

# Indonesia

Emissions	Climate Commitment Status
<p><b>3.5%</b> of global emissions<sup>1</sup></p>	<p><b>2020 update submitted<sup>2</sup></b> ✓</p> <p><b>LTS submitted in 2021<sup>3</sup></b> ✓</p> <p><b>CAT rating<sup>4</sup></b> <b>HIGHLY INSUFFICIENT</b></p> <p><b>Net zero commitment:</b> No official commitment. The LTS explores scenarios and opportunities “to rapidly progress towards net-zero emission in 2060 or sooner” (<a href="#">Indonesia Long-Term Strategy for Low Carbon and Climate Resilience 2050</a>)</p> <p><b>Net zero details:</b></p> <p><b>Date:</b> 2060</p> <p><b>Legal status:</b> In policy document</p> <p><b>Gases covered:</b> Uncertain</p> <p><b>Credits allowed:</b> Uncertain</p>

## How action-oriented are the NDCs in the food and land sector?

Criteria	NDC Assessment
<p><b>Specific policy priorities or actions for agriculture and food:</b></p> <ul style="list-style-type: none"> <li>The NDC covers agriculture with dedicated sections in Annex I on mitigation measures and Annex II on adaptation measures; the increase in agricultural productivity is a key component of the NDC in this sector</li> <li>Detailed targets and actions are described for 3 scenarios (BAU, unconditional mitigation and conditional mitigation). These include targets on: <ul style="list-style-type: none"> <li>increasing the land dedicated to low-emissions crops</li> <li>the implementation of water-efficient concept in water management</li> <li>manure management for biogas</li> <li>feed supplement for cattle.</li> </ul> </li> <li>“Sustainable agriculture and plantations” is identified as one of the key adaptation programmes; key strategies include: <ul style="list-style-type: none"> <li>Mainstreaming/integrating climate change adaptation into agricultural sector, especially for strategic commodities</li> <li>Development and implementation of climate adaptive technologies for sustainable production of agricultural crops and plantations</li> </ul> </li> <li>Specific actions under these strategies include: identification of best practices for farmer’s economic empowerment, Enhancing management and provision of ecosystem services in agricultural sector, development of financing scheme for agriculture, improved culture techniques, seeds and water management</li> <li>While the NDC presents specific mitigation targets in the sector, it provides no information on means of implementation associated to them (such as policies or financial resources)</li> </ul>	<p>▲ ▲</p> <p><b>High:</b> NDC provides <b>indications of specific orientations</b> pursued by the Party in different agricultural and food sub-sectors</p>
<p><b>Specific policy priorities or actions for LULUCF:</b></p> <ul style="list-style-type: none"> <li>The NDC provides extensive information on LULUCF and states that most emissions (63%) are the result of land-use change and peat and forest fires; the country has set up a target by 2030 in peat lands restoration of 2 million ha and rehabilitation of degraded land of 12 million ha; REDD+ activities remain as an important component of the NDC target from the land-use sector</li> <li>The NDC is to be implemented through actions including “effective land use and spatial planning, sustainable forest management which include social forestry programme, restoring functions of degraded ecosystems including wetland ecosystems”; specifically, mitigation actions in the LULUCF sector will focus on deforestation rate, forest degradation, land degradation and peatland restoration</li> <li>Specific targets and actions are described for three scenarios (BAU, unconditional mitigation and conditional mitigation); these include targets on: halting deforestation, controlling illegal logging, improved timber plantation, increasing carbon sequestration and land rehabilitation, rewetting and revegetation of peatland, and more</li> <li>The NDC details Indonesia’s steps to reduce emissions from the land sector by instituting a moratorium on the clearing of primary forests and by reducing deforestation and forest degradation, restoring ecosystem functions, as well as sustainable management of forest; the efforts include social forestry through active participation of the sub national governments, private sector, small and medium enterprises, civil society organisations, local communities and adat communities (Indonesia: Masyarakat Hukum Adat), and women – in both the planning and implementation stages</li> <li>Key adaptation strategies include: reduction of deforestation and forest degradation, land conservation, utilisation of degraded land for renewable energy and social forestry, through actions including: <ul style="list-style-type: none"> <li>Mainstreaming/Integrating climate change adaptation in forest management to support mitigation actions and enhancement of economic resilience of communities living in/surrounding forests</li> <li>Developing and implementing environmentally friendly technologies (EFT) in production forest management and social forestry</li> <li>Avoiding conversion of productive lands for other uses</li> <li>Developing and implementing climate adaptive technologies to support sustainable land management practices</li> <li>Integrated programme on rehabilitation of degraded land and development of biomass energy</li> <li>Enhancing engagement of local and adat communities in social forestry development process.</li> <li>Strengthening implementation of landscape approach in social forestry</li> </ul> </li> </ul>	<p>▲ ▲ ▲</p> <p><b>Very high:</b> NDC provides <b>specific orientations</b> pursued by the Party in different LULUCF sub-sectors, <b>including specific targets and means of implementation (such as policies or funding associated to them)</b></p>

