

The Republic of the Union of Myanmar

### National Unity Government

## NATIONALLY DETERMINED CONTRIBUTIONS

# 2020

# (Executive Summary)

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Dipterocarp forest in Saw Township ©The Shutterbug

# Foreword

Myanmar is a country having the least portion of GHG emissions in the world according to 2018 data, contributing only 0.61 tons of C02eq/person compared to global emissions. However, Myanmar has determined setting its ambitious national commitments in curbing global temperature and achieving the goal of Paris Agreement limiting well below 1.5°C target through the implementation of its Intended Nationally Determined Contributions (INDC) and the preparation of more determined NDC for coming years, even though multiple challenges has been experienced in terms of capacity, data, technology and financial resources as well as high vulnerability to climate change and its related extreme disasters from which both the country and its people have incurred the significant losses and damages.

Through the implication of its rich natural resources and empowerment of human resources, Myanmar has endeavored to achieve its key inspiration of poverty alleviation, and inclusive and sustainable socio-economic development, while building the country as a peaceful, prosperous, and federal democratic nation as well as climate-resilient and low-carbon society for the well- being of all people. Therefore, Myanmar adopted and took the steps to implement all relevant policy and strategy frameworks, especially Myanmar Climate Change Policy, Strategy and Action Plans during the previous transition period, which are essential as a mechanism to strive against the impacts of climate change and to achieve a climate-resilient development for both the present and future generations.

Recalling the principle of common but differentiated responsibilities and respective capabilities in the light of different national circumstances while reaffirming our commitments for more ambitious climate actions, Myanmar has developed its NDC with more determined and detailed climate actions in both areas of mitigation and adaptation compared to INDC, getting together with all relevant stakeholders and applying all means of supports from the development partners on the basis of all-inclusiveness during 2015 and 2021 It was accomplished just before the Feb 1 coup.

However, the recent coup has exacerbated the vulnerable situation of the country into a severe crisis which has already suffered fragility due to the COVID-19 global pandemic and severe impacts of climate change. These combined effects have pushed the country into economic stresses and derailed its sustainable development by diminishing the momentum of all good initiatives and basic infrastructure to build up not only the federal democratic nation but also the all-inclusive and climate-resilient development.

Despite facing various crises, the National Unity Government (NUG) was constituted comprising of democratically elected persons and representatives of ethnic minorities to restore both the country's democracy and its socio-economic development in a sustainable and climate-resilient manner for the benefits of all people. Recognizing "Only the people are the strength for the country", the NUG, the only and sole legitimate governing body representing the people and their mandate, is now committed to implementing its ambitious climate actions as described in this NDC through its implication of people-centered approach. Our government has firmly acknowledged that the fulfilment of our climate commitments is our sole responsibility and great honor for the sake of all people in the world. All endeavors the NUG has implemented represent not only the will of our people, but also the intrinsic value of the Convention which serves for the benefits of humankind in the face of climate change.

Myanmar's NDC acts for a fair commitment to the global climate change efforts by increasing the ambition levels of the INDC and adding tangible emission reduction targets to be achieved by 2030 with the specific implementation timeframe. The NDC clearly describes the conditional and unconditional emission reduction targets which inform Myanmar's strong desire to achieve the Paris Agreement's Goal within its capacity. Moreover, the NDC also informs the global community to enable its conditional targets to be realized if receiving technology transfer, capacity building and financial supports including climate finance from the international communities.

Reaffirming our legitimacy and mandate from the people, the NUG firmly believes that the ambitious climate actions of Myanmar can contribute to the global climate actions which will help meet the goal of the Paris Agreement to remain well below the 1.5°C target whilst fighting against COVID-19.

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H.E Duwa Lashi La Acting President National Unity Government The Republic of the Union of Myanmar

# Remark

While the climate change is one of the most prominent threats to a modern world along with the COVID-19 pandemic and ecosystems degradation, it becomes a prerequisite for every country to take the collective actions to fight against the climate change and its destructive impacts, and the global pandemic. Myanmar located in the Southeast Asia's peninsula is one of the most vulnerable countries due to its least developed country status having the limited capacity to tackle the climate change and the pandemic.

