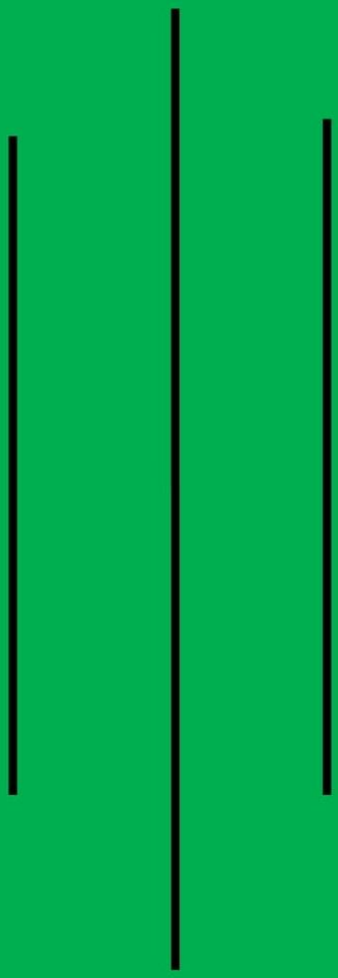

# Second Nationally Determined Contribution (NDC)



**Government of Nepal**
**Kathmandu**

**December 08, 2020**

# Second Nationally Determined Contribution (NDC)

## 1. Introduction

Nepal is among the most vulnerable countries to climate change. It is at high-risk due to the country's fragile topography, the climate-sensitive livelihoods of the people and their limited adaptive capacity. Nepal is committed to acting on climate change in line with the Paris Agreement, despite the country's negligible emissions. It is because efforts to limit global average temperature rise to 1.5°C would result in significantly lower risks for Nepal when compared to 2°C or higher. These risks are in addition to the existing impacts and vulnerabilities of climate change in the country. Nepal, therefore, calls on all Parties to increase ambition and move collectively onto emission reduction pathways consistent with the Paris Agreement's 1.5°C warming limit.

The Government of Nepal hereby presents its enhanced Nationally Determined Contribution (NDC) under the Paris Agreement for the period 2021-2030, following Articles 4.2 and 4.11 of the Paris Agreement, and Decision 1/CP.21 paragraph 23 and 24, and other relevant provisions of the Paris Agreement. The NDC takes into account the principle of common but differentiated responsibilities and respective capabilities, in light of national circumstances.

## 2. Nepal's Long-Term Low Greenhouse Gas Emission Development Strategy

Nepal envisions achieving socio-economic prosperity by building a climate-resilient society. To this end, the country has developed its policy and institutional framework. In accordance with Article 4, paragraph 19 of the Paris Agreement, Nepal is formulating a long-term low greenhouse gas emission development strategy by 2021. The strategy aims to achieve net-zero greenhouse gas emission by 2050.

## 3. Mitigation Component of Nationally Determined Contribution (NDC)

| **Quantified targets of NDC** | |
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| **Type** | Activity-based targets and policy targets in key sectors, including emissions reduction in some sectors |

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| | The targets in this section, unless otherwise specified, are conditional upon international support. |
| **Coverage** | Energy; Industrial Processes and Product Use (IPPU); Agriculture, Forestry and Other Land Use (AFOLU); and Waste |
| **Timeframe** | From 1st January 2021- 31st December 2030<br><br>Single year target – 2030, including updates on 2025 targets |
| **Energy** | (Energy generation)<br>• By 2030, expand clean energy generation from approximately 1,400 MW to 15,000 MW, of which 5-10 % will be generated from mini and micro-hydro power, solar, wind and bio-energy. Of this, 5,000 MW is an unconditional target. The remainder is dependent upon the provision of funding by the international community.<br>• By 2030, ensure 15% of the total energy demand is supplied from clean energy sources.<br><br>(Transport)<br>• Sales of electric vehicles (e-vehicles) in 2025 will be 25% of all private passenger vehicles sales, including two-wheelers and 20% of all four-wheeler public passenger vehicle sales (this public passenger target does not take into account electric-rickshaws and electric-tempos) in 2025. Due to this e-vehicle sales target, fossil fuel energy demand for the transportation sector will decrease from approximately 40 million GJ in the Business As Usual (BAU) scenario in 2025 to 36 million GJ. This would be around a 9% decrease in fossil fuel dependency. This target will reduce emissions from a projected BAU of 2,988 Gg $CO_2$ eq. in 2025 to 2,734 Gg $CO_2$ eq., which is around 8% decrease in emissions.<br>conditional<br>• By 2030, increase sales of e-vehicles to cover 90% of all private passenger vehicle sales, including two-wheelers and 60% of all four-wheeler public passenger vehicle sales (the public passenger target does not take into account electric-rickshaws and electric-tempos). As a consequence, energy demand for fossil fuels will decrease from approximately 48 million GJ in the 2030 BAU scenario to 34.5 million GJ, which is around 28% decrease in fossil fuel dependency. This target will reduce emissions from a projected BAU of 3,640 Gg $CO_2$ eq. in 2030 to 2,619 Gg $CO_2$ eq., which is around 28% decrease in emissions.<br>conditional<br>• By 2030, develop 200 km of the electric rail network to support public commuting and mass transportation of goods. |

