tariffs are quantified through the Uzbekistan Energy Policy MRV Model[1].

1.2 Location of project activity

Uzbekistan, countrywide.

1.3 Crediting period duration

The crediting period of the project is 2021-2027.

1.4 Description of implemented project activity

Since 2017, which marked the beginning of accelerated tariff adjustments, electricity and natural gas tariffs have steadily increased. The tariffs were frozen in 2020 and 2021 to mitigate the impact of COVID-19. The most recent tariff adjustments were implemented in 2022 and 2023. According to the schedule below, it is projected to reach cost recovery in 2026.

Table 1. Projected versus actual tariff increase for 2022-2030[2]

		2022	2023	2024	2025	2026	2027	2028	2029	2030
Electricity	Ex-ante estimates	35.3%	26.0%	9.8%	6.9%	5.0%	5.0%	5.0%	5.0%	5.0%
	Actual	***25.0%***	***27.2%***	***37.7%***						
Gas	Ex-ante estimates	42.2%	29.7%	9.8%	6.9%	5.0%	5.0%	5.0%	5.0%	5.0%
	Actual	***11.8%***	***17.4%***	***44.5%***						
CPI	Ex-ante estimates	11.4%	11.2%	9.8%	6.9%	5.0%	5.0%	5.0%	5.0%	5.0%
	Actual	***12.3%***	***8.7%***	***9.8%***						

[1] iCRAFT_UZB_MRV

[2] 2022-2024 real cumulative tariff increases (considering inflation) are 63.3% for electricity and 41.5% for gas.

1.5 Post-validation changes

1.5.1 Temporary deviations from the validated monitoring plan, applied methodologies, standardized baselines, or other tools and models applied

There have been no temporary deviations in this Annual Report

For the 2021-2022 Annual Report, no ERs claimed for the 2021 period (2021 GHG emissions under the “Withpolicy” scenario considered to be the same as under the “Withoutpolicy” scenario).

1.5.2 Corrections

There have been no corrections.

1.5.3 Changes to the start date of the crediting period

There have been no changes to the crediting period.

1.5.4 Inclusion of monitoring plan

The monitoring plan is included in the validated CPDD.

1.5.5 Permanent changes to the validated monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other tools and models used

There have been no permanent changes to the monitoring plan, applied methodology, or the model.

1.5.6 Changes to project design

There have been no changes to the program.

Section 2. Description of the monitoring system

For information on data collection and procedures for MRV, please refer to the iCRAFT Project Operations Manual.[3]

2.1 Data and parameters fixed ex ante

All historical data before 2022 are fixed ex-ante and available under the Uzbekistan Energy Policy MRV Model. The following table includes a description of all relevant parameters fixed ex-ante.

Parameter	Description [and unit]	Source(s) of data
Gross Domestic Product	Gross domestic product in constant 2021 [UZS] [Table 6 "Library". MRV model]	World Development Indicators (World Bank)
Gross Domestic Product (GDP) growth	Annual GDP growth as a percentage [%] [Table 6 "Library". MRV model]	World Development Indicators (World Bank)
Consumer Price Index mid-period	Monthly index with 2021=1 as reference point [units] [Table 50 "Library".MRV model]	World Economic Outlook (WEO) World Development Indicators (World Bank) https://stat.uz/en/official-statistics/prices-and-indexes
Inflation rate	Local annual inflation as a percentage [%] [Table 6 "Library". MRV model]	World Development Indicators (World Bank)
Exchange Rate	Exchange rates between local and US currency as Nominal UZS / Nominal US dollar on an annual basis [units] [Table 6 "Library". MRV model]	https://www.oanda.com/
Carbon Price	UZS/tCO_2 [tab "CarbonPrice.1". MRV model]	Assumed to be zero
Elasticity	Short-run and long-run elasticity for electricity, natural gas, and heating oil for residential and non-residential users. [Table 33 "Library". MRV model]	WB Project Appraisal Document (PAD)[4]
Residential Electricity Consumption	Annual final electricity consumption for residential consumers [GWh] [Table 48 "Library". MRV model]	Ministry of Economy and Finance (MEF); Statistical Agency (SA[5])
Non-residential Electricity Consumption	Annual final consumption for non-residential consumers [GWh] [Table 48 "Library".MRV model]	MEF; SA

[3] Annex-1 iCRAFT POM V3.pdf
[4] https://documents1.worldbank.org/curated/en/099062723101015596/pdf/P18043202a5c110109330043ce5985bae0
[5] https://stat.uz/en/

Residential Natural Gas Consumption	Annual final electricity consumption for residential consumers [GWh] [Table 48 “Library”. MRV model]	MEF; SA
Non-residential Natural Gas Consumption	Annual final consumption for non-residential consumers, excluding transport and heating sectors [GWh]. [Table 48 “Library”. MRV model]	MEF; SA
Exogenous Energy Intensity Improvement	Incremental EE improvement resulting from exogenous actions, such as targeted programs [% per year] [tab "FC.EnergyIntensity". MRV model]	Assumed to be zero for all sectors
Endogenous Energy Intensity Improvement	Incremental EE improvement resulting from the subsidy removal policy [% per year] [tab "FC.EE.1". MRV Model]	Assumed to be zero for all sectors
Total Net Energy Generation	Actual and expected electricity generation [GWh] [Table 1 “Library”. MRV model]	MEF; SA; Master plan 2020-2030[6] (for forecast estimates)
Total Energy Sales	Actual and expected electricity sales [GWh] [Table 1 “Library”. MRV model]	MEF; SA; Master plan 2020-2030[7] (for forecast estimates)
Average losses	Actual and expected electricity losses [% of sales] [Table 1 “Library”. MRV model]	Calculated based on actual and projections up to 2033
Off-grid Generation	Amounts of off-grid generation are assumed to be available in Uzbekistan [Table 37 “Library”. MRV model]	SA for 2012-2020 plus estimates for 2021-2033[8]
Electricity Imports	Annual volume of electricity imports [GWh] [Table 8 “Library”. MRV model]	MEF; SA
Electricity Exports	Annual volume of electricity exports [GWh] [Table 8 “Library”. MRV model]	MEF; SA
Capacity of Imports/Exports	Annual capacity for imports/exports with each client/country [GWh] [Table 8 “Library”. MRV model]	MEF; Assumed constant (3900 MW)

[6] https://minenergy.uz/en/lists/view/77
[7] https://minenergy.uz/en/lists/view/77
[8] Data assumed constant from 2020 onwards.