How action-oriented are the NDCs in the food and land sector?		
Criteria		NDC Assessment
<p><b>Key policies in the NDC supporting priorities:</b></p> <p><b>Agriculture and food:</b></p> <ul style="list-style-type: none"> <li>National Medium-Term Development Plan (RPJMN) - vague focus on climate mitigation and adaptation, including agriculture</li> </ul> <p><b>LULUCF:</b></p> <ul style="list-style-type: none"> <li>RKTN (Long-Term National Forestry Plan 2011-2030)</li> </ul>		<p>▲</p> <p><b>Medium:</b> NDC lists <b>sectoral</b> policies related to either agriculture and food or LULUCF, but these are not directly linked to actions/orientations</p>
<p><b>Dedicated financial resources associated with policies or action:</b></p> <ul style="list-style-type: none"> <li>A commitment on the "Development of financing scheme for agriculture" is mentioned in Annex 2 on adaptation</li> <li>Under the means of implementation, the NDC reports that the latest financial assessment estimates that USD 322.86 billion will be needed for the implementation of mitigation actions</li> <li>Indonesia has established a national agency for environmental fund management (Id. Badan Pengelola Dana Lingkungan Hidup/BPDLH); BPDLH is mandated to manage and mobilise finance for environment and allowed to mobilise climate finance from various sources both national and international sources, private and public sources, bilateral and multilateral channels</li> <li>Since its establishment in October 2019, BPDLH has managed reforestation fund from domestic sources (forest levy paid by private sectors) and initiated REDD+ result-based payment from international sources</li> </ul>		<p>▲</p> <p><b>Medium:</b> NDC provides a general indication on existing or planned public funding to finance mitigation policies and actions in either agriculture and food or LULUCF</p>
<p><b>Spatial information for mitigation provided in the NDC:</b></p> <ul style="list-style-type: none"> <li>Frequent mentions of the use of and need for spatial planning, mostly focused on adaptation.</li> <li>One of the principles of the NDC is "recognizing the needs to integrate climate change into development and spatial planning" and the NDC states that it "will be implemented through effective land use and spatial planning"</li> <li>Key adaptations actions described in Annex II include: <ul style="list-style-type: none"> <li>Integrating watershed management into Local Spatial Planning</li> <li>Facilitate, oversight, enforcement and compliance to spatial plan (on the conversion of productive land)</li> <li>Strengthening implementation of regulations relating to Spatial Planning (on land conservation)</li> <li>Identification of highly vulnerable areas in local spatial and land use planning efforts (in the context of social and livelihood resilience)</li> <li>Mainstreaming adaptation into spatial planning and strengthening compliance in the implementation of spatial plan. (in the context of human settlements)</li> </ul> </li> </ul>		<p>▲</p> <p><b>Medium:</b> NDC provides information on spatial planning related to climate mitigation and adaptation and/or includes a non-actionable map, i.e. one that is not useful in isolation or when combined with other data layers to inform policy. E.g. Map of administrative regions</p>
<p><b>Technology details provided in the NDC:</b></p> <ul style="list-style-type: none"> <li>Technology development and transfer needs are detailed in the means of implementations section, but without a specific focus on AFOLU</li> <li>Regarding adaptation, the NDC highlights the development and implementation of climate adaptive technologies for sustainable production of agricultural crops and plantations; this includes improved protection from pests and disease, R&amp;D to produce new genetically improved seeds, cultural techniques for higher productivity, integrated cropping calendar, improved water management</li> <li>Development and implementation of environmentally friendly technologies (EFT) in production forest management</li> <li>Implementation of environmentally friendly technologies (EFT) in social forestry. Key actions include: Creating enabling environment for EFT, Identification, development and implementation of best practices applicable for social forestry)</li> </ul>		<p>▲ ▲</p> <p><b>High:</b> NDC provides <b>detail focus areas of technological development needs or plans</b> related to agriculture, food or LULUCF</p>
What specific policy measures are included in the NDCs regarding critical food and land transitions?		
Critical transition	Details	NDC Assessment
Healthy diets	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<p>●</p> <p>NDC does not mention any detail on the critical transition</p>
Productive and regenerative agriculture	<ul style="list-style-type: none"> <li>Identification, development and implementation of best practices for farmers' economic empowerment</li> <li>Enhancing management and provision of ecosystem services in agricultural sector</li> <li>Development of financing scheme for agriculture</li> <li>Improve agricultural crops protection from pests and diseases</li> <li>R&amp;D to produce high quality (genetically improved) seeds and cultural techniques to increase productivity</li> <li>Improved water management systems for increasing resilience to climate change.</li> <li>Application of integrated cropping calendar</li> </ul>	<p>●</p> <p>NDC lists essential actions, including specific commitments, strategies, or funding, related to the critical transition</p>

