**Lao People's Democratic Republic’s Nationally Determined Contribution: 2020 Update, 09 March 2021**

# **Introduction:**

Lao People’s Democratic Republic has updated its Nationally Determined Contribution in accordance with the Conference of Parties’ 21 1/CP.21 Decisions.

As per Paris Agreement Article 4, the 2020 NDC update builds upon the 2015 submission to enhance its ambition through the introduction of three national-level greenhouse gas (GHG) emissions scenarios, namely a baseline emissions scenario, an unconditional mitigation scenario to 2030, as well as a more ambitious conditional mitigation scenario to 2030 towards achieving net zero GHG emissions by 2050.

National GHG emissions in 2020 have been estimated at around 53,000 ktCO2e by deducting the GHG mitigation measures implemented across all sectors since 2000 from the baseline scenario.

## **Sectoral level 2030 unconditional mitigation targets:**

The unconditional mitigation scenario and targets are the GHG emission reduction efforts that Lao PDR can commit to by 2030 considering its resources and existing levels of support from developed country Parties.

|  |  |  |  |
| --- | --- | --- | --- |
| **Sector** | **Mitigation target (2020-2030)** | | **Average abatement between 2020 and 2030 (ktCO2e/y)** |
| **Land Use Change and Forestry** | Reduced emissions from deforestation and forest degradation, foster conservation, sustainable management of forests, buffer zones of national parks and other preserves, and enhancement of forest carbon stocks. | | 1,100 |
| **Energy** | **Hydropower** | 13GW total hydropower capacity (domestic and export use) in the country | 2,500 |
| **Energy Efficiency** | Introduction of 50,000 energy-efficient cook stoves | 50 |
| **Transport** | New Bus Rapid Transit system in Vientiane Capital and associated Non-Motorized Transport (NMT) component | 25 |
| Lao-China Railway | 300 |

## **National level 2030 unconditional mitigation target**

|  |  |
| --- | --- |
| **National level 2030 unconditional target** | 60% GHG emission reductions compared to the baseline scenario, or around 62,000 ktCO2e in absolute terms. |

## **2030 conditional mitigation targets:**

The conditional mitigation scenario and targets are the GHG emission reduction efforts that Lao PDR could achieve by 2030 contingent upon increased levels of financial support from developed country Parties.

|  |  |  |  |
| --- | --- | --- | --- |
| **Sector** | **Mitigation measure (2020-2030)** | | **Average target between 2020 and 2030 (ktCO2e/y)** |
| **Land Use Change and Forestry** | Increased forest cover to 70% of land area (i.e., to 16.58 million hectares) through reduced emissions from deforestation and forest degradation, foster conservation, sustainable management of forests, buffer zones of national parks and other preserves, and enhancement of forest carbon stocks. | | 45,000 |
| **Energy** | **Other renewables** | SOLAR and WIND: **1 GW** total installed capacity in the country | 100 |
| BIOMASS: **300 MW** total installed capacity in the country | 84 |
| **Transport** | **30%** Electric Vehicles penetration for 2-wheelers and passengers cars in national vehicles mix | 30 |
| Biofuels to meet **10%** of transport fuels | 29 |
| **Energy efficiency** | **10%** reduction of final energy consumption compared to the business-as-usual scenario | 280 |
| **Agriculture** | **50,000** hectares adjusted water management practices in lowland rice cultivation | | 128 |
| **Waste** | Implementation of 500 tons/day sustainable municipal solid waste management project | | 40 |

## **Long-term adaptation objectives in key sectors**

|  |  |
| --- | --- |
| **Sector** | **Objectives** |
| Agriculture | * Promote climate resilience in farming systems and agriculture Infrastructure * Promote appropriate technologies for climate change adaptation, including nature-based and circular economy solutions |
| Forestry and Land Use Change | * Promote climate resilience in forestry production and forest ecosystems, including in buffer zones of protected areas and other forested areas * Promote technical capacity in the forestry sector for managing forests for climate change adaptation * Promote integrated land use planning, natural resources, and environment management |
| Water Resources | * Strengthen water resource information systems for climate change adaption * Manage surface water, groundwater, and wetland for climate change resilience * Increase water resource infrastructure resilience to climate change, including through nature-based solutions * Strengthen early warning systems in a timely manner |
| Transport and Urban Development | * Increase the resilience of urban development and infrastructure to climate change, including through the use of green infrastructure and nature-based solutions * Promote ecosystem-based adaptation solutions |
| Public Health | * Increase the resilience of public health infrastructure and water supply system to climate change * Improve public health services for climate change adaptation and coping with climate change-induced impacts. |
| Energy | * Build resilience to climate change in the hydropower sector through improved dam safety regulations and guidelines * Strengthen technical capacity to use new and innovative technologies to enhance climate resilience and sound management in the energy sector * Promote multipurpose use of reservoirs to enhance the resilience of surrounding communities and maximize benefits for other sectors |

## **2025 shorter-term adaptation targets**

|  |  |
| --- | --- |
| **Sector** | **Target 2025** |
| * Agriculture * Forestry and Land Use Change * Water Resources * Transport and Urban Development * Energy | Mainstream climate change adaptation in sectoral strategy and action plan, including through results-based management framework |
| * Health | Implement the Strategy on Climate Change and Health Adaptation to 2025 |
| Implementation of the “Scaling-Up Water Supply, Sanitation, and Hygiene” Project |