Planned Reserve Margin	Extra supply available above expected peak demand [%] [Table 30 “Library”. MRV model]	Calculation, based on Uzbekistan load demand curve 2019 (20%)
Plant-level data: Plant Type / Subtype Technology First year of operation Capacity Capital Cost Variable op. costs Fixed op. cost Capacity Factor Heat Rate Maximum available capacity CO_2 emissions rate	Units: [descriptive] [descriptive] [year] [MW] [tab “PS.PlantList”. MRV Model”] [US$/kW] [US$/kW] [US$/kW] [%] typical [MJ/MWh] [MW] [table 17 “Library”. MRV model] [tCO_2/MWh] [table 19 “Library”. MRV model]	Sources: ME, Uzhydropower, and Thermopower JSC. Lazar’s levelized cost of energy analysis[9] IPCC 2006 based on fuel
Electricity Tariff for residential and non-residential consumers	Nominal monthly average end-user Tariff [UZS/kWh] [Table 49 “Library”. MRV model]	ME, Uzbekenergo
Natural Gas Tariff for residential and non-residential consumers	Nominal monthly average end-user Tariff [UZS/kWh] [Table 49 “Library”. MRV model]	ME, Uzbekneftegaz

2.2 Data and parameters monitored

The project uses the Uzbekistan Energy Policy MRV Model[10] developed by TCAF specifically for iCRAFT for data collection and estimation of emission reductions.

Changes to main variables, such as tariffs, consumption, and the power load curve, are updated in specific sections of the MRV model. For variables not updated, the model uses as default values the data entered originally in the model at the time of validation.

The following table includes a description of relevant parameters monitored during the current period.

[9] https://www.lazard.com/media/sptlfats/lazards-levelized-cost-of-energy-version-150-vf.pdf
[10] Version 3 of the MRV model has been provided to the verifier as part of the verification package, along with supporting documentation.

Parameter	Description [and unit]	Source of data	Updated in this report [YES/NO]
Gross Domestic Product (GDP) growth	Annual GDP growth as a percentage [%]	World Economic Outlook (IMF); World Development Indicators (World Bank)	YES
Consumer Price Index mid-period	Monthly index with 2021=1 as reference point [units]	World Economic Outlook (IMF); World Development Indicators (World Bank); Statistics Agency[11]	YES for 2024
Inflation rate	Local annual inflation as a percentage [%]	Statistics Agency[12]	YES (for 2024)
Exchange Rate	Exchange rates between local and US currency as Nominal UZS / Nominal US dollar on an annual basis [units]	The Central Bank of the Republic of Uzbekistan[13]	YES (for 2024)
Carbon Price	UZS/tCO_2	Assumed to be zero[14]	NO
Elasticity	Short-run and long-run elasticity for electricity, natural gas, and heating oil for residential and non-residential users.	WB Project Appraisal Document (PAD)[15]	NO (update expected for 2026[16])
Residential Electricity Consumption	Annual final electricity consumption for residential consumers [GWh]	ME[17]	YES (for 2024)
Non-residential Electricity Consumption	Annual final consumption for non-residential consumers [GWh]		
Residential Natural Gas Consumption	Annual final electricity consumption for residential consumers [GWh]		
Non-residential Natural Gas Consumption	Annual final consumption for non-residential consumers, excluding transport and heating sectors [GWh].		

[11] https://stat.uz/en/ and https://nsdp.stat.uz/
[12] Data source updated, to reflect availability of reliable information at national level
[13] https://cbu.uz/en/statistics/e-gdds/data/111573. Updated source from previous AR. Central Bank of Uzbekistan.
[14] No Carbon Price policy implemented
[15] https://documents1.worldbank.org/curated/en/099062723101015596/pdf/P18043202a5c110109330043ce5985bae0
[16] Original analysis completed in 2022. Subject to data availability, new analysis expected by 2026.
[17] Ministry of Energy. Updated source from previous AR, as ME centralizes the data collection efforts from all sources.

Plant-level data: Plant Type / Subtype Technology First year of operation Capacity Capital Cost Variable op. costs Fixed op. cost Capacity Factor Heat Rate Maximum available capacity CO_2 emissions rate	Units: [descriptive] [descriptive] [year] [MW] [US$/kW] [US$/kW] [US$/kW] [%] typical [MJ/MWh] [MW] [tCO_2/MWh]	Sources: Ministry of Energy[18]. Lazar's levelized cost of energy analysis[19] IPCC 2006, based on fuel	YES NO NO
Power Sector Load Curve	Hourly load for the verified period [MW]	ME[20]	YES for 2024
Electricity Tariff for residential consumers	Nominal monthly average end-user Tariff [UZS/kWh]	ME[21] / MEF[22]	YES for 2024
Electricity Tariff for non-residential consumers			YES for 2024
Natural Gas Tariff for residential consumers	Nominal monthly average end-user Tariff [UZS/MJ]	ME / MEF	YES for 2024
Natural Gas Tariff for non-residential consumers			YES for 2024

Please refer to the Uzbekistan Energy Policy MRV Model for the specific values of these variables.

Four types of data are collected:

1. Data that documents macroeconomic variables and forecasts.
2. Data that documents the end-user demand for electricity and natural gas (Final Energy Consumption) by sector under the coverage of the policy in question.
3. Data that documents the current operation of the electricity supply system under the coverage of the policy in question and for all sectors and client classes.
4. Data that documents the change in policy that occurred (change in the tariff levels)

[18] 2023_Elektr stansiyalar_Updated_2025.07.18.xlsx; information provided by the Department of renewable energy sources, energy efficiency and energy audit. Updated source from previous AR, as ME centralizes the data collection efforts from all sources.

. [19] https://www.lazard.com/media/sptlfats/lazards-levelized-cost-of-energy-version-150-vf.pdf

[20] Department of renewable energy sources, energy efficiency and energy audit

[21] Financial Department within ME. Updated source from previous AR, as ME centralizes the data collection efforts.

[22] Tariff policy department within MEF

Electricity system-level data

To capture any changes in electricity demand, data is to be collected on the real operation of all the generating units involved, including any constraints historically or currently placed on their operation.