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| conditional | (Residential cooking and biogas)<br>• By 2030, ensure 25% of households use electric stoves as their primary mode of cooking.<br>• By 2025, install 500,000 improved cookstoves, specifically in rural areas.<br>• By 2025, install an additional 200,000 household biogas plants and 500 large scale biogas plants (institutional/industrial/ municipal/community).<br><br>These three combined targets can reduce emissions from approximately 1,999 Gg $CO_2$ eq. in BAU in 2025 to approximately 1,774 Gg $CO_2$ eq. This is around 11% reduction in emissions from the cooking sector. For 2030, these three targets can reduce emissions from approximately 2,064 Gg $CO_2$ eq. from BAU to 1,599 Gg $CO_2$ eq., which is around 23% reduction in emissions. |
| **AFOLU**<br>conditional<br>conditional | (Forestry)<br>• By 2030, maintain 45% of the total area of the country under forest cover (including other wooded land limited to less than 4%).<br>• By 2030, manage 50% of *Tarai* and Inner *Tarai* forests and 25% of middle hills and mountain forests sustainably, including through the use of funding from REDD+ initiatives. |
| **Waste**<br>conditional | • By 2025, 380 million litres/day of wastewater will be treated before being discharged, and 60,000 cubic meters/year of faecal sludge will be managed. These two activities will reduce around 258 Gg $CO_2$ eq. compared to BAU. |

| **Detailed Description of Mitigation Component of NDC**[1] | |
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| **1. Quantified information on the reference point, including, as appropriate, a base year** | |
| a **Reference year**(s), base year(s), reference period(s) or other starting point(s) | Nepal's NDC comprises of sectoral activity-based targets. As per the Greenhouse Gas Inventory, prepared for the Third National Communication (TNC), the net GHG emissions of 31,998.91 Gg $CO_2$ eq. was estimated for Nepal in the base year 2011. The direct GHG emission for the following sectors are:<br>Energy: 14713.36 Gg $CO_2$ eq.<br>IPPU: 379.80 Gg $CO_2$ eq.<br>AFOLU: 15982.16 Gg $CO_2$ eq.<br>Waste: 923.59 Gg $CO_2$ eq. |
| b. Quantifiable information on the **reference** | **Energy**<br>• Current total installed capacity for energy |

[1] Information to facilitate Clarity, Transparency and Understanding (ICTU) Guidelines

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| **indicators**, their values in the reference year(s), base year(s), reference period(s) or other starting point(s), and, as applicable, in the target year | generation is approximately 1400MW, mainly from hydropower. Nepal categorizes mini and micro-hydropower (i.e. hydropower of less than 1MW capacity) and solar and wind as renewable energy.<br>• Current energy demand satisfied by clean energy sources is well below 15%.<br>• The current share of electric vehicles is approximately 1%.<br>• The current rail network –a reference not available<br>• Currently, around 5% of households use electric induction stoves, either as their primary or secondary mode of cooking.<br><br>**Industry**<br>• Currently, emission standards are not in place for emissions in the brick and cement industries.<br>**Waste**<br>• Currently, 2.1 % of wastewater and less than 1% of the faecal sludge is treated.<br><br>**AFOLU**<br><br>(Forestry)<br>• Nepal's 2016 NDC sets a target to maintain 40% of the total area of the country under forest cover.<br>• Current forest cover is approximately 44.74% of which 4.38% is another wooded land (OWL).<br><br>(Agriculture)<br>• The current soil organic matter content of agricultural land is 2%.<br>• The number of the organic fertilizer production plant is 23.<br>• The number of improved cattle shed is 100,000. |
| c. For strategies, plans and actions referred to in Article 4, paragraph 6, of the Paris Agreement, or policies and measures as components of nationally determined contributions where paragraph 1(b) above is not applicable, | The targets in this section, unless specified, are all conditional upon international support and will be implemented by 2030.<br><br>**Energy**<br>• By 2030, increase the reliable supply of clean energy, ensuring access to all.<br>• Increase the quantity (kWh), quality, reliability, and affordability of electricity access from |

