ICAT Kyrgyzstan Project

Report on Deliverable 13

Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic

ICAT Initiative for Climate Action Transparency

Initiative for Climate Action Transparency – ICAT

Deliverable 13: Report on the description (definition and validation) of data requirements and parameters for the NDC tracking tool set up"

AUTHOR

Aleksandr Temirbekov
National Expert Group Leader, Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic

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Acronyms

BAU	Business As Usual scenario
BTR	Biannual Transparency Report
GACMO	Greenhouse Gas Abatement Cost Model
GHG	Greenhouse Gases
GSP CBIT	Global Support Programme Capacity Building Initiative for Transparency
HPP	Hydro Power Plant
ICAT	Initiative for Climate Action Transparency
MNRETS	Ministry of Natural Resources, Ecology and Technical Supervision
MRV	Measurement Reporting and Verification
NDC	Nationally Determined Contribution to Paris Agreement
NGHGI	National GHG Inventory
NSC	National Statistic Committee
RES	Renewable energy sources
SPP	Solar Power Plant
TOR	Terms of Reference
UNEP CCC	United Nations Environment Programme Copenhagen Climate Centre
UNFCCC	United Nations Convention on Climate Change
UNOPS	United Nations Office for Project Services

Introduction

To address Kyrgyz Republic´s needs and, to support the country´s initiatives to track the implementation of its Nationally Determined Contributions (NDC) and the achievement of climate targets, Kyrgyzstan has engaged the Initiative for Climate Action Transparency (ICAT) through its international implementing partner, UNEP Copenhagen Climate Centre (UNEP CCC). Through this collaboration, Kyrgyz Republic is expecting to get support on the development of country – tailored tools and frameworks to measure and project desirable GHG impacts from climate interventions, planned in Kyrgyzstani NDC. It is expected to improve monitoring, tracking and reporting arrangements on the implementation of its NDC´s and the achievements of climate targets, which would help Kyrgyz Republic to meet the enhanced transparency requirements of the Paris Agreement. Following the country´s sectorial priorities, the ICAT project has the focus on the Energy sector and the Transport as a sub-sector.

By the moment ICAT has developed, and collaborated with partners to roll-out, a suite of practical, open-source tools and methodologies to provide effective support to the transparency efforts of countries around the world. The toolbox package includes the following: `

1. Policy Impact Assessment
2. NDC Tracking & Projections
3. Data Management & Reporting
4. Sustainable Development & Just Transitions
5. Transformational Change
6. Adaptation & Loss and Damage
7. Climate Finance & Article 6
8. Subnational and Non-State Actions

The first two ICAT tools tailored for the Energy and Transport sectors of Kyrgyzstan were presented to the national stakeholders of Kyrgyzstan on two trainings 1) on GACMO and NDC Tracking and 2) on Mitigation Policy & Measures effects assessment.

This is the next Report by the National Lead Expert, which presents corresponding deliverables in line with the Consultant's - UNOPS Contract TOR assigned for the third reporting period.

1. Deliverable 13: “Report on the description (definition and validation) of data requirements and parameters for the NDC tracking tool set up”

According to the ICAT Project Implementation Plan this report compile and analyse the outputs of the previous ICAT project reports by the Kyrgyzstani Experts’ Team and the outputs of the NDC Tracking Framework Workshop aimed to support the national UNFCCC focal point to establish operational national NDC progress tracking tool for the national MRV system.

1.1. Background information

Under the Paris Agreement[1], countries have set climate targets related to mitigation and in many cases also to adaptation. Countries communicate those targets in the form of Nationally Determined Contributions (NDCs). As the name suggest, the type of targets and level of ambition are decided by the countries. For this reason, targets in the NDCs vary considerably. For example, mitigation targets might be related to specific sectors, specify a reduction of greenhouse gas (GHG) emissions or aim to reduce GHG intensity (e.g., GHG emissions per unit of gross domestic product – GDP). These targets may be set relative to a target year, known as an absolute target, or to the GHG emission level in a Business-As-Usual scenario (BAU), which is the case of the Kyrgyzstan NDC 3.0/

Adaptation targets are even more diverse, depending on each country’s national circumstances.

1.1.1 NDC tracking and reporting

Tracking progress towards a climate target is an essential task for ensuring its achievement. We can never know exactly what the future holds. Therefore, we need to keep checking whether things go as planned or whether we need to finetune our approach, e.g., the strategy and/or measures developed to help achieve a climate target.

Climate-related targets generally have additional benefits, related to SDG e.g., related to health, job creation, livelihoods, food security or energy security. For some countries, these benefits can be just as or even more important than the climate target itself. Tracking progress, thus, also helps ensuring such benefits can be reaped.

Where countries have committed to climate targets at an international level, reporting progress to the targets internationally will help create an atmosphere of trust and confidence to national capacities. This is achieved as countries see each other’s progress.

[1] https://unfccc.int/process-and-meetings/the-paris-agreement

Reporting on progress also supports countries in sharing lessons learned and benefitting from each other's good practices. Under the Paris Agreement[1], countries have set climate targets related to mitigation and in many cases also to adaptation.

By the moment, Kyrgyzstan has communicated those targets in the form of three Nationally Determined Contributions (NDCs). As the name suggest, the type of targets and level of ambition have been decided by the country.

Under the Paris Agreement's Enhanced Transparency Framework (ETF), Kyrgyzstan is required to report information related to climate action and support as part of their Biennial Transparency Reports (BTR) every two years onwards.[2]

The MPGs[3] require that all countries report on relevant indicators to track progress towards implementation of their NDC. Reporting such indicators falls under "information necessary to track progress made in implementing and achieving the NDC", which is a "shall" mandatory requirement".

However, what "relevant" means for each specific target is not defined. According to the MPGs, indicators for tracking progress towards a country's NDC shall be relevant to that NDC and can be qualitative or quantitative.

Indicators are to be reported for each year of reporting during the implementation of the NDC.

The outline for BTRs and Common Tabular Formats (CTF) for reporting information on climate progress are laid out in the 'Guidance for operationalizing the modalities, procedures, and guidelines for the ETF, referred to in Article 13 of the Paris Agreement' (transparency guidance further on).[4]

In BTRs and the accompanying CTF, the following information on indicators must be reported:

- Description of selected indicators (CTF table 1 in Annex II to the transparency guidance).
- Definitions needed to understand each indicator (CTF table 2 in Annex II to the transparency guidance).
- Methodology or accounting approach used to generate the information for each indicator (CTF table 3 in Annex II to the transparency guidance).
- Indicator values in the base year and in each year of the NDC period (CTF table 4 in Annex II to the transparency guidance).
- Projections of key indicators (CTF table 10 in Annex II to the transparency guidance).