Electricity System-level data (Electricity Imports, Exports, and Generation - transformation from other energy sources)			
Annual system-level data required	**Unit:**	**historical data for ex-post**	**forecast data for ex-ante**
Total System Generation	*MWh*	[Annual]	[Annual_Est]
Hourly generation (raw data for load-duration analysis)	*MWh*	[Hourly]	[Hourly_Est]
System T&D Loss Rate	*%*	[Annual]	[Annual_Est]
Off-Grid Capacity	*MW*	[Annual]	[Annual_Est] with specific data from known planned plants and an assumption-driven estimate for other plants /years
Off-Grid Generation	*MWh*	[Annual]	[Annual_Est] with specific data from known planned plants and an assumption-driven estimate for other plants /years
Imported Electricity			
Imported Energy	*MWh*	[Annual]	[Annual_Est]
Imported Capacity	*MW*	[Annual]	[Annual_Est]
Exported Electricity			
Exported Energy	*MWh*	[Annual]	[Annual_Est]
Exported Capacity	*MW*	[Annual]	[Annual_Est]
Electricity price	*UZS/MWh*	[Annual] with cells to capture tariffs by customer group/sector as appropriate	[Annual_Est] with cells to capture tariffs by customer group/sector as appropriate
Natural Gas Price - Delivered	*UZS/MJ*	[Annual]	[Annual_Est]
Electricity production, tier 1 or tier 2 inventory data			
Total Electricity generated	*MWh*	[Annual]	
Natural Gas Consumed	*MJ*	[Annual]	
Fuel Oil Consumed (by oil grade if appropriate)	*MJ*	[Annual]	
Coal Consumed	*MJ*	[Annual]	
Carbon Emissions per period from Natural Gas	*tonne CO2*	[Annual_Calc]	

Electricity System-level data (Electricity Imports, Exports, and Generation - transformation from other energy sources)			
Annual system-level data required	**Unit:**	**historical data for ex-post**	**forecast data for ex-ante**
Carbon Emissions per period from Fuel Oil	*tonne CO2*	[Annual_Calc]	
Carbon Emissions per period from Coal	*tonne CO2*	[Annual_Calc]	

Electricity generating units data

Data required for each generating unit	Unit:	historical data for ex-post	forecast data for ex-ante
Unit name	*Text*	[Descriptive]	[Descriptive] for known planned plants only
Unit ID number	*Number*	[Descriptive]	[Descriptive] for known planned plants only
Ownership		[Descriptive]	[Descriptive] for known planned plants only
Transmission Zone name or number	Text	[Descriptive]	[Descriptive] for known planned plants only
Unit maximum capacity	*MW*	[Descriptive]	[Descriptive] for known planned plants or [Descriptive_w/Default] based on studies and projections
Online Date	*Year*	[Descriptive]	[Descriptive]
Retirement Date	*Year*	[Descriptive] when known, or [Descriptive_w/Default] based on expected life	[Descriptive_w/Default] based on expected life
Emission Controls	*Name of controls (e.g., SCR, FGD, scrubber)*	[Descriptive_w/Default]	[Descriptive_w/Default]
Unit fuel type	*Fuel (e.g., NG, oil, solar PV, solar thermal, hydro)*	[Descriptive]	[Descriptive]
Fuel source	*Source (e.g., pipeline, rail shipments)*	[Descriptive_w/Default]	[Descriptive_w/Default]
Variable O&M Costs	*UZS/MWh*	[Annual_w/Default]	[Annual_Est_w/Default]
Fixed O&M Costs	*UZS/MW-year*	[Annual_w/Default]	[Annual_Est_w/Default]

Data required for each generating unit	Unit:	historical data for ex-post	forecast data for ex-ante
Expected Annual Capacity Factor	*%*	[Annual_w/Default]	[Annual_Est_w/Default]
Expected Annual Availability or Forced Outage Rate	*%*	[Annual_w/Default]	[Annual_Est_w/Default]
Annual Capital Requirements (if additional from FOM)	*UZS/MW-year*	[Annual_w/Default]	[Annual_Est_w/Default]
Ramp Rate	*MW/hr*	[Annual_w/Default]	[Annual_Est_w/Default]
Minimum Runtime	*hrs*	[Annual_w/Default]	[Annual_Est_w/Default]
Minimum Off Time	*hrs*	[Annual_w/Default]	[Annual_Est_w/Default]
Maximum run time or other operating constraints	*hrs*	[Annual_w/Default]	[Annual_Est_w/Default]
Generation	*MWh*	[Subannual]	
Capacity Factor	*%*	[Subannual_Calc]	
Fuel or Heat Input	*MJ*	[Subannual]	
Heat Rate	*MJ/MWh*	[Subannual]	
CO_2 Emission Rate from energy	*tCO_2/MWh*	[Subannual_Calc]	
CO_2 Emission Rate - non-energy sources	*tCO_2/MWh*	[Subannual]	
Carbon Emissions per period from energy	*tCO_2*	[Subannual_Calc] with degradation factor	
Carbon Emissions per period: non-energy sources	*tCO2*	[Subannual_Calc] with degradation factor	

Total final consumption data

Annual system-level data required	Unit:	historical data for ex-post	forecast data for ex-ante
Residential			
Electricity	*MWh*	[Annual]	[Annual_Est]
Natural Gas	*MJ*	[Annual]	[Annual_Est]
Industry			

Electricity	*MWh*	[Annual]	[Annual_Est]
Natural Gas	*MJ*	[Annual]	[Annual_Est]
Commercial and Public Services			
Electricity	*MWh*	[Annual]	[Annual_Est]
Natural Gas	*MJ*	[Annual]	[Annual_Est]
Other (Agricultural, Forestry, Fishing, Non-specified)			
Electricity	*MWh*	[Annual]	[Annual_Est]
Natural Gas	*MJ*	[Annual]	[Annual_Est]

End-user energy pricing data

Consistent monitoring and collection of data will be done on the end-user demand for energy (Final Energy Consumption) by sector[23] and by fuel type, and in different tariff brackets. Data for the 30 most recent years is used to develop local elasticities, and then data is required for each historic year in the modelling period, updated yearly.