However, comparing to the INDC, Myanmar is a keen of contributing its more ambitious climate actions to mitigate climate change through the application of its vast intact forests and rich natural resources. Myanmar committed to play its part as a responsible party in mitigating the global climate change while also developing its adaptation responses with the aim of building the climate-resilient economy through the nature-based solutions. These domestic climate actions will be implemented not only to minimize the exposure of its people and nature capital but also to safeguard its economy.

On behalf of our people and practicing our mandate from the people, the Ministry of Natural Resources and Environmental Conservation under NUG is very glad to submit the Nationally Determined Contributions (NDC) in which our firm commitments for ambitious climate actions are clearly and strategically described to be implemented within the specific period to fulfil the Paris Goal of limiting global temperature well below 1.5°C. Under the implementation of NDC, Myanmar can reach 244 million tCO<sub>2</sub>e total emission reductions in the unconditional context but can meet 413 million tCO<sub>2</sub>e total emission reduction target by 2030 if subjecting to the conditions of international finance and technical support. These contributions represent fair and significant to the global climate change efforts based on its national circumstances.

Natural disasters such as floods, droughts, cyclones and landslides events are unprecedently increasing in terms of intensity and frequency. The coastal areas are exposed to predicted sealevel rise and salinity intrusion, increasing Myanmar's vulnerability and risks to climate change. Thus, loss and damage will be of utter importance for Myanmar to be addressed for which we would like to seek further international support. We are strengthening institutional capacity to improve the scientific understanding of climate change and advance meteorological forecasting.

The climate change is a universal issue needed to combat through global collective actions. In fighting against climate change, the ambitious domestic actions shall be transformed into the global collective actions through the obligatory financial and technical supports of the international communities. Despite the current domestic endeavors, Myanmar always welcomes any means of international support to build the country having a climate-resilient and sustainable socio-economic development, restore as a prosperous federal democratic union which brings the well-beings for its people.

H.E Dr. Tu Hkawng Union Minister, Ministry of Natural Resources and Environmental Conservation National Unity Government The Republic of the Union of Myanmar

### **Executive Summary of Myanmar's NDC 2020**

The Republic of the Union of Myanmar located in South East Asia, is a nation that is rich in natural resources and whose area of 676,575 km<sup>2</sup> spans a diverse range of topography and ecological zones. However, with a population of 54.8 million people, it is also one of the world's most vulnerable countries to climate change. Myanmar will play its part in mitigating global climate change while also developing its adaptation response in order to build climate resilience, taking nature-based solutions to climate change so as to minimize exposure of its people and natural capital, increase resilience and safeguard its economy.

One means by which the Government of the Republic of the Union of Myanmar will reduce the vulnerability of its population to climate change and raise significant populations out of poverty is selective and strategic investments in the infrastructure needed for its national economic development. Nevertheless, Myanmar is one of the least GHG emitting countries in the world, contributing only 0.61 tons of CO<sub>2</sub>e/person, based on 2018 data. Thus, based on its development status, **Myanmar's total emissions reductions contributions as a part of its NDC are 244 million tCO<sub>2</sub>e unconditionally, and a total of 413 million tCO<sub>2</sub>e, subject to conditions of international finance and technical support by 2030, which represents a significant commitment to global climate change efforts based on its national circumstances.** 

Myanmar's INDC efforts were focused on adaptation, Disaster Risk Reduction (DRR), and mitigation. This NDC builds on those efforts and sets key sectoral conditional targets for energy and agriculture, forestry, and other sectors that the government aims to achieve with international financial and technical assistance.