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| Parties to provide **other relevant information** | renewable sources.<br>• Strengthen transmission and distribution links to support upscaling of e-cooking, e-heating, e-transport and charging stations.<br>• Develop enabling environment to provide power to small and mid-size enterprises (SMEs) using distributed renewable energy generation sources.<br>• Promote public electric mobility through policy incentives, including subsidy policies and other financial mechanisms.<br>• By 2025, ensure at least three provinces operate electric public transport, three provinces establish vehicle fitness test centres to monitor and regulate vehicular emissions, and all metropolitan cities have roads paved with bicycle and pedestrian lanes.<br><br>**Agriculture, Forestry and Other Land use (AFOLU)**<br>(Forestry)<br>• Forests under community-based management will comprise at least 60% of Nepal's forest area; management committees will have 50% women representation and proportional representation of Dalits and Indigenous People in key posts.<br>• By 2030, institutional mechanisms and structures in place and adequate provision of budget to ensure social and environmental safeguards including Free, Prior and Informed Consent (FPIC); forest tenure and access to finance and technology for Local Communities, women and Indigenous People.<br>• Ensure fair and equitable benefits (carbon and non-carbon) from sustainable forest management, watershed management, and biodiversity-conservation among Local Communities, women and Indigenous People.<br>• By 2030, upgrade watershed health and vitality in at least 20 districts to a higher condition category.<br>• By 2030, create an inventory of wetlands in Nepal and sustainably manage vulnerable wetlands.<br>• By 2025, enhance the sink capacity of the land-use sector by instituting the Forest Development |

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| | Fund (FDF) for compensation of plantations and forest restoration.<br>• Increase growing stock including Mean Annual Increment in *Tarai*, Hills and Mountains.<br>• Afforest/reforest viable public and private lands, including agroforestry.<br>• Restore and manage degraded forest land, including in the *Chure* region.<br><br>(Agriculture)<br>• By 2030, soil organic matter content of agriculture land will reach to 3.95%.<br>• By 2030, mulberry and fruit orchard areas will be expanded to 6,000 ha.<br>• By 2030, the number of additional improved cattle sheds will reach to 5,00,000 for quality farm-yard manure production and use.<br>• By 2030, the number of organic fertilizer production plants in the country will reach 100.<br>• Integrate climate change in the upcoming revised Agriculture Policy.<br>• By 2025, update the Rangeland Policy and develop plans for the sustainable management of rangelands.<br>• By 2030, establish 200 climate-smart villages and 500 climate-smart farms.<br>• Promote intercropping, agroforestry, conservation tillage, and livestock and agricultural waste management.<br>• Ensure increased access of climate-smart agricultural technologies to women, Indigenous People, smallholder farmers and marginalized groups.<br>• Protect, promote and support climate-resilient indigenous seeds/crop varieties through community seed banks and national gene banks.<br><br>**Industry**<br>• By 2030, adopt low emission technologies in brick and cement industries to reduce coal consumption and air pollution, including through the development and/or enactment of emission |

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| | standards.<br>• By 2025, formulate guidelines and establish mechanisms to monitor emissions from large industries.<br><br>**Waste**<br>• By 2030, create an enabling environment for both public and private sector to treat industrial and municipal waste, including faecal sludge.<br>• By 2030, adopt and implement waste segregation, recycling and waste-to-energy programs in at least 100 municipalities.<br>• By 2030, the burning of healthcare waste in 1,400 healthcare facilities will be prohibited by proper management of healthcare waste through the application of non-burn technologies.<br>• Promote the 3Rs (Reduce, Reuse, Recycle) approach to waste management, along with source segregation and management of degradable and non-degradable waste.<br>• Focus on co-production of energy and organic fertilizer from solid waste, wastewater and faecal sludge.<br><br>**Other Relevant Targets**<br>(Tourism)<br>• By 2025, formulate and implement nature-based tourism plans in at least five main tourist destinations.<br>• By 2030, ensure at least five tourist destinations are carbon neutral.<br>• By 2030, including measures in policies to offset the carbon footprint of emissions resulting from tourism transport.<br><br>(Urban Settlements)<br>• Adopt national building codes and prepare Integrated Urban Development Plans (IUDPs) emphasizing low carbon and climate-resilient urban settlements in all municipalities.<br>• By 2025, revise the urban environment management guidelines to incorporate activities |