Annual system-level data required	Unit:	historical data for ex-post	forecast data for ex-ante
Residential			
Electricity	*UZS/MWh*	[Annual]	[Annual_Est]
Natural Gas	*UZS/MJ*	[Annual]	[Annual_Est]
Industry			
Electricity	*UZS/MWh*	[Annual]	[Annual_Est]
Natural Gas	*UZS/MJ*	[Annual]	[Annual_Est]
Commercial and Public Services			
Electricity	*UZS/MWh*	[Annual]	[Annual_Est]
Natural Gas	*UZS/MJ*	[Annual]	[Annual_Est]
Other (Agricultural, Forestry, Fishing, Non-specified)			
Electricity	*UZS/MWh*	[Annual]	[Annual_Est]
Natural Gas	*UZS/MJ*	[Annual]	[Annual_Est]

Macroeconomic variables and forecasts

Econometric Data to define country-specific elasticities	Unit:	Historical data for ex-post
Population	million people	30 years' annual data. Cite source
Urbanization	%	30 years' annual data. Cite source
Household electrification of urban and rural households	%	30 years' annual data. Cite source
Ave. Household size (urban and rural)	people/HH	30 years' annual data. Cite source

[23] Residential, Commercial, Public Services, Industry, Agriculture, Forestry, and Fishing.

Econometric Data to define country-specific elasticities	Unit:	Historical data for ex-post
GDP (in UZS)	US$ million	30 years' annual data. Cite source
Exchange rate	UZS/USD	
Deflator to USD (2010)		
Income per capita (in constant USD)	US$/yr.	30 years' annual data. Cite source
Electricity price (current LCU and constant USD)	US$/MJ	30 years' annual data. Cite source
Heat price (current LCU and constant USD)	US$/MJ	30 years' annual data. Cite source
Coal price (current LCU and constant USD)	US$/MJ	30 years' annual data. Cite source
Natural Gas price (current LCU and constant USD)	US$/MJ	30 years' annual data. Cite source
Gasoline price (current LCU and constant USD)	US$/MJ	30 years' annual data. Cite source
Diesel price (current LCU and constant USD)	US$/MJ	30 years' annual data. Cite source
Other Oil Products (by oil grade if appropriate)	US$/MJ	30 years' annual data. Cite source
Renewable (by type if appropriate)	US$/MJ	30 years' annual data. Cite source
Electricity total consumption	MWh	30 years' annual data. Cite source
Heat total consumption	MJ	30 years' annual data. Cite source
Coal total consumption	MJ	30 years' annual data. Cite source
Natural Gas total consumption	MJ	30 years' annual data. Cite source
Gasoline total consumption	MJ	30 years' annual data. Cite source
Gasoline total consumption	MJ	30 years' annual data. Cite source
Diesel total consumption	MJ	30 years' annual data. Cite source
Other Oil Products (by oil grade if appropriate)	MJ	30 years' annual data. Cite source
Heating and cooling degree days		
Heating degree-days	deg-day	30 years' annual data. Cite source
Cooling degree-days	deg-day	30 years' annual data. Cite source

Roles and Responsibilities[24]

Per Presidential Decree No. 271[25], a Project Implementation Unit (PIU) has been established under the MEF for the overall coordination and day-to-day implementation of the Project. The PIU is also responsible for monitoring and evaluating results achieved under the Project, to track the implementation progress of the Project activities and key results indicators. To fulfil the coordination role, the following are the roles of the PIU staff members to be filled:

- Head of the PIU
  Responsible for:
  - The overall work done by the PIU;
  - Coordination amongst the various PIU staff/specialists;

[24] Annex_Redistribution of iCRAFT PIU Responsibilities.
[25] https://lex.uz/docs/6561851

- The overall monitoring and evaluation of the Project progress, results achieved under each project component;
- Reporting to the Director of the CGEP;
- Coordination and cooperation of work with the relevant World Bank team(s);
- Preparing financial documentation on project financing and other expenses for the Director of the CGEP.

- Financial Management Specialist
  Responsible for:
  - Compiling project proposals, financing iCRAFT payments, from national stakeholders;
  - Preparing a draft of annual reports on the use of the iCRAFT funds for project financing;
  - Bookkeeping all financial transactions under the PIU's activity.
- Reporting coordinating specialist
  Responsible for:
  - Coordinating the Annual Report preparation and consolidating inputs into the final Annual Report;
  - Focal point for the annual verification process;
  - Clearing all the input data, ensuring the accuracy and completeness of collected data, and approving its use in the calculation of results that will be published in the Annual Reports.
- Social and communication specialist
  Responsible for:
  - Fulfilling Annual Reporting requirements per the Environmental and Social Commitment Plan. managing the planned communication campaign, and broader stakeholder engagement, including a feedback mechanism as per the Stakeholder Engagement Plan.
- Energy Sector Specialist
  Responsible for:
  - Collecting all data required by the MRV model (ex-post);
  - Assisting in updating data and the MRV model.
- Climate Finance Specialist
  Responsible for:
  - The maintenance and update of the MRV model.
- QA/QC, data archive specialist
  Responsible for:
  - Maintaining all data collected and reported in a database for safekeeping, verifications, and audits.

Quality Control and Quality Assurance Procedures[26]

To ensure a successful reporting and verification of emission reductions, all data used for the calculation of ERs will be referenced, stored, and accessed in a way that ensures a high level of reliability. Key aspects include, among others, clear traceability of data sources, appropriate measures for storing and accessing data, as well as back-up procedures to avoid any information loss.

The main objectives of quality control and quality assurance procedures are to:

[26] **Annex-2 iCRAFT_QA_QC_Procedure_V2.pdf**

- Ensure the implementation of monitoring and reporting systems that support the process of issuing emission reductions.
- Ensure the integrity of stored data and calculations;
- Facilitate all monitoring, reporting, and verification processes;
- Promptly report any deviations that may affect expected outcomes.

Procedures for QA/QC activities include the use of several tools, such as:

1. Summary of Monitoring Records (SMR);
2. QA/QC checklist
3. Training
4. Backup procedures
5. Spot checks and internal pre-audits.

Summary of Monitoring Records (SMR)[27]

All monitoring records and related evidence for the calculation of ERs and all other variables to be included in the Annual Report should be stored. Events impacting any of the reported variables and/or calculations shall also be recorded and stored.
A unique document, often called “summary of monitoring records” (SMR)– in a spreadsheet format – shall present a synthetic view of information that is relevant for the reporting, calculations, and verification. The document should include:

Variables and Reporting Indicators

- Variables used in the MRV model: records used to calculate emissions reductions, including
- Transformative Change Indicators
- Sustainable Development Co-benefits Indicators
- Environmental and Social Reporting Indicators

Together with the variables and indicators, the SMR shall include information on:

i. If the value of the variable/indicator is reported or calculated;
ii. The source of information (list of documents, evidence for reported info, intermediary calculation files for calculated info);
iii. Responsible entity for the accuracy of the information (evidence owner/source).