The information to be provided in the CTF tables is partly quantitative and partly narrative. Additional narrative information can be provided in the BTR. The outline for BTRs was defined in Annex IV to the above-mentioned Guidance. The relevant chapter for providing

[2] See Art. 13 of the Paris Agreement, https://unfccc.int/sites/default/files/english_paris_agreement.pdf. The ETF is operationalised by the modalities procedures and guidelines (MPGs) in decision 18/CMA.1, https://unfccc.int/documents/193408

[3] Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement https://unfccc.int/sites/default/files/resource/l23_0.pdf

[4] Decision 5/CMA.3, https://unfccc.int/documents/460951

such information is BTR Chapter II entitled 'Information necessary to track progress made in implementing and achieving nationally determined contributions under Article 4 of the Paris Agreement'.

As a result of the ICAT project implementation in the Kyrgyz Republic, including a set of the technical deliverables reports and conducted workshops, including the last project event on October 30, 2025, the NDC tracking framework has been shaped, discussed and prepared for formal endorsement on the appropriate state climate policy governance level.

This very deliverable is understood as a description of the process of adapting the NDC tracking tool to be used in the national context of Kyrgyzstan. It should define and validate inputs parameters required for the proposed NDC tracking tool to be used in the country.

The parts of the NDC Tracking Tool have been done already as part of previous deliverables and the validation Workshop for the proposed NDC tracking framework. That is why this report is focused only on indicators and parameters required for the NDC Tracking Tool.

1.2 Parameters for the Kyrgyzstan NDC Tracking Tool on Energy and Transport sectors

In Kyrgyzstan, NDC Tracking Tool (TT) has been elaborated based on a system of indicators arising from the targets defined under the Kyrgyzstani NDC 3.0 Implementation Plan containing a set of mitigation policies and measures for the target period till 2035.

The system includes a multi-level structure reflecting national, sectoral and action level of indicators, which evidently provide for effective tracking of the NDC progress towards its targets.

Those systems determine the bulk of data and parameters needed to build a robust NDC Tracking system and corresponding tool as a part of the national MRV system, which is, in fact, in the process of formation.

NDC TTs hinge on structured parameters across institutional, technical, and reporting dimensions. For Kyrgyzstan, strengthening sectoral GHG inventories, scenario modelling, and institutional coordination would be critical to ensure transparent and credible NDC progress tracking.

They combine national-level parameters (targets, baselines, institutional arrangements) with sectoral indicators (energy, transport, agriculture, industry, waste, land use). This ensures countries can transparently track progress against their NDC commitments in Biennial Transparency Reports (BTRs).

Cross-Cutting Parameters include the following

- National circumstances: GDP, population, energy mix, development priorities.
- Institutional arrangements: Ministries, agencies, coordination bodies.
- NDC description: Targets, timelines, conditional/unconditional commitments.

- Baseline & scenarios: Business-as-usual vs. NDC target trajectories.
- Progress indicators: Quantitative ($ktCO_2e$ reduced) and qualitative (policy adoption status).
- Reporting formats: Common Tabular Formats (CTF) + narrative chapter in BTRs.

There are also some sector-specific parameters for Kyrgyz NDC TT (tab.1).

Table 1. Sector-specific parameters for Kyrgyz NDC TT.

Sector	Key Parameters	Purpose
Energy	Installed renewable capacity (MW), fossil fuel share, energy efficiency improvements, grid emissions factor	Track decarbonization of power generation
Transport	Vehicle fleet composition, EV adoption, fuel economy standards, modal shift indicators	Assess low-carbon mobility transition
Agriculture	Livestock numbers, fertilizer use, methane reduction practices, climate-smart agriculture adoption	Monitor non-CO_2 GHG reductions
Industry	Energy intensity, process emissions (cement, steel), uptake of BAT (best available technologies)	Evaluate industrial mitigation
Waste	Waste generation, recycling rates, methane capture from landfills, waste-to-energy projects	Track circular economy and methane mitigation
Land Use & Forestry (LULUCF)	Afforestation/reforestation area, forest carbon stock, land degradation trends	Assess carbon sink enhancement

Kyrgyzstan Energy Sector parameters to track include:

- Hydropower share in electricity mix,
- Small hydro projects,
- Solar PV and wind installations,
- Coal-to-gas switching
- Energy efficient buildings and autonomous heating systems

For the Transport sectors those parameters to track include:

- Share of electric light electrical vehicles (EV) fleet
- Share of electric public bus fleet
- Share of CNG buses in Bishkek,
- EV charging stations,
- Public transport ridership and freight

The possible template for NDC monitoring on the level of sectoral mitigation policies and measures is presented in Annex II.

1.3 Data needs for the Kyrgyzstan NDC Tracking Tool on Energy and Transport sectors

For Kyrgyzstan **NDC Tracking Tool**, the data inputs need to be structured so the tool can monitor progress, compare targets, and assess transparency. To provide data to track Kyrgyz NDC, here's a breakdown of the **core datasets** defined in the course of ICAT project:

- **National Context Data**
  - Baseline year emissions (1990, 2000, 2010, 2020, 2023 according to country reporting).
  - Current GHG inventory (sectoral breakdown: energy, transport, agriculture, industry, waste, LULUCF).
  - Socio-economic indicators: GDP, population, energy consumption, land use statistics.
- **Mitigation Targets & Scenarios Data**
  - NDC targets (% reduction vs BAU baseline, carbon neutrality year).
  - Conditional vs unconditional targets (linked to finance, technology, or capacity support).
  - Sectoral mitigation measures (renewables, energy efficiency, transport electrification, afforestation, waste management).
  - Scenario projections (BAU, mitigation, enhanced ambition).
- **Sectoral Data Inputs**
  - Energy: fuel mix, renewable share, efficiency measures.
  - Transport: vehicle fleet composition, modal share, electrification plans.
  - Agriculture: livestock numbers, fertilizer use, methane reduction practices.
  - Industry: production volumes, energy intensity, technology upgrades.
  - Waste: solid waste generation, recycling rates, methane capture.
  - LULUCF: forest cover, afforestation/reforestation, degradation rates.
- **Finance & Implementation Data**
  - Climate finance flows (domestic + international).
  - Carbon market participation (if applicable: Article 6, voluntary markets).
  - Policy instruments (carbon tax, ETS, subsidies, regulations).
  - Capacity-building and technology transfer data.
- **Transparency & Reporting**
  - MRV systems (Monitoring, Reporting, Verification frameworks).
  - Institutional arrangements (responsible ministries, agencies).
  - Progress indicators (renewable capacity installed, hectares reforested, emissions reduced).
  - Alignment with global frameworks (Paris Agreement MPG, IPCC guidelines).