What specific policy measures are included in the NDCs regarding critical food and land transitions?		
Critical transition	Details	NDC Assessment
<b>Protecting and restoring nature</b>	<ul style="list-style-type: none"> <li>• BPDHLH, a national agency for environmental fund management, has managed reforestation fund from domestic sources (forest levy paid by private sectors) and initiated REDD+ result-based payment from international sources</li> <li>• Indonesia will continue to work on Article 5 of the Paris Agreement that sends clear political signal on the recognition of the roles of forest and REDD+; existing COP decisions has provided sufficient guidance to implement and support REDD+ implementation; as policy approaches and positive incentives, REDD+ should be able to support the achievement of Indonesia's emission reduction target in forestry sector</li> <li>• Strengthening implementation of deforestation reduction efforts</li> <li>• Sustainable utilisation of non-wood products by local and adat communities.</li> <li>• Identification, development and implementation of best practices and local wisdom in utilisation of natural forest resources.</li> <li>• Integrated rehabilitation of degraded land and soil and water conservation</li> <li>• Facilitate, oversight, enforcement and compliance to spatial plan</li> <li>• Strengthening implementation of regulations relating to Spatial Planning</li> <li>• Application of soil and water conservation technology using mechanic and vegetation methods</li> <li>• Identification, development and implementation of best practices</li> <li>• in land utilisation and management</li> </ul>	<p>●</p> <p>NDC lists essential actions, including specific commitments, strategies, or funding, related to the critical transition</p>
<b>A healthy and productive ocean</b>	<ul style="list-style-type: none"> <li>• Implementation of ecosystem-based adaptation in coastal zone development</li> <li>• Implementation of integrated management of mangrove ecosystem</li> <li>• Enhance coastal zone and ocean pollution control, including marine litter and plastic debris</li> <li>• Increase communication, Education and Public Awareness (CEPA) on the important role of coastal ecosystem protection in natural disaster impact reduction</li> <li>• Restoration of degraded coastal zone as essential ecosystem.</li> <li>• Improve livelihood of communities living in or depending on coastal areas.</li> </ul>	<p>●</p> <p>NDC lists essential actions, including specific commitments, strategies, or funding, related to the critical transition</p>
<b>Diversifying protein supply</b>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>	<p>●</p> <p>NDC does not mention any detail on the critical transition</p>
<b>Reducing food loss and waste</b>	<ul style="list-style-type: none"> <li>• For the waste management sector, the Government of Indonesia is committed to develop a comprehensive strategy to improve policy and institutional capacity at the local level, enhance management capacity of urban wastewater, reduce landfill waste by promoting the "Reduce, Reuse, Recycle" approach, and the utilisation of waste and garbage into energy production</li> <li>• National Policy and Strategy on Solid Waste Management</li> </ul>	<p>●</p> <p>NDC provides inexplicit or unclear information on the critical transition (topic is mentioned, but not as a policy action)</p>
<b>Local loops and linkages</b>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>	<p>●</p> <p>NDC does not mention any detail on the critical transition</p>
<b>Digital revolution</b>	<ul style="list-style-type: none"> <li>• As part of the implementation of Article 13 of the Paris Agreement, Indonesia applies an Integrated National Transparency framework, through: (a) National Registry System (Id. Sistem Registry Nasional/SRN) for mitigation, adaptation and means of implementation both from national and international sources; (b) National GHGs Inventory System (SIGN-SMART); (c) MRV system for mitigation including REDD+; (d) Safeguards Information System for REDD+ (SIS-REDD+); and (e) Information Systems on vulnerability (SIDIK) and joint adaptation and mitigation at the Village level (PROKLIM)</li> <li>• Issuance of regulations such as regulations on SRN, REDD+, MRV, and establishment of a roster of experts, methodological panel, and inter-ministerial team for monitoring and evaluation of NDC implementation</li> </ul>	<p>●</p> <p>NDC lists essential actions, including specific commitments, strategies, or funding, related to the critical transition</p>