QA/QC Checklist

The QA/QC checklist is a control document managed by the Reporting Coordinator and QA/QC, and Data Archive Specialist to ensure that:

- All information required for the Annual Reports is reported in the SMR.
- Supporting documents and evidence are available in the monitoring records database for all variables and reporting indicators
- Training/Accreditation information is collected.
- Relevant data issues are reported, and evidence is collected.

The frequency of data checks is set up in line with the frequency of data availability.

[27] Annex-4 Summary of Monitoring Records (SMR).pdf

Backup procedures[28]

Loss of all monitored parameters or inconsistent reporting/calculations may result in a lack of ability to report and verify emission reductions. The following backup measures are established to mitigate these risks:

- Establishing a regular backup schedule based on data sensitivity and criticality;
- Determining the scope of backups, including data, software, and configuration files;
- Choosing a secure and reliable storage location for backups (e.g., off-site storage, cloud-based storage);
- Regularly testing backup procedures to ensure their effectiveness and reliability.

To maintain data integrity, a regular backup schedule is established, tailored to the sensitivity and criticality of the data involved. This approach ensures that the most important data is backed up more frequently. For the management of sensitive data, primarily taken from internal databases of government bodies and not publicly available (for instance, Customs Committee statistics on detailed utility imports to assess the amount of energy-efficient utility imports), backups are conducted as soon as the data is compiled and validated. Other data compiled as a result of regular monitoring is backed up monthly.

The scope of backups encompasses all relevant databases, files, and documents, alongside the MRV Model, its configurations, and settings. The QA/QC and Data Archive Specialist is responsible for backing up the database. Compiling and calculating integral data are conducted using cloud-based storage, specifically the Virtual Drive Account of the Center of Green Economy Projects. The off-site storage location for saving and backing up data is located on the server of the Information Technology Center under the Ministry of Economy and Finance. To protect sensitive information from unauthorized access, encryption protocols are implemented for all backups.

Process for updating QA/QC procedures

The QA/QC procedures will be updated regularly, and suggestions and feedback will be used to update the QA/QC procedures to reflect the unique features and to introduce improved QA/QC methods. All changes to be introduced into the QA/QC procedures require no objection from the World Bank Task Team Leader and approval by the Director of the Center of Green Economy Projects

[28] Annex-3 iCRAFT Backup Procedure.pdf

Section 3. Calculation of emission reductions

Determining the CO_2e emissions reduction caused by implementing the tariff reform:

The scenario calculations are performed by the model on the following basis:

First, the "*Withpolicy*" scenario is established based on ex-post data on energy consumption and prices for electricity and natural gas. Then the model analyses the change in end-user demand for each type of energy based on differences in end-user energy prices caused by the policy package that is being evaluated in this analysis. For this, the counterfactual "*Withoutpolicy*" scenario pricing is established and agreed upon, and the demand adjustment is determined by analyzing the price effect by employing the most rigorous possible of the methodologies laid-out in the section "Measuring price effect for demand adjustment".

Establishing CO_2e emissions from "*Withpolicy*" operation

Based on the end-user, final demand data collected, CO_2e emission levels under the "*Withpolicy*" operation[29] are determined using Equation 7-8[30] and applying country-specific emissions factors per fuel and sector or technology when these are available or from the 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 2, tables 2.2 to 2.10 for stationary sources.

Establishing CO2e emissions from counterfactual "*Withoutpolicy*" operation

The CO2e emissions levels under the counterfactual "*Withoutpolicy*" operation are determined with the end-user energy prices that could be expected. Using the results of these analyses, the inventory method is then used in all cases to evaluate the CO_2e emissions under this counterfactual "*Withoutpolicy*" operation, applying equations 9-10.[31]

3.1 Calculation of baseline emissions or baseline

A baseline is set by considering business-as-usual, historical trends, and the expected trajectory of emissions in the scenario where the policies would not have been implemented, and selecting the one that represents the country's effort to achieve the NDC. The difference between the "*Withpolicy*" and baseline scenario ("*Withoutpolicy*") determines the impact of the policy on emission reductions. The summary of GHG emissions "*Withoutpolicy*" is provided in Table 2 below. For the details of the estimations, please refer to the ER calculation spreadsheet.

Table 2. GHG emissions "*Withoutpolicy*"

	Unit	2024
Electricity	$MtCO_2$	33.3
Natural Gas	$MtCO_2$	38.1
Total	$MtCO_2$	71.4

[29] Note that the "Withpolicy" scenario represents the actual and observable conditions.
[30] Please refer to CPDD V5-Annex 3 MRV Methodology.
[31] Please refer to CPDD V5-Annex 3 MRV Methodology.

3.2 Calculation of project emissions

Project emissions are calculated as a result of "*Withpolicy*" scenario and provided in the table below. please refer to the ER calculation spreadsheet for the details of the calculations.

Table 3. GHG emissions "*Withpolicy*"

	Unit	2024
Electricity	$MtCO_2$	21.4
Natural Gas	$MtCO_2$	36.3
Total	$MtCO_2$	57.7

3.3 Calculation of leakage emissions

Leakage emissions are not applicable as per the methodology.

3.4 Calculation of emission reductions

	Baseline GHG emissions (t CO_2e)	**Project GHG emissions (t CO_2e)**	**Leakage GHG emissions (t CO_2e)**	**Emission reduction (tCO_2e)**
Total	71,407,031	57,685,731	0	13,721,300

3.5 Comparison of emission reductions achieved with estimates in the validated CPDD

Amount achieved during this monitoring period (t CO_2e)	**Amount estimated ex ante for this monitoring period in the CPDD (t CO_2e)**
13,721,300	18,841,971

3.6 Explanation of calculation of "amount estimated ex ante for this monitoring period in the CPDD"

Ex-ante estimates of emission reductions are calculated using the version of the Uzbekistan Energy Policy MRV Model presented at the time of validation of the program ("UZB_NewEnergyPolicyMRV v23").

3.7. Remarks on the increase in achieved emission reductions

The data in the MRV Model was updated to include the latest official numbers. The following three updates were made to the model:

Load Duration data

In this new version, 2024 hourly generation data was made available.