1.4 NDC tracking system of indicators for Energy and Transport Sectors

At the moment, Kyrgyzstan NDC 3.0 tracking system of indicators consist of two main categories "Headline Indicators" reflecting the actual situation of GHG emissions on the

national and sectoral level or "Supporting Indicators" that include a set of mitigation policies and measures implementation indicators which reflect Kyrgyzstani efforts to achieve its NDC targets.

The national level NDC indicator writes as **'National Net GHG Emissions'** and serve to monitor the overall outcome of the national mitigation policy and measures implementation over the defined NDC timeframe. This national level indicator is determined by a set of main sectoral indicators, including:

1. **Total GHG emissions of the Energy Sector.**
2. **Total GHG emissions of the Transport Sector.**
3. Total GHG emissions of the IPPU Sector.
4. Total GHG emissions of the Agriculture Sector.
5. Total GHG removals of the LULUC Sector, and
6. Total GHG emissions of the Waste Sector.

These above mentioned seven indicators form the category of 'Headline Indicators', which reflects the current national and sectoral GHG emission situation, evidently after the mitigation policies and measures implementation and are used to target achievement of national and sectoral ambitious goals. Populated with intentional vectoral pathways and values, they shape NDC targets of Kyrgyzstan.

The overall national mitigation target under Kyrgyzstan NDC 3.0 is to reduce the level of net GHG emissions projected BAU scenario baseline by 18% unconditionally in 2030, and by 16% in 2035. Conditional targets provide for a reduction of net GHG emissions by 30% relative to the BAU baseline level of net GHG emissions in 2030, and by 39% from the projected baseline level of net GHG emissions in 2035

MPG provides that each Party shall provide the information for each selected indicator for the reference point(s), level(s), baseline(s), base year(s) or starting point(s), and shall update the information in accordance with any recalculation of the GHG inventory, as appropriate (paragraph 67).

It also adds, that each Party shall also provide projections of key indicators to determine progress towards its NDC under Article 4 of the Paris Agreement (paragraph 97). And also, that each Party shall include projections on a sectoral basis and by gas, as well as for the national total, using a common metric consistent with that in its national inventory report.

All the NDC 3.0 Headline Indicators has the common metrics of "kt CO2e".

The category of "Supporting Indicators" for Kyrgyz NDC 3.0 reflecting climate actions within the Energy and Transport sectors, arises from the NGC 3.0 Implementation Plan mitigation policies and measures (PM), which comprise a wide number of indicators under each policy and measure.

In many cases indicators for policies and measures are similar and provide data on the policy level value through summing up the same metric data, but in some cases indicators of measures serve as preliminary data providing source for further calculation for the final mitigation policy level indicator value with the common metric using some additional parameters.

Then, compiled data in a common energy metric of Terra Joules is used to calculate sectoral GHG emissions reduction according to the sectoral Headline Indicator.

To calculate and track NDC targets, it is also relevant to use the data of national GHG Inventory[5] to define the grid emission factor to calculate RE gains of GHG reduction.

The matrix of Energy and Transport policy and measures and their indicators is presented below in Table 2.

[5] Data needs and parameters of GHG emission estimate for the Energy and Transport sectors are described in the IPCC Guidelines for national GHG inventory. 2006. Volume 2 Energy.

Table 2. The matrix for the Energy and Transport Sectors mitigation policies and measure with corresponding indicators to track

Energy		
#	**Policies**	**Indicators, units**
1	**RES (Solar, Wind, Hydro) development**	Installed capacity, MW

#	**Measures**	**Indicators**
	Solar energy	
1	A new 300 MW solar power plant has been launched in Toru-Aigyr	Installed capacity, MW
2	A new 1900 MW solar power plant has been launched to replace new coal/gas-fired power plants in Kyzyl-Uryuk	Installed capacity, MW
3	A new 400 MW solar power plant has been launched to replace new coal/gas-fired power plants in Balykchi	Installed capacity, MW
4	Construction of a 20 MW solar power plant on the territory of the Alamedin hydroelectric power station cascade.	Installed capacity, MW
5	50,000 households are equipped with solar power systems. 11 public schools are equipped with 250 kW solar power systems. Solar power systems on the roofs of GIK apartment buildings (4 MW by 2028, 10 MW by 2030, 30 MW by 2035).	Installed capacity, MW
	Wind energy	
6	A new 100 MW wind power plant has been commissioned to replace new coal-fired power plants (Rossatom company)	Installed capacity, MW
7	A new 100 MW wind power plant has been commissioned to replace new coal-fired power plants (Metrum LLC)	Installed capacity, MW
	Hydropower	

			8	A 234.5 MW hydroelectric power station was commissioned to replace new coal-fired power plants. (Toktogul and Uch-Kurgan HPP)	Installed capacity, MW
			9	A hydroelectric power station (Kambarata 1) with a capacity of 1860 MW was commissioned to replace new coal-fired power plants.	Installed capacity, MW
			10	The Kazarman hydroelectric power station with a capacity of 912 MW and the Kokomeren hydroelectric power station with a capacity of 1305 MW were commissioned.	Installed capacity, MW
			11	100 MW of new small hydroelectric power plants were commissioned	Installed capacity, MW
			12	171 MW of additional hydroelectric power capacity was introduced	Installed capacity, MW
				Development of grid infrastructure for the distribution of renewable energy power	
			13	Substations and transmission lines have been commissioned to supply power from new renewable energy power plants.	New substations and km of power lines put into operation.
2	**Decarbonization of the heating system**	Consumed energy, TJ			
			#	**Measures**	**Indicators**
			14	At least 1,000 coal-fired boilers have been replaced with gas and/or renewable energy sources, improving energy efficiency.	The number and installed capacity of gas or renewable energy heating boilers put into operation instead of coal boilers
			15	Heat pumps installed in 20,000 households; Heating systems in 1,400 municipal buildings have been modernized	The number and installed capacity of heat pumps for heating put into operation
3	**Natural gas supplies to households instead of coal**	Consumed energy, TJ			
			#	**Measures**	**Indicators**
			16	The gasification level has reached 60%	Number and % of households newly connected to gas distribution networks shifting from coal