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| | related to promoting low carbon and climate-resilient urban settlements.<br><br>**Gender Equality and Social Inclusion (GESI)**<br>By 2030, develop an Action Plan for integrating GESI in achieving NDC targets.<br>● Develop specific programs with dedicated resources (human and financial) to ensure full, equal and meaningful participation of women, children, youth, Indigenous Peoples and marginalized groups in climate change-related policy development; and during the planning, monitoring and implementation processes at local, provincial and national levels.<br>● Promote the leadership, participation and negotiation capacity of women, Indigenous Peoples and youth in climate change forums.<br>● Ensure gender-disaggregated data when reporting on progress and achievements. |
| d. **Target** relative to the reference indicator, expressed numerically, for example in percentage or amount of reduction | **See NDC and section 1b.** |
| e. Information on **sources of data** used in quantifying the reference point(s) | Greenhouse Gas Inventory prepared for the Third National Communication. |
| f. Information on the circumstances under which the Party may **update** the values of the reference indicators | In the next Greenhouse Gas Inventory, Nepal may update the reference indicators of existing sectors and/or may provide new values for sectors not previously covered. Nepal will update the values of reference indicators in such cases. |
| **2. Time frames and/or periods for implementation** | |
| a. **Time frame** and/or period for implementation, including start and end date, consistent with any further relevant decision adopted by the CMA; | From 1st January 2021- 31st December 2030. |
| b. Whether it is a **single-year or multi-year** target, as applicable. | Single year target – 2030, including updates on 2025 targets. |

| **3. Scope and coverage** | |
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| a. General **description of the target**; | Sectoral activity-based and policy targets, including emissions reduction in some sectors.<br><br>The Government of Nepal will meet unconditional targets from its resources.<br><br>Conditional targets are dependent on international support on financing, technology transfer and/or capacity building. |
| b. **Sectors, gases, categories and pools** covered by the nationally determined contribution, including, as applicable, consistent with IPCC guidelines; | **Sectors:**<br>● Energy<br>○ Electricity generation<br>○ Transportation<br>○ Residential demand (energy demand for cooking)<br>● Agriculture, Forestry and Land Use (AFOLU)<br>○ Deforestation and forest degradation<br>○ Agriculture<br>● Industrial process and product use (IPPU)<br>● Waste<br><br>**Gases:**<br>● Carbon Dioxide ($CO_2$)<br>● Methane ($CH_4$)<br>● Nitrous Oxide ($N_2O$) |
| c. How the Party has taken into consideration **paragraphs 31(c) and (d)** of decision 1/CP.21; | The detailed assessment carried out during the NDC formulation process concluded that the data needed to define targets and to rigorously assess the impact of policies and actions on emissions for all sectors was not available.<br><br>Nepal will extend the scope of the coverage of its NDC overtime to all categories of anthropogenic emissions and removals, as more robust data becomes available. |
| d. Mitigation co-benefits resulting from Parties' adaptation actions and/or economic diversification plans, including a description of specific projects, measures and initiatives of Parties' adaptation actions and/or economic diversification plans. | Not applicable. |