#### National Climate Change Policy Mainstreaming:

To ensure that Myanmar continues to develop and maintain conditions that secure the wellbeing and safety of its people, the government has adopted a strategic vision to transform the country into a climate-resilient, low-carbon society that is sustainable, prosperous, and inclusive, for the wellbeing of present and future generations. To achieve its goal as set out above, Myanmar needs to direct its development actions (specifically in the key social, infrastructure, and economic sectors) along two strategic pathways:

a) Increase the adaptive capacity of vulnerable communities and sectors so that they are resilient to the adverse impacts of climate change, and

b) Create and maximize opportunities to pursue a low-carbon growth pathway by ensuring development benefits to communities and all economic sectors.

Myanmar has and will be mainstreaming climate change into all relevant short, medium, and longterm national development plans and policies. This includes State and Regional development plans and policies under the guidance of the Myanmar Sustainable Development Plan (2018-2030) which is aligned with the 2030 Sustainable Development Goals (SDG). In addition, the National Environmental Policy (2019)<sup>1</sup>, **Myanmar Climate Change Policy (2019)**<sup>2</sup>, **Myanmar Climate Change Strategy (2018-2030)**<sup>3</sup>, and **Myanmar Climate Change Master Plan (2018-2030)**<sup>4</sup> were endorsed in 2019. Myanmar needs cross-cutting support to improve implementation of climate change actions across a diverse array of sectors, broadly defined as: Policy, Institutions, Finance, Capacity, Technology and Partnerships.

The Climate Change Strategy and Master Plan outlines six prioritized sectors pertaining to adaptation, mitigation, and cross cutting issues. In order to support implementation these prioritized sectors, Myanmar will use GCF Readiness support to develop **Strategies for Natural Resources Management and for Urban Low-Emissions and Climate Resilient Development**.

<sup>&</sup>lt;sup>1</sup> https://www.ecd.gov.mm/?p=2122&fbclid=IwAR1ig4wEfe45A4d\_X- E1R6k9wdEuzpAYAtNic6wflVDGwFeRHNuDHAxW 49E/

 $<sup>^{2}\</sup> https://www.ecd.gov.mm/?p=2287\&fbclid=IwAR1SE22K08U0Ii6-I_aY86gasg-jJgYIOqJGv98Tlkk-DD5jKHj_UC4qht8/.$ 

 $<sup>^{3}</sup> https://www.ecd.gov.mm/?p=2287 \&fbclid=IwAR1SE22K08U0Ii6-I\_aY86gasg-jJgYIOqJGv98Tlkk-DD5jKHj\_UC4qht8$ 

 $<sup>^{4}</sup> https://www.ecd.gov.mm/?p=2287 \&fbclid=IwAR1SE22K08U0Ii6-I_aY86 gasg-jJgYIOqJGv98Tlkk-DD5jKHj_UC4 qht8$ 

### **Mitigation Actions:**

In the energy sector, Myanmar aims to achieve a **conditional annual target of avoiding 144.0 million tCO<sub>2</sub>e emissions by 2030 against that predicted under the BAU (Business as Usual) scenario, of 297.01million tCO<sub>2</sub>e.** Myanmar aims to achieve this target by: increasing the total share of renewable energy (solar and wind) to 53.5% (from 2000MW to 3070MW) by 2030, and decreasing the share of coal by 73.5% (from 7940MW to 2120MW) by 2030. Under its **unconditional target, in the energy sector Myanmar will achieve avoiding 105.24 million tCO<sub>2</sub>e by 2030 from the BAU.** 

In the Agriculture sector, Myanmar has introduced a new **conditional cumulative target of sequestrating 10.4 million tCO<sub>2</sub>e** over the period of 2021-2030. Through promotion of tree planting and agroforestry Myanmar will raise the average tree canopy cover across **275,000 ha of its agricultural land with <10% tree canopy cover per hectare.** MOALI will increase this ambition level pending success in achieving these initial targets.