<table>
<tr><td>4</td><td>Improved energy -efficiency in buildings</td><td>Consumed energy, TJ</td><td colspan="3"><table>
<tr><th>#</th><th>Measures</th><th>Indicators</th></tr>
<tr><td>17</td><td>Improving the energy efficiency of new and renovated buildings through mandatory energy performance assessment during design, construction and procurement</td><td>Number of Eff buildings and square meters of constructed and refurbished energy-efficient buildings</td></tr>
<tr><td>18</td><td>Modernization of 10,000 migrant households (Warm House) and 5,000 vulnerable households (Clean Heat for Health) was carried out.</td><td>1. Number and square meters of modernized households within the framework of the "Warm House" project
2. Number and square meters of modernized households within the framework of the Clean Heat for Health project</td></tr>
<tr><td>19</td><td>Low-cost, low-carbon solutions have been implemented in 10,000 (Eco-household) households, 1,400 social facilities have been modernized, reducing heat consumption by up to 28% and electricity consumption by up to 18%.</td><td>1. Number and square meters of modernized households within the framework of the Eco-Everyday Life project
2. Number and square meters of modernized social facilities</td></tr>
</table></td></tr>
<tr><td>5</td><td>Improving the energy efficiency of urban lighting systems</td><td>Consumed energy, TJ</td><td colspan="3"><table>
<tr><th>#</th><th>Measures</th><th>Indicators</th></tr>
<tr><td>20</td><td>Reducing energy consumption in the street lighting sector by 30% by 2035</td><td>The number of installed LED lamps for street lighting in Bishkek and Osh.</td></tr>
</table></td></tr>
<tr><td>6</td><td>Improving the energy efficiency of industrial enterprises</td><td>Consumed energy, TJ</td><td colspan="3"><table>
<tr><th>#</th><th>Measures</th><th>Indicators</th></tr>
<tr><td>21</td><td>Reduction of energy losses by 10–15%, improvement of voltage quality, reduction of network load.</td><td>% reduction in electricity losses, due to measures to compensate for reactive power in power grids</td></tr>
<tr><td>22</td><td>Reducing energy consumption by 15-20% in regulated industries, certifying 20% of large enterprises, reducing energy losses by 10-15%</td><td>% reduction in energy losses, due to the implementation of energy efficiency energy management systems (ISO 50001) at large industrial enterprises</td></tr>
</table></td></tr>
</table>

Transport					
#	**Policies**	**Indicators, units**			
1	**Decarbonisation of road transport fleet**	Fuel combusted, TJ	#	**Measures**	**Indicators**
			1	Increase of light electrical vehicle fleet	Number of registered electrical vehicles
			2	Increase of public electric buses fleet	Number of public electrical buses
			3	Substitute diesel and petrol driven public buses with CNG buses	Number of public CNG buses
2	**Transport decarbonisation fiscal policy**	Number of fiscal legal acts	#	**Measures**	**Indicators**
			4	Car fuel tax imposed: petrol - 10%; diesel - 4%	Amount of taxes collected
3	**Improvement of cities' traffic regulation**	Fuel combusted, TJ	#	**Measures**	**Indicators**
			5	Installation of smart traffic lights on the crossroads	Number of smart traffic lights controllers
4	**Development of non-motor transport means**	Fuel combusted, TJ	#	**Measures**	**Indicators**
			6	Development of bicycles lanes networks	Km of bicycle lanes constructed
			7	Promotion of personal mobility devices (PMD)	Number of electrical PMD

The matrix for the Energy and Transport Sectors mitigation policies and measure with indicators and needed data and parameters to monitor and track NDC 3 progress is given in Annex I.

1.5 NDC Progress Data Tracking Protocols

BTR 1 preparation process has reveal several problems on data collection to track NDC mitigation measure implementation, including the following:

- NDC 2 Implementation Plan though being developed with the support from UNDP and widely discussed in 2021, was not formally approved by the Government. Therefore, many organizations did not monitor and collect data on defined activities indicators and targets.
- Thus, there is no NDC formal responsibilities among the engaged institutions to report on NDC activities implementation.
- The data collected was not properly processed and accurate.
- There is no information hub with the needed hardware and software designated for climate reporting information gathering, storing and processing, as appropriate.
- Some of the sent data was lost, since the responsibility for data collection on a permanent basis was not approved by a formal staff order within the involved institutions.

Beside the general frames for NDC tracking, ICAT supported Kyrgyzstani UNFCCC focal point to develop data exchange protocols.

For this a special workshop was organised involving stakeholders from targeted sectors – Energy and Transport - who elaborated data exchange protocols for each of the NDC 3.0 measure, while addressing the following questions:

1. What indicators do we collect? (I)
2. Who will collect and report data? (R)
3. What is the reporting time frame to present data? (T)
4. What are reporting formats? (F)
5. Who provided quality assurance of reported data? (QA)
6. What are the channels? (Ch)

1.5.1 Energy Sector NDC Progress Tracking Data Protocols

The outputs of the group work by sectors are presented in the table 3 below:

Table 3. NDC mitigation policy and measures monitoring information and data protocols of the Energy Sector

#	NDC policies and measures	Monitoring component	Data and information for NDC TT protocols
1.1.	**Development of solar energy**		

#	NDC policies and measures	Monitoring component	Data and information for NDC TT protocols
1.1.1	A new 300 MW solar power plant launched in Toru-Aigyr	I	Installed capacity of new solar power plants commissioned
		R	Ministry of Energy, Kyrgyz Energy Settlement Centre, National Grid Company, donors, Renewable Energy Associations
		T	Every year at the end of the year
		F	Excel format indicating the location, owner, and quantity of equipment running
		QA	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic
		Ch	Interagency official exchange network
1.1.2	A new 1900 MW solar power plant has been launched to replace new coal/gas-fired power plants in Kyzyl-Uryk	I	Installed capacity of new solar power plants commissioned
		R	Ministry of Energy, Kyrgyz Energy Settlement Centre, National Grid Company, donors, Renewable Energy Associations
		T	Every year at the end of the year
		F	Excel format indicating the location, owner, and quantity of equipment running
		QA	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic
		Ch	Interagency official exchange network
1.1.3	A new 400 MW solar power plant has been launched to replace new coal/gas-fired power plants in Balykchi	I	Installed capacity of new solar power plants commissioned
		R	Ministry of Energy, Kyrgyz Energy Settlement Centre, National Grid Company, donors, Renewable Energy Associations
		T	Every year at the end of the year
		F	Excel format indicating the location, owner, and quantity of equipment running
		QA	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic
		Ch	Interagency official exchange network
1.1.4	Construction of a 20 MW solar power plant on the territory of the Alamedin hydroelectric power station cascade.	I	Installed capacity of new solar power plants commissioned
		R	Ministry of Energy, Kyrgyz Energy Settlement Centre, Chakan Hydroelectric Power Plant, National Grid Company, donors, Renewable Energy Associations
		T	Every year at the end of the year
		F	Excel format indicating the location, owner, and quantity of equipment running
		QA	Ministry of Energy, Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic

#	NDC policies and measures	Monitoring component	Data and information for NDC TT protocols
		Ch	Interagency official exchange network
1.1.5	50,000 households are equipped with solar power systems. 11 public schools are equipped with 250 kW solar power systems. Solar power systems on the roofs of GIK apartment buildings (4 MW by 2028, 10 MW by 2030, 30 MW by 2035).	I	Installed capacity of new solar power plants commissioned
		R	Local Self Governments, City Hall, Ministry of Education, National Electric Grid Company, Kyrgyz Energy Settlement Centre, Ministry of Energy, National Electric Grid Company
		T	Every year at the end of the year
		F	Excel format indicating the location, owner, and quantity of equipment running
		QA	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic
		Ch	Interagency official exchange network
1.2.	**Development of wind energy**		
1.2.1	A new 100 MW wind power plant has been commissioned to replace new coal-fired power plants (Rossatom company)	I	Installed capacity of new wind power plants commissioned
		R	Ministry of Energy, Kyrgyz Energy Settlement Centre, National Grid Company, donors, Renewable Energy Associations
		T	Every year at the end of the year
		F	Excel format indicating the location, owner, and quantity of equipment running
		QA	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic
		Ch	Interagency official exchange network
1.2.2	A new 100 MW wind power plant has been commissioned to replace new coal-fired power plants (Metrum LLC)	I	Installed capacity of new wind power plants commissioned
		R	Ministry of Energy, Kyrgyz Energy Settlement Centre, National Grid Company, donors, Renewable Energy Associations
		T	Every year at the end of the year
		F	Excel format indicating the location, owner, and quantity of equipment running
		QA	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic
		Ch	Interagency official exchange network
1.3.	**Development of hydropower**		
1.3.1	A 234.5 MW hydroelectric power station was commissioned to replace new coal-fired power plants. (Toktogul and Uch-Kurgan HPP)	I	Installed capacity of new hydroelectric power plants commissioned
		R	Ministry of Energy, Kyrgyz Energy Settlement Centre, JSC ES[6], NSC[7], donors
		T	Every year at the end of the year

[6] Joint Stock Company Electrical Stations
[7] National Statistic Committee

#	NDC policies and measures	Monitoring component	Data and information for NDC TT protocols
		F	Excel format indicating the location, owner, and quantity of equipment running
		QA	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic
		Ch	Interagency official exchange network
1.3.2	A hydroelectric power station (Kambarata 1) with a capacity of 1860 MW was commissioned to replace new coal-fired power plants.	I	Installed capacity of new hydroelectric power plants commissioned
		R	Ministry of Energy, Kyrgyz Energy Settlement Centre, JSC ES, NSC, donors
		T	Every year at the end of the year
		F	Excel format indicating the location, owner, and quantity of equipment running
		QA	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic
		Ch	Interagency official exchange network
1.3.3	The Kazarman hydroelectric power station with a capacity of 912 MW and the Kokomeren hydroelectric power station with a capacity of 1305 MW were commissioned.	I	Installed capacity of new hydroelectric power plants commissioned
		R	Ministry of Energy, JSC ES, Kyrgyz Energy Settlement Centre, NSC
		T	Every year at the end of the year
		F	Excel format indicating the location, owner, and quantity of equipment running
		QA	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic
		Ch	Interagency official exchange network
1.3.4	100 MW of new small hydroelectric power plants were commissioned	I	Installed capacity of new small hydroelectric power plants commissioned
		R	Ministry of Energy, Kyrgyz Energy Settlement Centre, National Grid Company, Renewable Energy Association
		T	Every year at the end of the year
		F	Excel format indicating the location, owner, and quantity of equipment running
		QA	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic
		Ch	Interagency official exchange network
1.3.4	171 MW of additional hydroelectric power capacity was introduced	I	Additional capacity of reconstructed hydroelectric power plants put into operation
		R	Ministry of Energy, JSC ES, Kyrgyz Energy Settlement Centre, NSC
		T	Every year at the end of the year
		F	Excel format indicating the location, owner, and quantity of equipment running

#	NDC policies and measures	Monitoring component	Data and information for NDC TT protocols
		QA	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic
		Ch	Interagency official exchange network
1.4.	**Development of grid infrastructure for the distribution of renewable energy power plants**		
1.4.1	Substations and transmission lines have been commissioned to supply power from new renewable energy power plants.	I	New substations and power lines put into operation
		R	Ministry of Energy, JSC NEGK[8], Kyrgyz Energy Settlement Centre, NSC
		T	Every year at the end of the year
		F	Excel format indicating the location, owner, and quantity of equipment running
		QA	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic
		Ch	Interagency official exchange network
1.5.	**Decarbonization of the heating system**		
1.5.1	At least 1,000 coal-fired boilers have been replaced with gas and/or renewable energy sources, improving energy efficiency.	I	The number and installed capacity of gas or renewable energy heating boilers put into operation instead of coal boilers
		R	Local governments, mayor's offices, Gazprom Kyrgyzstan, the Ministry of Energy, the Kyrgyz Energy Settlement Centre, and the National Grid Company. Associations of Renewable Energy Suppliers
		T	Every year at the end of the year
		F	Excel format indicating the location, owner, and quantity of equipment running
		QA	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic
		Ch	Interagency official exchange network
1.5.2	Heat pumps installed in 20,000 households; Heating systems in 1,400 municipal buildings have been modernized	I	The number and installed capacity of heat pumps for heating put into operation
		R	Local governments, City Halls, JSC NEGK, the Ministry of Energy, NSC, Associations of Renewable Energy Suppliers
		T	Every year at the end of the year
		F	Excel format indicating the location, owner, and quantity of equipment running
		QA	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic
		Ch	Interagency official exchange network
1.6.	**Natural gas supplies to households instead of coal**		