| **4. Planning process** | |
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| a. Information on the **planning processes** that the Party undertook to prepare its NDC and, if available, on the Party's implementation plans, including, as appropriate: | |
| i. Domestic **institutional arrangements**, public **participation** and engagement with **local communities** and **indigenous people**, in a **gender**-responsive manner; | The NDC was developed through an inclusive and participatory process, with a series of consultations at national and provincial levels.<br><br>Nepal's NDC formulation was a country-driven process following the principle of Leave No One Behind (LNOB). A team of experts reviewed overarching and sectoral policies, strategies and programs; and coordinated the process of gathering data and performing analysis. These assessments were later verified through in-person and virtual consultations both at national and provincial levels with line ministries, experts, Local Peoples, women, Indigenous Peoples and youth.<br><br>The reviewed targets served as inputs for the technical work, such as the Low Emissions Analysis Platform (LEAP) modelling for building scenarios and projections. The output of the technical work and inputs from consultations were further reviewed and verified by the NDC Working Committee, established by the Ministry of Forests and Environment and comprising representatives from government agencies and relevant experts. Furthermore, the NDC was discussed at the Inter-Ministerial Coordination Committee on Climate Change (IMCCCC) and shared with respective line ministries and civil society organizations for formal input. Finally, it was submitted to the Cabinet for approval. |
| ii. **Contextual matters**, including, *inter alia*, as appropriate: | |
| (a) **National circumstances**, such as geography, climate, economy, sustainable development and poverty eradication; | Nepal is a landlocked country that lies in the southern face of the Himalayan mountain range. The country is located between $26^0$ 22' and $30^0$ 27' North latitude and $80^0$ 04' and $88^0$ 12' East longitude and covers an area of 147,181 square kilometres. Physiographic regions within the country include High Himal, High Mountain, Middle Mountain, Siwalik, and the *Tarai*. Within these regions, elevations range from 59 meters to 8,848 meters.<br><br>Nepal's climate is influenced by the Himalayan mountain range and the South Asian Monsoon. The climate has four distinct seasons: pre-monsoon (March-May), monsoon (June-September), post-monsoon (October-November) and winter (December-February). |

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| | Nepal is a Least Developed Country (LDC) whose economy mostly depends on agriculture and remittances. Nepal's per capita GDP was USD 1,085 in the fiscal year 2019/2020 with a growth rate of 7.5% from the last fiscal year. However, the impact of COVID-19 is already bringing these numbers down.<br><br>In the past two decades, the proportion of Nepali people living in absolute material poverty has more than halved from 49% in 1992 to 23% in 2015. Rates of child and maternal mortality reduced significantly as well. Primary school enrolment now exceeds 96% and has gender parity. Average life expectancy at birth has crossed 70 years. Nepal's pace of development has been one of the highest in the world. The latest Multi-dimensional Poverty Index (MPI) shows that 28.6% of the population is still low. This means their lives are impacted by several deprivations simultaneously. However, It also reveals that Nepal halved its official MPI between 2006 and 2014.<br><br>Building on the relative success of the Millennium Development Goals, Nepal is committed to pursuing and achieving the Sustainable Development Goals (SDGs) by 2030, including the target set by the Sendai Framework on Disaster Risk Reduction. These global ambitions are broadly aligned with the social, economic, environmental and risk reduction aspirations that Nepal has set for itself in its new constitution. |
| (b) **Best practices** and experience related to the preparation of the NDC; | See above 4 (a, i) |
| (c) **Other** contextual aspirations and priorities acknowledged when joining the Paris Agreement; | The provision in the Paris Agreement to limit global average temperature rise to 1.5°C results in lower risks for Nepal when compared to 2°C or higher temperatures<br><br>Nepal's commitment to reduce national GHG emission levels will require international support on financing, technology transfer and/or capacity building.<br><br>Furthermore, Nepal aspires to avoid the residual risks caused by Loss and Damage and to receive financial and any other support for the risks that may still materialize. |
| b. Specific information | Not applicable. |

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| applicable to Parties, including regional economic integration organizations and their member States, that have reached an agreement to act jointly under Article 4, paragraph 2, of the Paris Agreement, including the Parties that agreed to **act jointly** and the terms of the agreement, in accordance with Article 4, paragraphs 16–18, of the Paris Agreement; | |
| c. How the Party's preparation of its NDC has been informed by the outcomes of the **global stocktake**, in accordance with Article 4, paragraph 9, of the Paris Agreement; | The first global stocktake will take place in 2023.<br><br>Nepal organized the Talanoa Dialogue in 2018, which generated political momentum for enhanced climate action, including a call for Parties to update their NDCs.<br><br>Nepal's new NDC is more ambitious than its previous one, both in terms of its sectoral coverage (through the inclusion of land-use change and forestry, energy, and waste) and in terms of its net emission reduction contribution. |
| d. Each Party with an NDC under Article 4 of the Paris Agreement that consists of **adaptation action and/or economic diversification plans resulting in mitigation co-benefits** consistent with Article 4, paragraph 7, of the Paris Agreement to submit information on: | Not Applicable. |
| i. How the economic and social consequences of **response measures** have been considered in developing the NDC; | Not Applicable. |
| ii. **Specific projects**, measures and activities to be implemented to contribute | Not Applicable. |