Within the forest land and other land use sector, Myanmar has set a **conditional target of reducing deforestation by 50% by the year 2030, resulting in a cumulative emissions reduction of 256.5 million tCO<sub>2</sub>e** (against the 2005-2015 baseline) over the period of 2021-2030. Myanmar has also set an **unconditional target to reduce deforestation by 25% by the year 2030, resulting in a cumulative net emissions reduction of 123.6 million tCO<sub>2</sub>e.** 

Through the **distribution of 5.1 million fuel-efficient cookstoves** Myanmar will achieve a cumulative emissions reduction of approximately **5.99 million tCO<sub>2</sub>e during 2021-2030.** Of this amount 4.73 million tCO<sub>2</sub>e will be subject to carbon offsetting while 1.26 million tCO<sub>2</sub>e will contribute to Myanmar's NDC target. Traditional cookstoves are also replaced by LPG-based technology substitutions to further reduce the emissions from the use of fuelwood and charcoal. The government has set an **unconditional target to support the distribution of one million LPG stoves by the private sector resulting in an emission reduction of 14.94 million tCO<sub>2</sub>e by 2030.** 

Under the national program for rural electrification, renewable energy technologies currently contribute an annual electricity generation capacity of 166.4MW. Of this total, **44.41MW is generated through RE mini-grids, providing electricity to 1.8m people of the off-grid rural population, and which will generate 0.564 million tons of CO<sub>2</sub>e in emissions avoided cumulatively by 2030 as compared to the alternative of power generation using standard diesel generators. The government has set a new NDC conditional target for mini-grid development, that will further increase renewable energy access to the total off-grid rural population of 3.6m people, power generation (88.82MW), and GHG emission avoided will be 0.874 million tCO<sub>2</sub>e by 2030. The government's NDC unconditional target will increase renewable energy access through mini-grids to the total off-grid rural population of 2.7m people, power generation (66.62MW), and GHG emission avoided will be 0.719 million tCO<sub>2</sub>e by 2030.** 

Myanmar will also initiate its efforts to promote energy efficiency across a range of sectors. Highlighting the fact that the country is becoming increasingly urban and industrial, Myanmar has set 2030 targets for improvement of energy efficiency of the residential sector by 7.8%, the industrial sector by 6.63%, the commercial sector by 4%, and other sectors by 1.36%. Thus, the policy target for energy efficiency is a cumulative of 20% by 2030 avoiding a cumulative of 0.133 million tCO<sub>2</sub>e as a conditional energy efficiency target. Myanmar requests support in developing the baseline data and mitigation actions targeting a range of passive and active energy, heating, and cooling standards and technologies for these sub-sectors.

In addition to the defined sectoral targets above, Myanmar welcomes support to increase the use of integrated resource management and planning approaches (such as the urban nexus approach), to promote **low carbon city growth models, and urban resilience paradigms** for cities of all sizes. Cities are now home to 29% of the population, and thus need to be safe, resilient, environmentally viable, and carbon-efficient without sacrificing development. Similarly, Myanmar is eagerly exploring **GHG emission reduction strategies across the land, marine, and aviation transportation sectors**. Priority will be given to electric vehicles, the development of a Shipping Energy Efficiency Management Plan (SEEMP) and a Green Shipping Strategy.

### **Climate Change Adaptation Actions**

Given the high vulnerability of Myanmar, adaptation actions will be a key priority of Myanmar's NDC. Myanmar will initiate the process of its National Adaptation Plans and aims to build resilience of all its vulnerable communities and ecosystems identifying and promoting the right community-based and ecosystems-based adaptation measures taking a sectoral approach. The key sectors as identified in the Myanmar Climate Change Strategy to build Myanmar's socio-economic resilience are agriculture, natural resources, health, disaster risks, urban planning. Education, training and research will also be a key pillar to enhance local capacities and knowledge to understand and deal with the impacts of climate change.

Myanmar will **promote climate-resilient productivity and climate smart responses in the agriculture, fisheries, and livestock sectors** to support rural food security and livelihood strategies while also promoting resource-efficient and low-carbon practices that may enhance development of new markets and products. Myanmar will engage in **sustainable natural resources management** that enhances the resilience of **biodiversity and ecosystem services** to support social and economic development of the local and indigenous/ethnic<sup>5</sup> communities while also delivering carbon sequestration.