[8] Joint Stock Company National Electrical grids of Kyrgyzstan

#	NDC policies and measures	Monitoring component	Data and information for NDC TT protocols
1.6.1	The gasification level has reached 60%	I	Number and % of households newly connected to gas distribution networks shifting from coal
		R	Local governments, City Halls, Gazprom Kyrgyzstan OJSC[9], Ministry of Energy, National Statistical Committee.
		T	Every year at the end of the year
		F	Excel format indicating the location, owner, and quantity of equipment running
		QA	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic
		Ch	Interagency official exchange network
1.7.	**Improving energy efficiency and reducing energy losses in households and service sector buildings**		
1.7.1	Modernization of 10,000 migrant households (Warm House) and 5,000 vulnerable households (Clean Heat for Health) was carried out. Low-cost, low-carbon solutions have been implemented in 10,000 (Eco-household) households, 1,400 social facilities have been modernized, reducing heat consumption by up to 28% and electricity consumption by up to 18%.	I	Number and square meters of modernized households within the framework of the "Warm House" project
			Number and square meters of modernized households within the framework of the Clean Heat for Health project
			Number and square meters of modernized households within the framework of the Eco-Everyday Life project
			Number and square meters of modernized social facilities
		R	MLSPM[10], MCAU[11], MF[12], LSG[13], MNRETS[14], ME[15], international organizations, donors
		T	Every year at the end of the year
		F	Excel format indicating the location, owner, and quantity of equipment running for social facilities
		QA	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic
		Ch	Interagency official exchange network
1.7.2	Improving the energy efficiency of new and renovated buildings through mandatory energy performance assessment during	I	Number and square meters of constructed and refurbished energy-efficient buildings
		R	MCAU, NSC, City Hall
		T	Every year at the end of the year

[9] Open Joint Stock Company
[10] Ministry of Labour, Social Protection and Migration
[11] Ministry of Construction, Architecture and Utilities
[12] Ministry of Finance
[13] Local Self-Governments
[14] Ministry of Natural Resources, Ecology and Technical Supervision
[15] Ministry if Energy

#	NDC policies and measures	Monitoring component	Data and information for NDC TT protocols
	design, construction and procurement	F	Excel format indicating the location, owner, and quantity of equipment running
		QA	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic
		Ch	Interagency official exchange network
1.8.	**Improving the energy efficiency of urban lighting systems**		
1.8.1	Reducing energy consumption in the street lighting sector by 30% by 2035	I	The number of installed LED lamps for street lighting in Bishkek and Osh.
		R	City Hall of Bishkek and Osh
		T	Every year at the end of the year
		F	Excel format indicating the location and quantity of equipment running
		QA	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic
		Ch	Interagency official exchange network
1.9.	**Improving the energy efficiency of industrial enterprises**		
1.9.1.	Reduction of energy losses by 10–15%, improvement of voltage quality, reduction of network load.	I	% of reduction in electricity losses, due to measures to compensate for reactive power in power grids
		R	ME, OJSC NEGK, NSC
		T	Every year at the end of the year
		F	Excel format indicating the location and quantity of installed equipment
		QA	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic
		Ch	Interagency official exchange network
1.9.2	Reducing energy consumption by 15-20% in regulated industries, certifying 20% of large enterprises, reducing energy losses by 10-15%	I	% of reduction in energy losses, due to the implementation of energy efficiency energy management systems (ISO 50001) at large industrial enterprises
		R	ME, OJSC NEGK, NSC
		T	Every year at the end of the year
		F	Excel format indicating the location and implemented ISO 50001 quantity measures
		QA	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic
		Ch	Interagency official exchange network

1.5.1 Transport Sector NDC Progress Tracking Data Protocols

Information for the transport Sector NDC TT data protocols of given in tab. 4.

Table 4. NDC mitigation policy and measures monitoring information and data protocols of the Transport Sector

#	NDC policies and measures	Monitoring component	Data exchange including information for protocols
2.1.	Electrical vehicles promotion	I	Number of registered electrical vehicles
		R	Ministry of Transport and Communications
		T	Annually
		F	Excel forms disaggregating transport categories (light cars, buses, light trucks, etc.)
		QA	Ministry of Economy and Commerce
		Ch	Interagency official exchange network
2.2	Promotion of personal mobility devices (PMD)	I	Number of electrical PMD
		R	Kyrgyz Sharing Companies' Association
		T	Annual
		F	Excel forms disaggregating electrical PMD (2-wheeled, 3-wheeled scooters, bikes, etc.)
		QA	Ministry of Economy and Commerce
		Ch	Interagency official exchange network
2.3	Fiscal measures: car fuel tax: petrol 10%, diesel 4%	I	Tax collected
		R	Ministry of Finance
		T	Annual
		F	Excel forms
		QA	Ministry of Economy and Commerce
		Ch	Interagency official exchange network
2.4.	Installation of smart traffic lights on the crossroads	I	Number of smart traffic lights controllers
		R	City Halls
		T	Annual
		F	Excel forms
		QA	Ministry of digital development
		Ch	Interagency official exchange network
2.5	Development of bicycles lanes networks	I	Km of bicycle lanes constructed
		R	City Halls
		T	Annual
		F	Excel forms
		QA	Ministry of Construction, Architecture and Utilities
		Ch	Interagency official exchange network

The use of the above mentioned NDC TT data protocols will be endorsed by the decision of the UNFCC focal point after debate with the key stakeholders.

Annex I. The matrix for the Energy and Transport Sectors mitigation policies and measures with indicators and required data and parameters to monitor and track NDC 3 progress

Table 5. Indicators and needed data and parameters by mitigation policies and measures of NDC 3 Energy and Transport Sectors Implementation Plan.

Energy

#	Policies	Indicators, units	#	Measures	Indicators	Data required	Parameters
1	**RES (Solar, Wind, Hydro) development**	Installed capacity, MW		**Solar energy**			
			1	A new 300 MW solar power plant has been launched in Toru-Aigyr	Installed capacity, MW	Generated power, kWh	Daily insolation, hrs. Annual capacity factor, full time hours. Electricity production, kWh. Grid emission factor, tCO2/kWh.
			2	A new 1900 MW solar power plant has been launched to replace new coal/gas-fired power plants in Kyzyl-Uryk	Installed capacity, MW	Generated power, kWh	Daily insolation, hrs. Annual capacity factor, full time hours. Electricity production, kWh. Grid emission factor, tCO2/kWh.
			3	A new 400 MW solar power plant has been launched to replace new coal/gas-fired power plants in Balykchi	Installed capacity, MW	Generated power, kWh	Daily insolation, hrs. Annual capacity factor, full time hours. Electricity production, kWh. Grid emission factor, tCO2/kWh.
			4	Construction of a 20 MW solar power plant on the territory of the Alamedin hydroelectric power station cascade.	Installed capacity, MW	Generated power, kWh	Daily insolation, hrs. Annual capacity factor, full time hours. Electricity production, kWh. Grid emission factor, tCO2/kWh.