The hourly generation data for 2024 is used in the calculations in the form of generation by hour as a percentage of the total yearly generation in each of six seasonal bins, which normalizes the year-to-year differences.

Average energy tariff data by month in 2024

The tariff data for electricity and natural gas by month for 2024 was updated to the final official numbers. This change was made to ensure that the model reflects the most accurate and up-to-date information.

Energy consumption data for 2024

The electricity and natural gas end-user consumption data for 2024 were updated to the final official numbers. This is a crucial aspect of the model as it provides accurate information on energy consumption and usage patterns.

The final calculation of ER is lower than the ex-ante values.

For the details of the calculations, please refer to the "iCRAFT_UZB_MRV" spreadsheet.

Section 4. Parameters monitored to evaluate transformative change

Indicator	Description	Reported unit	Responsible entity	2024	References/Source
Size of emission reductions	Amount of emission reductions achieved in the monitoring period	$MtCO_2e$	MEF	13.7	"iCRAFT_UZB_MRV" spreadsheet[32]
Sustainability					
Policy					
New investments in renewable energy	Increase in the installed capacity of renewable energy that year	MW installed capacity	ME	**Increase of 1872.78 MW in 2024** [1050 MW - solar; 800 MW – wind; 22.78 MW - hydro]	Ministry of Energy[33]
Improved social protection	Increased number of beneficiaries covered by the social protection project	Number of beneficiaries	MEF, MPRE	2023: 4,030,611 2024: 2,939,819 **Decrease of** 1,090,792	["Citizens' budget: 2025", p29[34]
Reduced fossil fuel subsidies	Reduction of government subsidy spending on the industrial and commercial segment (and households) of electricity and natural gas	Million USD/ Percentage	MEF	2023: 10,932[35] 2024: 10,063 **Decrease: 869 / 7.95%**	IEA Fossil Fuel Subsidies Database[36]

[32] iCRAFT_UZB_MRV_V3.0.xlsm
[33] 3-ilova Elektr stansiyalar_лойиҳа офиси.xlsx
[34] Budjet_P_25_uz.pdf. Decrease is linked to a significant decrease in the poverty rate in the country, from 17% in 2021 to 8.9% in 2024, as evidenced in the latest statistics, with the positive result of reduced number of people in need of social protection benefits. UZB Poverty statistics 2021-2024.pdf; https://www.gazeta.uz/en/2025/08/25/poverty/; RE_ Inquiry Regarding Key Indicators for iCRAFT Annual Report 2024.pdf
[35] 2023 value updated according to latest IEA report published on November 11, 2025
[36] Subsidies 2010-2024.xlsx extracted from https://www.iea.org/data-and-statistics/data-product/fossil-fuel-subsidies-database (electricity + gas)

Indicator	Description	Reported unit	Responsible entity	2024	References/Source
Technology	Increased import of more energy-efficient appliances	Percentage / Thousand USD	MEF	**Decrease of 27.36%** 2023: 623,849.22 2024: 453,173.87[37]	Internal Database of the Customs Committee[38]
	Increased percentage of people in favour of tariff reforms and reducing consumption and paying higher tariffs in exchange for improved services (as part of the Listening to Citizens of Uzbekistan (L2CU) survey).	Percentage	PIU	**Electricity Decrease* of 1.6%** 2023: 18.3%[39] 2024: 16.7% **Natural Gas Decrease* of 0.5%** 2023: 16.0% 2024: 15.5 %	Listening to the Citizens of Uzbekistan Survey[40] *[*While there is a slight decrease in 2024, for both electricity and gas there is an upward trend throughout the reporting year, with 24,7% in favour of tariff reforms for electricity and 22.6% for gas as of December 2024[41]]*
Financing	Reduced spending on fossil fuel subsidies	Million USD/ percentage	MEF	**Decrease 869 / 7.95%** 2023: 10,932 2024: 10,063	IEA Fossil Fuel Subsidies Database
Leverage					
Increased PPP participation	Private sector financing leveraged in renewable energy technologies	Million USD	MEF	**Increase of 1216%** 2023: 0,591 7,777.5 for 2024	Ministry of economy and finance[42]

[37] The observed decrease in the import value of energy-efficient appliances, from $623.8 million in 2023 to $453.2 million in 2024, is a direct and intended outcome of the government`s successful industrial policy. This trend does not reflect a decrease in consumer demand but rather a strategic and successful shift towards import substitution and the localization of production.
[38] 23.07.25 илова++.xlsx; CUSTOM LETTER 23.07.25 Moliya.pdf
[39] 2023 AR data corrected for both electricity and natural gas, to consider both % of population that “Agree” and “Completely Agree” with increased tariffs to improve service quality.
[40] “L2CU Data” excel file. Percentage of population surveyed that “Agree” and “Completely Agree” with increased tariffs to improve service quality.
[41] l2cu_energy_PIU_07_2025_DATA.xlsx
[42] https://lex.uz as collected in “Increased PPP Participation Data” excel file. Information is based on the date that the agreements were signed. 2023 was an atypical year, with direct investment agreements prioritized over PPPs.

Indicator	Description	Reported unit	Responsible entity	2024	References/Source
MRV system	A robust MRV system is being designed	Yes/No	PIU	Yes	MEF / iCRAFT[43]
Article 6 National Authority	National Authority designated for the Article of the Paris Agreement	Yes/No	MEF	**Yes** MEF is designated as the National Authority	Presidential Decree No. 436 dated December 2, 2022[44]; UNFCCC Designated National Authorities[45]
Carbon pricing					
Results-Based Climate Finance Emission Reduction Payment Agreement (RBCF-ERPA)	First ERPA for RBCF signed	Tonnes of VERs contracted	MEF	500 000	Emission Reduction Payment Agreement between Uzbekistan and the IBRD, signed on October 4, 2023[46]
Mitigation Options Purchase Agreement for Internationally Transferred Mitigation Options (MOPA-ITMO)	First MOPA for ITMOs signed	Tonnes of ITMOs contracted	MEF	277 777	Mitigation Outcome Purchase Agreement between Uzbekistan and the IBRD, signed on October 4, 2023[47]

[43] Solution designed and currently under testing as reported by MRV unit. MRV team information letter.pdf
[44] https://lex.uz/ru/docs/-6303230
[45] https://unfccc.int/process-and-meetings/the-paris-agreement/article-64-mechanism/national-authorities#country_RtoZ
[46] According to the Schedule 2 of the ERPA, the annual amount of contract VERs for the period of January 1, 2024 to December 31, 2024.
[47] According to the Schedule 2 of the MOPA, the annual amount of contract VERs for the period of January 1, 2024 to December 31, 2024.

