Intended Nationally Determined Contribution (INDC) towards the achievement of the global goal of the UN Framework Convention on Climate Change (UNFCCC) by the Republic of Tajikistan

The Republic of Tajikistan, pursuant to the relevant decisions of the Conference of the Parties (COP) to the UNFCCC, COP-19 and COP-20 of the UNFCCC, including the Lima Call for Action to Combat Climate Change (Lima, Peru, December 2014), submits herewith its Intended Nationally Determined Contribution (INDC) and the explanations concerned.

The final decision concerning the INDC of the Republic of Tajikistan within the framework of a new global climate change agreement, which will be proposed for signing during the COP-21 (Paris, France, December 2015), is expected to be taken with due account for the outcomes of the negotiating process at this meeting.

The Republic of Tajikistan, as a mountainous and landlocked country with a developing economy and low per capita GDP, is characterized by the low level of gross and specific greenhouse gas emissions and an extreme vulnerability to climate change, including frequent natural disasters. More than 60% of the water resources of the Central Asia Region, which originate from the high mountain glaciers, are generated in the country. Tajikistan adheres to the policy of sustainable development. Since independence, fundamental regulatory and legal instruments, national strategies and programmes have been adopted and the key environmental international conventions and agreements have been ratified, serving on a global scale as a safeguard towards preservation of the natural environment and preventing ecological disasters. With the assistance of the international institutions, measures are being developed and implemented to fulfil the commitments which have been made in accordance with the UN environmental conventions, and the relevant institutional structures are established.

The Republic of Tajikistan is a participating country of the international Pilot Programme for Climate Resilience (PRCR). At the time of preparation of the INDC, the main efforts of the PPCR in the Republic of Tajikistan are focused on hydraulic power industry, development of other renewable sources of energy, agriculture and forestry, adequate response to and risk reduction against natural disasters, provision of hydrometerological services, as well as measures to raise public awareness.

The INDC of the Republic of Tajikistan with respect to the reduction of greenhouse gas emissions and the impact on the climate system, without attracting new substantial international funding

The INDC of the Republic of Tajikistan with respect to the reduction of greenhouse gas emissions and the impact on the climate system, subject to new substantial international funding and technology transfer

A flexible target, not exceeding 80-90% of the 1990 level by 2030, which amounts to 1.7-2.2 tons in CO₂ equivalent per capita, has been determined as the country's contribution to anthropogenic greenhouse gas emission reductions. Systematic reforestation in accordance with the adopted State programmes is a considerable contribution of the country to the reduction of negative impacts on the climate system.

The potential for reducing greenhouse gas emissions in the Republic of Tajikistan to achieve a **target of 65-75% of the 1990 level by 2030**, which amounts to **1.2-1.7 tons in CO₂ equivalent** per capita. It will be possible in case of implementation of investment projects and national programmes in the sphere of power industry, transport, agriculture and forestry and water resources management, risk reduction of natural disasters, promotion and diversification of renewable energy sources and reduction of energy losses; modernization, introduction of new technologies and development of the sectors of the

economy.

Reference year and volume of emissions

1990, 25.5 million tons in CO₂ equivalent.

Timeframe

2021-2030.

Scope and coverage

Basic spheres of economic activity, included in the INDC the Republic of Tajikistan:

- Power industry and water resources;
- Industry and construction;
- Land use, agriculture and gardening and grazing;
- Forestry and biodiversity;
- Transportation and infrastructure.

Greenhouse gases

- Carbon dioxide (CO₂);
- Methane (CH₄);
- Nitrous oxide (N₂O).

The INDC of the Republic of Tajikistan with respect to climate adaptation, without attracting new substantial international funding

Reduction of the adverse impacts of the dangerous weather events and climate change will be ensured by: modernization of the hydrometeorological services and improvement of the process of serving the needs of the economy and of the citizens; implementation of the Medium-Term Development Programme of the Republic of Tajikistan for the period 2016-2020; Agriculture Reform Programme of the Republic of Tajikistan for 2012-2020; State Programme for Study and Preservation of Glaciers of the Republic of Tajikistan for 2010-2030; Development State Programme of Geology Industry of the Republic of Tajikistan for 2012-2020; National Strategy for Disaster Risk Management of the Republic of Tajikistan for 2009-2015; National Plan for Emergency Preparedness and Response of the Republic of Tajikistan and other sectoral programmes. .

It is important to bear in mind that for several reasons the planned and approved State programmes and strategies are not fully implemented due to the lack of financial resources. In the future it will be important to ensure mobilization of additional external resources and enhancement of scientific and technical assistance to ensure the full-fledged implementation of these and other important programmes.

The INDC of the Republic of Tajikistan with respect to climate adaptation, subject to new substantial international funding and technology transfer

The reduction of vulnerability to the impacts of climate change by means of full-scale integration of the climate resilience and adaptation measures into the planning and development of the green infrastructure in the following sectors:

- agriculture, irrigation and water systems,
- power engineering and industrial facilities,

- transport and housing infrastructures, as well as in the following areas:
 - resilience to the hydrometeorological hazards and climate changes;
 - disaster risk reduction;
 - promotion of adaptation of globally significant biological species and natural ecosystems to climate change;
 - monitoring and preservation of the glaciers and water resources in the runoff formation zones under the conditions of climate warming;
 - improvement of occupational safety, lifesustaining activity and health of the population, maternity and childhood protection in the context of climate warming.