5	50,000 households are equipped with solar power systems. 11 public schools are equipped with 250 kW solar power systems. Solar power systems on the roofs of GIK apartment buildings (4 MW by 2028, 10 MW by 2030, 30 MW by 2035).	Installed capacity, MW	Generated power, kWh	Daily insolation, hrs. Annual capacity factor, full time hours. Electricity production, kWh. Grid emission factor, tCO2/kWh.
	Wind energy		**Data required**	**Parameters**
6	A new 100 MW wind power plant has been commissioned to replace new coal-fired power plants (Rossatom company)	Installed capacity, MW	Generated power, kWh	Capacity factor, full time hours. Electricity production, kWh/year. Electricity production per day? kWh/day. Grid emission factor, tCO2/kWh
7	A new 100 MW wind power plant has been commissioned to replace new coal-fired power plants (Metrum LLC)	Installed capacity, MW	Generated power, kWh	Capacity factor, full time hours. Electricity production, kWh/year. Electricity production per day, kWh/day. Grid emission factor, tCO2/kWh.
	Development of hydropower		**Data required**	**Parameters**
8	A 234.5 MW hydroelectric power station was commissioned to replace new coal-fired power plants. (Toktogul and Uch-Kurgan HPP)	Installed capacity, MW	Generated power, kWh	Capacity factor, full time hours. Electricity production, kWh/year. Grid emission factor, tCO2/kWh.

9	A hydroelectric power station (Kambarata 1) with a capacity of 1860 MW was commissioned to replace new coal-fired power plants.	Installed capacity, MW	Generated power, kWh	Capacity factor, full time hours. Electricity production, kWh/year. Grid emission factor, tCO2/kWh.
10	The Kazarman hydroelectric power station with a capacity of 912 MW and the Kokomeren hydroelectric power station with a capacity of 1305 MW were commissioned.	Installed capacity, MW	Generated power, kWh	Capacity factor, full time hours. Electricity production, kWh/year. Grid emission factor, tCO2/kWh.
11	100 MW of new small hydroelectric power plants were commissioned	Installed capacity, MW	Generated power, kWh	Capacity factor, full time hours. Electricity production, kWh/year. Grid emission factor, tCO2/kWh.
12	171 MW of additional hydroelectric power capacity was introduced	Installed capacity, MW	Generated power, kWh	Capacity factor, full time hours. Electricity production, kWh/year. Grid emission factor, tCO2/kWh.
	Development of grid infrastructure for the distribution of renewable energy power plants		**Data required**	**Parameters**
13	Substations and transmission lines have been commissioned to supply power from new renewable energy power plants.	New substations and power lines put into operation	km of new transmitting lines and capacities, kV. Number of substations and capacities of	Newly established grid facilities power consumption, kWh. Electricity consumed, kWh. Grid emission factor, tCO2/kWh.

						substations, kVA (kW).	
2	**Decarbonization of the heating system**	Consumed energy, TJ					
			#	**Measures**	**Indicators**	**Data required**	**Parameters**
			14	At least 1,000 coal-fired boilers have been replaced with gas and/or renewable energy sources, improving energy efficiency.	The number and installed capacity of gas or renewable energy heating boilers put into operation instead of coal boilers	Generated heat power, Gk. Electricity consumed, kWh	Available energy for heating, TJ/day. Energy efficiency of boilers, %. Gas emission factor, kg CO2/TJ. Previous use of coal, kg/day. Calorific values of coal. Annual coal consumption, t/year.
			15	Heat pumps installed in 20,000 households; Heating systems in 1,400 municipal buildings have been modernized	The number and installed capacity of heat pumps for heating put into operation	Generated heat power, GC. Electricity consumed, kWh.	Available energy for heating, TJ/day. Energy efficiency of heating systems, %. Previous use of coal, kg/day. Calorific values of coal. Annual coal consumption, t/year.
3	**Natural gas supplies to households instead of coal**	Consumed energy, TJ					
			#	**Measures**	**Indicators**	**Data required**	**Parameters**
			16	The gasification level has reached 60%	Number and % of households newly connected to gas distribution networks shifting from coal	Number of coal to gas switched households. Gas consumed, TJ. Avoided coal consumption, TJ	Available energy for cooking, TJ/day. Energy efficiency of stove, %. Available energy for heating, TJ/day. Energy efficiency of heating system. Use of gas for household, TJ/year. Gas emission factor, kg CO2/TJ. Use of coal, kg/day. Calorific values of coal. Annual coal consumption, t/year.
4	**Improved energy -efficiency in buildings**	Consumed energy, TJ					
			#	**Measures**	**Indicators**	**Data required**	**Parameters**

17	Improving the energy efficiency of new and renovated buildings through mandatory energy performance assessment during design, construction and procurement	Number of Eff buildings and square meters of constructed and refurbished energy-efficient buildings	Area of living space new residential buildings with better thermo insulation, (sq. m)	Energy consumed, GC. Energy saved, GC. Average heat loss in the old buildings, GC. Source fuel calorific value, gross/net.
18	Modernization of 10,000 migrant households (Warm House) and 5,000 vulnerable households (Clean Heat for Health) was carried out.	1. Number and square meters of modernized households within the framework of the "Warm House" project 2. Number and square meters of modernized households within the framework of the Clean Heat for Health project	Area of living space new residential buildings with better thermo insulation, (sq. m)	Energy consumed, GC. Energy saved, GC. Average heat loss in the old buildings, GC. Source fuel calorific value, gross/net.
19	Low-cost, low-carbon solutions have been implemented in 10,000 (Eco-household) households, 1,400 social facilities have been modernized, reducing heat consumption by up to 28% and electricity consumption by up to 18%.	1. Number and square meters of modernized households within the framework of the Eco-Everyday Life project 2. Number and square meters of modernized social facilities	Area of living space new residential buildings with better thermo insulation, (sq. m)	Energy consumed, GC. Energy saved, GC. Average heat loss in the old buildings, GC. Source fuel calorific value, gross/net.