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| to mitigation co-benefits, including information on adaptation plans that also yield mitigation co-benefits, which may cover, but are not limited to, key sectors, such as energy, resources, water resources, coastal resources, **human settlements** and urban planning, agriculture and forestry; and economic diversification actions, which may cover, but are not limited to, sectors such as manufacturing and industry, energy and mining, transport and communication, construction, **tourism**, real estate, agriculture and fisheries. | |
| **5. Assumptions and methodological approaches, including those for estimating and accounting for anthropogenic greenhouse gas emissions and, as appropriate, removals:** | |
| a. Assumptions and methodological approaches used for **accounting for anthropogenic greenhouse gas emissions and removals** corresponding to the Party's nationally determined contribution, consistent with decision 1/CP.21, paragraph 31, and accounting guidance adopted by the CMA; | Nepal will account for its anthropogenic GHG emissions and removals using the 2006 Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories.<br><br>Two additional guidelines will be considered for quality assurance:<br>• The IPCC Good Practice Guidance and Uncertainty Management in National GHG Inventory (2000)<br>• The IPCC Good Practice Guideline for Land Use, Land-Use Change, and Forestry (2003). |
| b. Assumptions and methodological approaches used for **accounting** for the implementation **of policies and measures or strategies** in the | See 5(a) above.<br><br>Nepal will also apply specific assumptions and methodologies where relevant when accounting for various policies and measures in its Biennial Update Report, Biennial Transparency Report, or National Communication. |

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| nationally determined contribution; | |
| c. If applicable, information on how the Party will take into account **existing methods and guidance** under the Convention to account for anthropogenic emissions and removals, in accordance with Article 4, paragraph 14, of the Paris Agreement, as appropriate; | See 5 (a) above.<br><br>The IPCC 2006 Guidelines has been used to calculate emissions in the GHG Inventory of Nepal's Third National Communication. |
| d. **IPCC methodologies and metrics** used for estimating anthropogenic greenhouse gas emissions and removals; | See 5(a) above.<br>Nepal's emissions will be derived by using the Tier 1 (and in a few cases Tier II) methodologies of the 2006 IPCC Guidelines. |
| e. **Sector-, category- or activity-specific** assumptions, methodologies and approaches consistent with IPCC guidance, as appropriate, including, as applicable: | Due to limited data availability, not all sectors are covered in Nepal's NDC. In the future, Nepal would like to update its emission inventories, develop emission factors for all sectors following the 2006 IPCC guidelines, carry out modelling to build sector-specific scenarios and projections, establish a mechanism to collect, store and maintain datasets and account for conditional targets that require financial, capacity building and technical support. |
| i. Approach to addressing emissions and subsequent removals from **natural disturbances** on managed lands; | See (e) above. |
| ii. Approach used to account for emissions and removals from **harvested wood products**; | Not applicable. |
| iii. Approach used to address the effects of **age-class** structure in forests; | Not applicable. |
| f. **Other assumptions and methodological approaches** used for understanding the nationally determined | |

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| contribution and, if applicable, estimating corresponding emissions and removals, including: | |
| i. How the **reference indicators**, baseline(s) and/or reference level(s), including, where applicable, sector-, category- or activity-specific reference levels, are constructed, including, for example, key parameters, assumptions, definitions, methodologies, data sources and models used; | Not applicable. |
| ii. For Parties with nationally determined contributions that contain **non-greenhouse-gas components**, information on assumptions and methodological approaches used in relation to those components, as applicable; | Not applicable. |
| iii. For **climate forcers** included in nationally determined contributions not covered by IPCC guidelines, information on how the climate forcers are estimated; | Not applicable. |
| iv. **Further technical information**, as necessary; | Not applicable. |
| g. The intention to use **voluntary cooperation under Article 6** of the Paris Agreement, if applicable. | Nepal may explore potential markets that allow higher mitigation ambition while promoting sustainable development and environmental integrity. |
| **6. How the Party considers that its NDC is fair and ambitious in light of its** | |