Section 5. Parameters monitored to evaluate sustainable development co-benefits

Indicator	Description	Reported unit	Responsible entity	2024	References/Source
Social					
New green jobs	New green jobs created	Number of jobs	MEF	**Increase of 33.7 thousand** 2023: 3,040.9 thousand 2024: 3,074.6 thousand	Green Economy Platform[48]
Expanded access and equity of access to social safety nets	The social safety net expanded to reach more poor households	Number of households	MEF, MPRE	Decrease of 838,644 2023: 2,223,115 2024: 1,384,471	"Citizens' Budget: 2024 Draft", p.29 lines 1 and 2][49]
Social acceptance of tariff reforms	Social acceptance of tariff reforms has changed compared to previous years	Percentage of people in favour or against as per the Listening to Citizens of Uzbekistan (L2CU) survey	PIU	**Electricity: Decrease of 1.6%** 2023 18.3% / 2024: 16.7% **Natural Gas: Decrease of 0.5%** 2023: 16.0% / 2024: 15.5%	Listening to the Citizens of Uzbekistan Survey[50]
Reliability of energy services	Improved reliability of energy services due to more rational use of electricity and gas, and improved maintenance and infrastructure investment	Frequency and duration of power shortages and or customer complains/feedback	ME	**Shortages[51]** **Frequency: increase of 2.4%** from 868 in 2023 to 889 in 2024 **Duration: Decrease** 2023: Total 3526; avg.: 4.1 h 2024: Total 2565 h; avg.: 2.9 h **Complaints: Decrease of 53%** from 419 in 2023 to 197 in 2024	Green Economy Platform; Letter from ME dated June 19, 2025[52]
Environmental					

[48] Green statistics.pdf downloaded from green.imv.uz on August 27, 2025. Information reported based on directions/sectors listed in the green taxonomy

[49] Budjet_P_25_uz.pdf. Decrease is linked to a significant decrease in the poverty rate in the country, from 17% in 2021 to 8.9% in 2024, as evidenced in the latest statistics, with the positive result of reduced number of people in need of social protection benefits. UZB Poverty statistics 2021-2024.pdf; RE_ Inquiry Regarding Key Indicators for iCRAFT Annual Report 2024.pdf

[50] "L2CU Data" excel file. While there is a slight decrease in 2024, for both electricity and gas there is an upward trend throughout the reporting year, with 24,7% in favour of tariff reforms for electricity and 22.6% for gas as of December 2024.

[51] While the total frequency of shortages remained similar, there is a significant improvement from the previous year in terms of duration and resulting complaints.

[52] 1_ilova 2022-2023-2024 йил Мурожаатлар.xlsx

Indicator	Description	Reported unit	Responsible entity	2024	References/Source
Improved air quality	Change in air pollutants due to reduced use of fossil fuels country wide	Levels of SO_2, NOx, fly ash emissions, Suspended Particulate Matter (SPM), and NMVOCs in the air	MEEPCC, SA	**SO_2: decrease of 4.23%** from 1,521,414 tonnes in 2023 to 1456.942 tonnes in 2024 **NO_x: decrease of 28.84%** from 2,562,860 tonnes in 2023 to 1,823,714 tonnes in 2024 **NMVOC: increase of 1.2%**[53] from 3,268,464 tonnes in 2023 to 3,307,805 tonnes in 2024	Green Economy Platform[54]
Economic					
New investments in renewable energy technologies	New investment channelled to the deployment of renewable energy sources	Million USD	ME, MEF	**Increase of 18.34%** from 7,358 in 2023 to 8,707.5 in 2024	National database of legislation of the Republic of Uzbekistan[55]
Fiscal savings	Reduced spending on fossil fuel subsidies	Million USD/ Percentage	ME	869 / 7.95% 2023: 10,932 2024: 10,063	IEA Fossil Fuel Subsidies Database
Institutional					
Improved energy pricing policy	More ambitious tariff reforms were adopted	Tariff increase in percentage	PIU	**Electricity Tariffs:** residential: 67.7% increase; Average: 507 UZS/kWh non-residential: 30.2% increase Average: 929 UZS/kWh. **Natural Gas Tariffs:** residential: 166% increase Average[56]: 1,012.67 UZS/m^3 non-residential: 44.2% increase average: 1542 UZS/m^3	Decree of the Cabinet of Ministers No.204, dated April 16, 2024[57]

[53] While SO_2 and NO_x levels have improved from previous year, NMVOC levels remain similar in connection to expanded economic activity and transport.
[54] green.imv.uz; Slight increase in NMVOC due to increase pollution from non-stationary sources and from industrial/construction activities.
[55] https://lex.uz as collected in "New Investments in Renewable Energy Technologies Data_2024" excel file
[56] Calculated using 2023 tariff of 380 UZS/m3 and a residential tariff of 1795 UZS/m3 from June 2024 (new tariff considers 5 prices, according to consumption levels: from 650 UZS up to 500 m^3/month to 2,600 UZS for consumption over 10,000 m^3/month)
[57] VMQ–204_Tariff_16.04.2024.pdf; 2022-2024 Energy Tariff Increases _Updated_September_2025.xlsx

Indicator	Description	Reported unit	Responsible entity	2024	References/Source
Enhanced international cooperation	International cooperation agreements signed on low-carbon economy growth	Number of agreements	MEF	**2024: 4** **Total in 2022-2024: 12**	Uzbekistan - Germany[58]; Uzbekistan - EBRD[59]; Uzbekistan - GGI[60]; Uzbekistan - AFD[61].