5	**Improving the energy efficiency of urban lighting systems**	Consumed energy, TJ		**Measures**	**Indicators**	**Data required**	**Parameters**
			20	Reducing energy consumption in the street lighting sector by 30% by 2035	The number of installed LED lamps for street lighting in Bishkek and Osh.	Number of LED lamps installed	Energy consumption of new and old lamps, kWh. Lamp lifetime, hrs. Lamp wattage, W. Daily usage, hrs. Energy saved, kWh.
6	**Improving the energy efficiency of industrial enterprises**	Consumed energy, TJ	#	**Measures**	**Indicators**	**Data required**	**Parameters**
			21	Reduction of energy losses by 10–15%, improvement of voltage quality, reduction of network load.	% reduction in electricity losses, due to measures to compensate for reactive power in power grids	Current energy loses of targeted enterprises	Energy consumption pf targeted enterprises, kWh, GC. Energy saved, kWh, GC. Source fuel calorific value, gross/net.
			22	Reducing energy consumption by 15-20% in regulated industries, certifying 20% of large enterprises, reducing energy losses by 10-15%	% reduction in energy losses, due to the implementation of energy efficiency energy management systems (ISO 50001) at large industrial enterprises	Current energy loses of targeted enterprises. ISO 5001 endorsed.	Energy consumption of targeted enterprises, kWh. Energy saved, kWh, GC. Source fuel calorific value, gross/net.
TRANSPORT							
#	**Policies**	**Indicators, units**					
1	**Decarbonisation of road transport fleet**	Fuels consumed, TJ	#	**Measures**	**Indicators**	**Data required**	**Parameters**
			1	Increase of light electrical vehicles (EV)	Number of registered EV	Number of EV. Annual distance.	Size of a batter, kWh. Electricity consumption, km/kWh. Total electricity consumption MWh. Emission factor, tCo2/MWh. Total petrol consumption, TJ.

			2	Increase of public electric buses fleet	Number of public electrical buses	Number of public electrical buses	Emission factors of fossil fuels driven cars
			3	Substitute diesel and petrol driven public buses with CNG buses	Number of public CNG buses	Number of public CNG buses	Emission factors of fossil fuels driven cars
2	**Transport decarbonisation fiscal policy**	Number of fiscal acts					
			#	**Measures**	**Indicators**	**Data required**	**Parameters**
			4	Car fuel tax imposed: petrol - 10%; diesel - 4%	Amount of taxes collected	% reduction of fuels in transport	Emission factors of fossil fuels driven cars.
3	**Improved cities' traffic regulation**	Number of smart traffic lights controllers					
			#	**Measures**	**Indicators**	**Data required**	**Parameters**
			5	Installation of smart traffic lights on the crossroads	Number of smart traffic lights controllers	% reduction of traffic jams. % Reduction of	Reduced hours of Idling of motor vehicle engines during traffic jams, hrs/trip. Reduced fossil fuel consumption, TJ.
4	**Development of non-motor transport means**	Number of non-fossil fuelled motor transport means					
			#	**Measures**	**Indicators**	**Data required**	**Parameters**
			6	Development of bicycles lanes networks	Km of bicycle lanes constructed	Km of lanes. Annual use of lanes	Fuel consumption, km/l. Share of bikers that used cars, %/ Total petrol consumption, TJ. Emission factor for petrol, t CO2/TJ
			7	Promotion of personal mobility devices (PMD)	Number of electrical PMD	Number of PMD. Annual distance, km/PMD.	Size of a battery, kwh. Electricity consumption, km/kWh. Petrol consumption km/l. Emission factor for petrol.

Annex II The Template for NDC Mitigation Policies and Measures Monitoring

Table 6. The Template for NDC Mitigation Policies Monitoring

Energy Sector			YEAR:	Year:	Year:	
#	**Parameter**	**Indicator**	**Baseline Value**	**Target Value**	**Actual Value (Latest Data)**	**Notes**
1	Additional solar energy installed capacity	Total MW of renewable energy installed				
2	Additional wind energy installed capacity	Total MW of renewable energy installed				
3	Increased capacity of modernised hydropower plants (HPP)	Total MW of renewable energy installed				
4	Additional big HPP installed capacity	Total MW of renewable energy installed				
5	Newly constructed small HPP installed capacity	Total MW of renewable energy installed				
6	Development of grid infrastructure for the distribution of renewable energy power plants	Number and capacities of new substations and power lines put into operation				
7	The households gasified level has reached 60%	Number and % of households newly connected to gas distribution networks shifting from coal				
8	Improving the energy efficiency of new and renovated buildings through mandatory energy performance assessment during design, construction and procurement	Number of Eff buildings and square meters of constructed and refurbished energy-efficient buildings ude all the projects				
9	Modernization of 10,000 migrant households (Warm House) and 5,000 vulnerable households	1. Number and square meters of modernized households within the framework of the "Warm House" project				

	(Clean Heat for Health) was carried out.	2. Number and square meters of modernized households within the framework of the Clean Heat for Health project
10	Low-cost, low-carbon solutions have been implemented in 10,000 (Eco-household) households, 1,400 social facilities have been modernized, reducing heat consumption by up to 28% and electricity consumption by up to 18%.	1. Number and square meters of modernized households within the framework of the Eco-Everyday Life project 2. Number and square meters of modernized social facilities
11	Reduction of energy losses by 10–15%, improvement of voltage quality, reduction of network load.	% reduction in electricity losses, due to measures to compensate for reactive power in power grids
12	Reducing energy consumption by 15-20% in regulated industries, certifying 20% of large enterprises, reducing energy losses by 10-15%	% reduction in energy losses, due to the implementation of energy efficiency energy management systems (ISO 50001) at large industrial enterprises

TRANSPORT SECTOR			Year:	Year:	Year:	
#	**Parameter**	**Indicator**	**Baseline Value**	**Target Value (NDC)**	**Actual Value (Latest Data)**	**Notes**
1	Increase of light electrical vehicles (EV)	Number of registered EV				
2	Increase of public electric buses fleet	Number of public electrical buses				
3	Substitute diesel and petrol driven public buses with CNG buses	Number of public CNG buses				
4	Car fuel tax imposed: petrol - 10%; diesel - 4%	Amount of taxes collected				
5	Development of bicycles lanes networks	Km of bicycle lanes constructed				

6	Promotion of personal mobility devices (PMD)	Number of electrical PMD