Myanmar will ensure communities and economic sectors are able to **respond to and recover from climate-induced disasters, risks, and health impacts, including COVID-19**, and build a healthy society. Climate-smart health, disaster risk management, and minimized loss and damages of economic and non-economic assets and social protection systems could help to secure and sustain Myanmar's social and economic development, putting it on a climate-resilient pathway. Such systems will enable individuals, households, and national and local actors to absorb, adapt and transform in response to climate-induced risks.

Myanmar will work to develop **resilient**, **inclusive**, **and sustainable cities and towns where people can live and thrive**. Urban planning, physical infrastructure and building designs will be key to contribute to building resilience of cities and towns.

Investments in education, science, and technology-transfer will also be crucial areas for building a smart, knowledgeable, climate-responsive society. Limited capacities are a significant issue for Myanmar and capacity building will be an ongoing process. Myanmar will need support to enhance human capacities throughout the various primary, secondary, tertiary education and vocational training domains. Likewise, climate appropriate technology transfer will play a vital role in enhancing mitigation actions and building resilience and should focus on promoting the development of local green manufacturing and jobs creation.

The Myanmar Action Plan on Disaster Risk Reduction (MAPDRR)<sup>6</sup> outlines 7 components to work on disaster risk reduction. With increasing frequency and intensity of natural hazards like cyclones, floods, landslides, heatwaves and slow on-set events like sea-level rise, Myanmar will need international support to implement its MAPDRR and improve its forecasting, early warning systems and marine forecasting tools to minimize loss and damage.

### Institutional Frameworks for Planning and Reporting:

A wide range of planning and consultative processes have been utilized, with government agencies and stakeholders followed by ministerial level consultations to get political buy-in. The **National Environmental Conservation and Climate Change Central Committee (NECCCCC) led by the Vice President provides oversight on all environmental and climate change activities.** The Ministry of Natural Resources and Environmental Conservation (MONREC) plays the secretarial role for the NECCCCC and coordinates climate change related activities with relevant line agencies and the State and Regional Governments. In addition, MONREC is the government focal point for the UNFCCC and its climate financing entity, the Green Climate Fund.

<sup>&</sup>lt;sup>5</sup> All ethnic nationalities residing in Myanmar are regarded as the indigenous people

<sup>&</sup>lt;sup>6</sup> https://reliefweb.int/sites/reliefweb.int/files/resources/RDD\_FILE\_1340609699\_MAPDRR\_English\_June%202012.pdf

Myanmar will also be keen to extend cooperation in the ASEAN region in multiple sectors, including energy, land transport, marine transport, forest conservation and adaptation actions.

A **Monitoring, Reporting and Verification (MRV) system** is currently being established to enable Myanmar to meet its obligations within the enhanced transparency framework of the Paris Agreement. The MRV system envisaged for the country will serve multiple purposes as well as satisfying requirements for mitigation actions; 1) collecting data and information to account for the country's GHG inventories; 2) gathering data for preparation of Biennial Transparency Reports (BTR) required for implementation of the NDCs; and 3) identifying supports (finance, technology, and capacity) needed, and received.

Myanmar will support the **Global Stock-taking process** by submitting its Biennial Update Report in 2022 and Biennial Transparency Report (BTR) not later than 2024, as mandated by the PA Rule Book. This will take stock of the progress achieved based on:

- a) support received finance, technology transfer and capacity building, and
- b) mitigation contributions and adaptation actions implemented by the country.

Means of Implementation Myanmar will allocate domestic financial resources for the implementation of this NDC but will also need a major share of international financing support to be able to meet its conditional targets, to be able to implement mitigation and adaptation actions tied with the process of building back better through green recovery post COVID-19. In addition to the financial support, Myanmar will also seek technological and capacity building support to help meet the targets set in its NDCs.



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