[58] 1.Climate change_Germany.pdf Memorandum dated September 15, 2024.
[59] 2.EBRD MoU signed.pdf Memorandum dated November 13, 2024.
[60] 3. GGGI Framework Agreement signed.pdf Agreement dated November 14, 2024.
[61] 5. SDSN + AFD MoU signedMemorandum dated November 15, 2024

Section 6. Environmental and social reporting indicators

Indicators	Description	Reported unit	Responsible entity	2024
Social Specialist in place	Appoint and maintain a social specialist in the PIU for managing the planned communication campaign, and broader stakeholder engagement, including a feedback mechanism	Yes/No	PIU	YES [62]
Communication Strategy developed and implemented	Financing a communication campaign to inform the public and address stakeholders' views on proposed reforms	Financed: Yes/No	PIU	YES[63]
		Developed: Yes/No		YES[64]
		Types of materials developed and campaigns undertaken, results of satisfaction and perception surveys		As reported. (Please refer to FGRM report for details[65])
Operationalisation of feedback and redress grievance mechanism (FGRM)	Establish, publicize, maintain, and operate an accessible feedback and grievance mechanism to receive and facilitate the resolution of concerns and grievances with the Project	When established, how publicised	PIU	Through brochures, social media and mass media campaigns[66]
		Cumulative and for the reporting period: Records of feedback and grievances, types, how many resolved, how many outstanding		As reported. (Please refer to FGRM report for details[67])
Worker Grievance Mechanism	Ensure worker grievances are available for workers to allow them to	Mechanism in place: Yes/No	PIU	YES[68]

[62]Specialist was hired on April 2, 2024 and resigned December 2, 2024. New specialist hired May 23,2025. Information about Social and communication specialist.pdf
[63] Communication campaign was financed from iCRAFT funds to be implemented by MEF. 1-tranche matrix.pdf (section 2.2)
[64] By NASP: Letter from NASP.pdf; Media-plan.pdf
[65] FGRM report 2024.pdf Section 3
[66] FGRM report 2024.pdf
[67] FGRM report 2024.pdf Section 4
[68] FGRM report 2024.pdf Section 2

Indicators	Description	Reported unit	Responsible entity	2024
	quickly inform management of labour-related issues and raise workplace concerns and labour-related matters without fear of retaliation or favour	Cumulative and reporting period: Communicated to workers		Has been communicated to workers[69]
		Cumulative and for the reporting period: Records of grievances, types, how many resolved, how many outstanding		No grievances reported
Stakeholder Engagement Plan Revised	SEP will be regularly revised to include updated information on FGRM and details of the communications strategy, including campaigns, as well as messaging on social safety nets and who would be eligible for any benefits	Yes/No	PIU	Yes
		When revised, and why		May 8, 2024 (first revision[70]) June 2025 (second revision)
		Disclosed: Yes/No		Yes[71]
Incidents and accidents	Incident or accident related to the Project which has, or is likely to have, a significant adverse effect on the environment or people, including any sea/sh complaints and protests against tariff reforms	Scope, severity, and possible causes of the incident or accident, indicating immediate measures taken	PIU	No incidents or accidents occurred, as reported. (Please refer to FGRM report for details[72])
Training of PIU staff	Stakeholder mapping, engagement, including on FGRM, community health, safety	Cumulative and for the reporting period: Training completed	PIU	Yes[73]

[69] To all workers, as part of onboarding and periodically following internal procedures.
[70] As per WB agreement
[71] Available at https://green.imv.uz/uz/report
[72] FGRM report 2024.pdf Section 4
[73] Training was provided to MEF in October 2023 prior to the creation of the PIU. Additional training was provided to the PIU in June, 2024. Training by head of the PIU to new Specialist in May, June and July 2025. Social specialist completed World Bank online course on Environmental and Social Framework (Certificate date September, 2025).

Section 7. Financial reporting

The first tranche was received June 2024[74]. The following table provides and overview of the allocation and expenditure within the monitored period.

Table 4: Variables to monitor flow of funds

	2024 period[75]	*Cumulative to December 31st 2024*
Opening Balances	**0**	**0**
Total Opening Balances	**0**	**0**
Add: Sources of Funds		
Payment under Agreement TF0C1888	7,500,000	7,500,000
Total Funds Available	**7,500,000**	**7,500,000**
Less: Uses of Funds		
1. Ministry of Energy	900,000	900,000
2.Energy market regulator	1,775,000	1,775,000
3.Ministry of Economy and finance	3,628,000	3,628,000
4.“O‘zenergosotish” JSC (UzPowerTrade)	797,000	797,000
5. Uzhydromet	400,000	400,000
Total Expenditures	2,912,977	2,912,977
Total Uses of Funds	2,912,977	2,912,977
Net Funds Available	**4,587,023**	**4,587,023**
Closing Balances	**4,587,023**	**4,587,023**
Total Closing Balances	**4,587,023**	**4,587,023**

[74] iCRAFT 1-tranche Allocation.pdf

[75] 1-Tranch Disbursment.xlsx

Section 8. Other Relevant Information

Abbreviations

AFD	French Development Agency
CGEP	Center for Green Economy Projects
COVID-19	Coronavirus disease 2019
CPDD	Crediting Program Design Document
ERPA	Emission Reduction Purchase Agreement
EU	European Union
GDP	Gross Domestic Product
GIZ	German Agency for International Cooperation
IBRD	International Bank for Reconstruction and Development (also known as World Bank)
iCRAFT	Innovative Carbon Resource Application for Energy Transition
IEA	International Energy Agency
IMF	International Monetary Fund
IPCC	Intergovernemental Pannel on Climate Change
I-REC	The International REC Standard Foundation
ITMOs	Internationally Transferred Mitigation Outcomes
JSC	Joint Stock Company
L2CU	Listening to Citizens of Uzbekistan
ME	Ministry of Energy of Uzbekistan
MEEPCC	Ministry of Ecology, Environmental Protection and Climate Change of Uzbekistan
MEF	Ministry of Economy and Finance of Uzbekistan
MOPA	Mitigation Outcome Purchase Agreement
MPRE	Ministry of Poverty Reduction and employment of Uzbekistan
MRV	model Excel based Uzbekistan Energy Policy MRV model
PAD	Project Appraisal Document
PIU	Project Implementation Unit
QA/QC	Quality Control and Quality Assurance
RBCF	Result Based Climate Finance
SA	Statistics Agency of Uzbekistan
SCE	Singapore Cooperation Enterprise
SMR	Summary of Monitoring Records
TCAF	Transformative Carbon Asset Facility
tCO2	Ton of CO2
US	United States
UZS	Uzbekistani Sum (currency)
WB	World Bank
WEO	World Economic Outlook

- - - - - - - - - -

Document Information

Version	Date	Description
1.1	2024_02_28	Format Corrections Updates to the Section 4 parameters table Updates to the Section 5 parameters table

		Updated description for Section 8 Updates to the Section 2 description of the monitoring system
1.0	2023_11_09	Initial Adoption