The introduction of climate change adaptation measures will be carried out by means of:

- new methods and planning for water resources management;
- monitoring and hydrometeorological survey;
- ensuring food security and improving wellbeing of the population;
- infrastructure development;
- active role of women and civil society on the issues of climate change and disaster risk reduction;
- dissemination of knowledge and experience on climate change at various levels.

Involvement of different stakeholders in the process of preparation and discussion of the INDC and the legal framework to support implementation of the INDC The representatives of all key ministries and agencies. branches of the economy and the general public took part in the process of preparation and discussion of the INDC. In the Republic of Tajikistan, the programmes, strategies and legislative instruments are in place or being elaborated, aimed at developing renewable sources of energy, energysaving and energy efficiency, reforming agriculture, modernizing industry and transport, developing forestry and land use planning. In 2003, the National Action Plan of the Republic of Tajikistan on Climate Change Mitigation was adopted. At present, the National Development Strategy of the Republic of Tajikistan until 2015 is being implemented. At the time of preparation of the INDC, the National Development Strategy of the Republic of Tajikistan (2030), National Climate Change Adaptation Strategy and other sectoral strategies are being developed.

Taking into account the results of the negotiations and the decisions of COP-21 to the UNFCCC in Paris, December 2015, the Republic of Tajikistan may review or develop legislative and regulatory instruments; specify and complement sectoral

strategies and action plans to reflect adequately the priority issues of climate change, as well as develop projects and programmes for 'climate-sensitive' investment and fulfillment of the intentions of the Republic of Tajikistan with respect to greenhouse gas emissions and climate adaptation, as outlined in this INDC. The system of making regular biennial inventory of greenhouse gas emissions and sinks should be created, and the organizational arrangements on the issues of climate change should be improved.

Methodological approaches, used for assessment and accounting of anthropogenic greenhouse gas emissions and sinks and for forecasting The methodological approaches are based on the following international techniques:

- IPCC Good Practice Guidance, 2003;
- IPCC Guidance, 2006.

The post-2015 statistics, macroeconomic forecasts and the indicative development goals.

Starting from 2016, it is expected that regular biennial inventory and reporting for greenhouse gas emissions will be introduced and the progressive establishment of systems for monitoring and verification measures will be carried out.

The following global warming potentials are used, recommended by the decision 24 (COP-19 to the UNFCCC):

- Carbon dioxide (CO₂): 1;
- Methane (CH₄): 25;
- Nitrous oxide (N₂O): 298.

Why the INDC is fair and ambitious, taking into account national peculiarities

The Republic of Tajikistan has one of the lowest levels of greenhouse gas emissions but, in spite of a high share of renewable power generation, it faces acute power shortages against the background of the economy and population growth. Since 1991, at the initial stage of the period of state independence, and especially during the period 1992-2000, the Republic of Tajikistan had experienced grave consequences resulting from civil war and of the transition from a centrally planned to a market-based economy, with a sharp increase in poverty. During the period 2008-2015, the socio-economic indicators of the Republic of Tajikistan have improved. For the Republic of Tajikistan, the basic priority of climate measures lies in adaptation because of high dependence of the considerable part of the population and of the branches of the economy on climatic conditions, also taking into account the key role of the country's mountain ecosystems in water resources generation and biological diversity for Central Asia. The existing assessed contribution of the Republic of Tajikistan to global greenhouse gas emissions is less than 0.02%. In view of a low level of greenhouse gas emissions

and a very high share of hydro-power (more than 90%), the level of greenhouse gas emissions of the Republic of Tajikistan will amount to 80-90% by 2030, as compared to 1990 (as stated in the INDC); this will ensure the achievement of socially acceptable and scientifically grounded indicators, both in absolute and per capita terms. By doing so, the Republic of Tajikistan adheres to the basic principle of the UNFCCC - common but differentiated responsibility expects an adequate level of reducing greenhouse gas emissions from economically developed countries and the largest countries-emitters of greenhouse gases in accordance with the IPCC scientific recommendations to prevent global warming of more than 2°C. The international support of the intentions of the Republic of Tajikistan with respect to reduction of greenhouse gas emissions and a fullscale implementation of climate adaptation and resilience measures will enable the country to be strongly on track to green economy and climateresilient development. The forests and gardens in Tajikistan are of critical importance for preservation of mountain ecosystems and biodiversity, improvement of the state of lands and prevention of their further degradation, protection of vulnerable infrastructure, protection of water resources and carbon absorption from the atmosphere. That is why they play a specific role both in terms of mitigating the impact of anthropogenic activity on the climate and reducing negative consequences.

How do the INDCs promote the achievement of the goal of the Convention, indicated in the Article 2

The reduction of greenhouse gas emissions by 2030, as compared to 1990, by its own and ongoing joint efforts, as well as at the expense of additional new funding and technology transfer on the part of the international community, will enable the country to the path towards sustainable take "areen" development which is consistent with the Convention's goal - to prevent global warming of more than 2°C. The achievement of such an ambitious goal is only possible by means of substantial and differentiated efforts of all countries that are in support of a new and ambitious climate agreement within the UNFCCC.