Critical transition	Details	NDC Assessment
<b>Stronger rural livelihoods</b>	<ul style="list-style-type: none"> <li>Indonesia considers the importance of just transition of the workforce and the creation of decent work and quality jobs for an effective and inclusive transition to low greenhouse gas emission and climate resilient development</li> <li>1. addressing challenges faced by sectors, cities and regions in transitioning to low carbon development and in ensuring a decent future for workers affected by the transition.</li> <li>2. promoting low greenhouse gas emission and sustainable economic activities that will create quality jobs in cities and regions.</li> <li>3. enhancing capacity of workforces to facilitate access to decent work and quality jobs, taking into account gender and inter-generational equalities, as well as the needs of vulnerable groups.</li> <li>4. enhancing participatory public dialogue to foster high employment rates, adequate social protection, labour standards and wellbeing of workers and their communities</li> <li>In the first term of President Joko Widodo administration, priority actions within the national Nawa Cita (Nine Priority Agendas) framework were determined and implemented, which includes protecting Indonesia's citizens, encouraging rural and regional development</li> <li>The preparation of the NDC has taken into account the Sustainable Development Goals (SDGs) particularly on taking urgent action to combat climate change and its impacts, access to affordable, reliable, and renewable energy for all</li> </ul>	<p>●</p> <p>NDC lists essential actions, including specific commitments, strategies, or funding, related to the critical transition</p>
<b>Gender and demography</b>	<ul style="list-style-type: none"> <li>On gender issues, Indonesia has an advanced policy relating to gender equality and gender balance. Mapping gender issues in climate change in all development sectors will be crucial in implementing the policy; enhancing role of women in development and strengthening women's capacity and leadership in climate change have been initiated and will be continued as part of the NDC implementation and development of LTS</li> <li>In line with the Paris Agreement, Indonesia respects, promotes and considers its obligation on human rights, the right to health, the right of adat communities (Indonesia: Masyarakat Hukum Adat), local communities, migrants, children, youth, elders, persons with different abilities, and people in vulnerable situations; as well as the right to development, including gender equality, empowerment of women and intergenerational equalities</li> </ul>	<p>●</p> <p>NDC lists essential actions, including specific commitments, strategies, or funding, related to the critical transition</p>

## What specific institutional arrangements for climate have countries put in place?

### Dedicated body in place:

- Directorate General of Climate Change, under the Ministry of Environment and Forestry which serves as the National Focal Point for the UNFCCC

### Consultation processes:

- The Government conducted consultations with stakeholders representing Ministries and other government institutions, academia, scientists, private sector, and civil society organisations; these consultations included workshops and consultations organised at both the national and provincial levels, as well as bilateral meetings with key sectors

## SUMMARY

### Summary of the NDC analysis:

- The NDC provides detail on planned orientations and actions in the food and land sector, both in mitigation and adaptation. Orientations and actions are described for both the agriculture and LULUCF sectors for three mitigation scenarios, and specific targets are set for each scenario. However, few policies supporting these priorities are listed, and the link with these sectors is not explicitly drawn. The NDC mentions the Long-Term National Forestry Plan 2011-2030 (RKTN) and the existence of wood production targets, but no further detail is given on how this would contribute to the stated mitigation measures.
- Spatial planning is frequently mentioned, and the NDC hints at its use in developing mitigation and adaptation actions, but no actionable maps are provided. The NDC provides information on the technologies necessary to take actions in the sector, albeit with no detail on how these technologies are to be developed.
- The NDC addresses seven critical transitions in the sector, with essential actions associated to six of them. The NDC includes specific frameworks, mechanisms, and strategies across sectors including: development of financing schemes for agriculture, integrated rehabilitation of degraded land and soil and water conservation, implementation of integrated management of mangrove ecosystem, and an MRV system for mitigation including REDD+.
- The NDC addresses the "digital revolution" critical transition well by including an Integrated National Transparency framework for climate mitigation and adaptation, an MRV system for mitigation including REDD+, and a Safeguards Information System for REDD+

## REFERENCES

- Source: ClimateWatch, accessed 30 August 2021. <https://www.climatewatchdata.org/compare-all-targets?>
- Submitted 22 July 2021. Source: UNFCCC. <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Indonesia%20First/Updated%20NDC%20Indonesia%202021%20-%20corrected%20version.pdf>
- Submitted 22 July 2021. Source: UNFCCC. [https://unfccc.int/sites/default/files/resource/Indonesia\\_LTS-LCCR\\_2021.pdf](https://unfccc.int/sites/default/files/resource/Indonesia_LTS-LCCR_2021.pdf)
- Source: Climate Action Tracker, accessed 15 September 2021. An update to the overall rating is pending, but CAT released a preliminary analysis of the updated NDC noting that it did not increase the target's ambition. <https://climateactiontracker.org/climate-target-update-tracker/indonesia/>