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| **national circumstances** | |
| a. How the Party considers that its NDC is **fair and ambitious** in the light of its national circumstances; | Nepal is a Least Developed Country with an insignificant contribution to past and current global emissions. Nevertheless, Nepal recognizes that to meet the 1.5°C temperature goal, all countries need to undertake ambitious mitigation actions. This NDC and accompanying information reflect Nepal's commitment under the Paris Agreement to address climate change. |
| b. Fairness considerations, including reflecting on equity; | See above, 6 (a). |
| c. How the Party has addressed **Article 4, paragraph 3**, of the Paris Agreement; | This NDC broadens the ambition of the 2016 NDC, both in terms of sectoral coverage and net emission reduction contribution. |
| d. How the Party has addressed **Article 4, paragraph 4**, of the Paris Agreement; | In addition to the sectoral activity-based targets for transport, cooking, forestry and waste sectors, the 2020 NDC also includes policy targets for sectors where data and/or baseline information is not available such as for electric railroads, solid waste management and industries. This paves the way for Nepal to establish an economy-wide emissions target, based on national circumstances and capabilities. |
| e. How the Party has addressed **Article 4, paragraph 6**, of the Paris Agreement. | In addition to sectoral activity-based targets, Nepal's 2020 NDC also includes policy targets *(See section 1(d))* for areas where data and/or baseline information is not available. These areas include electric railroads, solid waste management and industries. |
| **7. How the NDC contributes towards achieving the objectives of the Convention as set out in its Article 2** | |
| a. How the NDC contributes towards achieving the objective of the Convention as set out in its Article 2; | See above, 6 (a). |
| b. How the NDC contributes towards Article 2, paragraph 1(a), and Article 4, paragraph 1, of the Paris Agreement. | See above, 6 (a) and 7(a). |

## 4. Adaptation Component of NDC

As per Article 7.10 and 7.11 of the Paris Agreement, Nepal will submit an adaptation communication, which will include its priorities, implementation and support needs,

plans and actions through the National Adaptation Plan (NAP). The NAP will outline Nepal's contribution towards meeting the adaptation goals set out in the Paris Agreement and the required means of implementation to implement that contribution fully.

Nepal is at high-risk to the effects of climate change. Thus, adaptation will be a constant requirement for the country. Adaptation priorities and actions, as per the National Climate Change Policy (2019), adopt an integrated approach to cover climate-sensitive sectors exemplifying the inter-sectoral nature of the responses. The adaptation priorities cover eight thematic and four cross-cutting areas.

The thematic areas are:

- Agriculture and Food Security;
- Forests, Biodiversity and Watershed Conservation;
- Water Resources and Energy;
- Rural and Urban Settlements;
- Industry, Transport and Physical Infrastructure;
- Tourism, Natural and Cultural Heritage;
- Health, Drinking Water and Sanitation;
- Disaster Risk Reduction and Management.

The cross-cutting areas are:

- Gender Equality and Social Inclusion (GESI), Livelihoods and Governance;
- Awareness Raising and Capacity Building;
- Research, Technology Development and Extension;
- Climate Finance Management.

Nepal will accelerate adaptation by implementing the National Environment Policy (2019), National Climate Change Policy (2019), Environment Protection Act (2019), Environment Protection Regulation (2020), National Adaptation Program of Action (NAPA) (2010), Framework on Local Adaptation Plans of Action (LAPA) (2019), Disaster Risk Reduction National Strategic Plan of Action 2018 – 2030, Fifteenth Plan

(2019/2020-2023/2024), and other national strategies and action plans. The key policy priorities of Nepal, on adaptation, include the following:

- By 2030, all 753 local governments will prepare and implement climate-resilient and gender-responsive adaptation plans. The plans will address climate change and disaster vulnerability and risks and prioritize adaptation and disaster risk reduction and management measures focusing on women, differently-abled, children, senior citizens, youth, Indigenous Peoples, economically deprived communities and people residing in climate-vulnerable geographical areas.
- The National Adaptation Plan (NAP) will be updated every ten years. Likewise, a National level Vulnerability and Risk Assessment (VRA) will be carried out every five years to inform climate resource allocation policies.
- By 2025, institutional mechanisms will be established and/or operationalized including Environment Protection and Climate Change Management National Council, Inter-Ministerial Climate Change Coordination Committee (IMCCCC), thematic and cross-cutting working groups (TWGs/CWGs), Climate Change Research Centre, Provincial Climate Change Coordination Committee and local level institutional structures.
- By 2021, GESI and Climate Change Strategy and Action Plan, and Climate Resilient Planning and Budgeting Guidelines will be formulated.
- By 2025, a strategy and action plan on gender-responsive climate-smart technologies and practices will be prepared and implemented.
- By 2025, climate change-related education will be included in all secondary schools and 2,000 climate change adaptation resource persons will be mobilized locally.
- By 2025, climate-sensitive diseases surveillance systems will be strengthened through the integration of climate and weather information into existing surveillance systems.
- By 2030, the population with access to the basic water supply will increase from 88% to 99%; and population with improved water supply will increase from 20% to 40%.

- By 2025, climate risk assessment mechanisms will be integrated into WASH program planning and implementation cycle.
- Public Weather Services (PWS), including the Agro-Meteorological Information System, will be strengthened and established.
- By 2030, a multi-hazard monitoring and early warning system covering all the provinces will be established.
- By 2025, a national strategy and action plan on Loss and Damage (L&D) associated with climate change impacts will be devised.
- By 2022, a Climate Finance Strategy, and National Capacity on Climate Finance Management will be formulated.
- Adaptation measures based on circular economy and sustainable resource use will be developed and implemented.

Nepal is in the process of developing its National Adaptation Plan (NAP). Through this process, Nepal intends to implement medium and long-term adaptation needs, including urgent and immediate priorities. Key outputs of NAP include the following:

- The NAP will be formulated by 2021. It will incorporate adaptation and resilience milestones to be achieved in the short-term (by 2025), medium-term (by 2030) and long-term (by 2050).
- By 2025, a Climate Information System will be established and operationalized.
- By 2022, a NAP Monitoring, Reviewing and Reporting Framework will be developed and operationalized.

## 5. Means of Implementation

The cost of achieving Nepal's NDC conditional mitigation targets is estimated to be USD 25 billion. The cost of achieving unconditional targets outlined in the NDC is estimated to be USD 3.4 billion. This estimate only covers activity-based targets and does not include the cost of policies, measures and actions. The cost of achieving the adaptation component will be detailed in the upcoming National Adaptation Plan (NAP).

To achieve the conditional targets, Nepal anticipates financial, technological and capacity-building support from global funds such as the Green Climate Fund, Global

Environment Facility, Adaptation Fund, Least Developed Countries Fund and bilateral/multilateral agencies and development partners. These funds will be utilized to bolster limited national resources and technical capacities for scaling up climate action.

The activities will be implemented for 10 years (2021-2030) by integrating them under the fiscal budget as various subsidy policies, projects or programs. As these targets are well aligned with the country's existing policies and plans, they will have high ownership and will be implemented on time at the national and sub-national levels. The key elements during implementation include:

- **Governance:** Enact key acts and regulations and strengthen institutional capacity to facilitate NDC implementation.
- **Finance:** Develop NDC financing and investment framework along with a strategy to streamline access to funds while bridging the gaps in the public and private sectors.
- **Economic Efficiency and Cost Effectiveness:** Ensure maximization of economic benefits and cost-effectiveness during the implementation of the NDC.
- **Equity and Inclusiveness:** Include the principles of equity, ensuring equal access to women, children, youth, Indigenous Peoples and marginalized groups during participation, decision-making and benefit-sharing from NDC implementation.
- **Monitoring, Reporting and Verification (MRV):** Promote data-driven tracking of NDC targets along with a strengthening of data generation and validation framework. Identify best practices while also incorporating lessons learnt. Maintain transparency by widely disseminating the methodology and results of the MRV.

Nepal will prepare a detailed NDC implementation framework/roadmap/plan to ensure the targets will be achieved in a systematic matter. The key elements of this framework/roadmap/plan include:

- **Capacity Building:** Identify and meet capacity-building needs across government bodies to enable implementation of relevant policies and improve collaboration across key ministries.
- **Knowledge Management:** Establish processes to retain knowledge within institutions, including through data management systems for transparency and MRV purposes.
- **Institutional mechanism:** Implement the NDC through federal, provincial and local governments, in collaboration with other relevant stakeholders including youth, women and Indigenous People. Coordinate NDC implementation through the Environment Protection and Climate Change Management National Council, Inter-Ministerial Climate Change Coordination Committee (IMCCCC), Thematic and Cross-Cutting Working Groups, and Provincial Climate Change Coordination Committees.
- **Communication and Coordination:** Develop clear lines of communication between different levels of governance (local, provincial, national and international) and across different sectors and stakeholders, including women, Indigenous Peoples and youth.
- **Finance:** Develop a financing and investment framework that ensures efficient access to climate funds and evidence-based allocations to areas of demand, including the green recovery agenda. Ensure that the framework differentiates between sources of finance to be used in each area, including in adaptation, mitigation, and Loss and Damage.
- **Tools:** Develop tools and models to support inclusive decision-making during planning and implementation of activities.