


Japan

Emissions	Climate Commitment Status
<p>2.4% of global emissions¹</p>  <p>Agriculture = 31.7 MtCO₂eq in 2019² or 3% of total emissions excluding LULUCF ↓ -14% since 1990</p> <p>-50.1 MtCO₂eq LULUCF emissions in 2019³</p> <p>Net sink of emissions</p>	<p>2020 update submitted⁴ ✓</p> <p>LTS submitted in 2019⁵ ✓</p> <p>CAT rating⁶ INSUFFICIENT</p> <p>Net zero commitment: By 2050 Japan will aim to reduce greenhouse gas emissions to net-zero, that is, to realise a carbon-neutral, decarbonised society (Policy Speech by the Prime Minister to the 203rd Session of the Diet and Law on Promotion of Global Warming Countermeasures)</p> <p>Net zero details:</p> <p>Date: 2050</p> <p>Legal status: In law (Law on Promotion of Global Warming Countermeasures)</p> <p>Gases covered: CO₂, CH₄, SF₆, HFCs, PFCs</p> <p>Credits allowed: Likely. No mention in the law but the long-term strategy submitted to the UNFCCC describes a Joint Crediting Mechanism through which “Japan will contribute to measures to address climate change on a global scale” by facilitating the diffusion of low-carbon technologies. The contributions developed through this mechanism will be used to achieve Japan’s emission reduction target.</p>
How action-oriented are the NDCs in the food and land sector?	
Criteria	NDC Assessment
<p>Specific policy priorities or actions for agriculture and food:</p> <ul style="list-style-type: none"> The NDC does not include a specific section on mitigation actions in the agriculture and food sector but specific actions are mentioned in the document: <ul style="list-style-type: none"> Measures to reduce CH₄ from paddy rice fields and N₂O emissions from fertiliser application in agricultural soils Measures to introduce energy efficiency and conservation farming machinery (listed) Promotion of soil management leading to the increase of carbon stock in cropland, promotion of revegetation 	<p>▲ ▲</p> <p>High: NDC provides indications of specific orientations pursued by the Party in different agricultural and food sub-sectors</p>
<p>Specific policy priorities or actions for LULUCF:</p> <ul style="list-style-type: none"> Explicit references to LULUCF are made throughout Japan’s NDC, including a dedicated section on removals by LULUCF and the definition of specific targets and measures; the NDC specifies that removals by LULUCF are in line with approaches equivalent to those under the Kyoto Protocol The target for LULUCF removals is set to about 37 Mt CO₂ by 2030, divided into 27.8 MtCO₂ through forest management and 9 MtCO₂ through cropland management, grazing land management and revegetation The measures listed to achieve this are the promotion of forest management/forestry industry measures, of soil management leading to the increase of carbon stock in cropland, and of revegetation by FY 2030 No further detail is given on specific actions or policies to achieve the promotion of these measures 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) 	<p>▲ ▲</p> <p>High: NDC provides indications of specific orientations pursued by the Party in different LULUCF sub-sectors</p>
<p>Key policies in the NDC supporting priorities:</p> <p>Agriculture and food:</p> <ul style="list-style-type: none"> N/A <p>LULUCF:</p> <ul style="list-style-type: none"> N/A 	<p>○</p> <p>Low: NDC does not list any sectoral policy related to agriculture, food or LULUCF</p>
<p>Dedicated financial resources associated with policies or action:</p> <ul style="list-style-type: none"> N/A 	<p>○</p> <p>Low: NDC does not provide any detail on public funding to mitigation actions in the agriculture, food and land sectors</p>

Criteria		NDC Assessment
Spatial information for mitigation provided in the NDC: <ul style="list-style-type: none"> N/A 		<p>○</p> <p>Low: NDC does not provide any information on spatial planning to support adaptation or mitigation actions in the food and land sectors in the form of maps or indications of spatial data</p>
Technology details provided in the NDC: <ul style="list-style-type: none"> The NDC refers to targets under the country's Long-Term Strategy to achieve a decarbonised society through disruptive innovations such as artificial photosynthesis and other carbon capture, use and storage technologies, however no specific technology tied to the food and land sector is mentioned The NDC mentions the "introduction of refrigerant control technology (F-gases)" which may be related to the food sector, but the link is not made explicit 		<p>○</p> <p>Low: NDC does not provide any detail on technological innovation related to the agriculture, food and land sectors</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"> N/A 	<p>●</p> <p>NDC does not mention any detail on the critical transition</p>
Productive and regenerative agriculture	<ul style="list-style-type: none"> Agriculture listed in IPCC sectors covered, measures to reduce CH4 and N2O emissions from agricultural soils Measures which form the basis for the bottom-up calculation of the GHG emission reduction target Measures to introduce energy efficiency and conservation farming machinery, Promotion of soil management leading to the increase of carbon stock in cropland, Promotion of revegetation 	<p>●</p> <p>NDC lists essential actions, including specific commitments, strategies, or funding, related to the critical transition</p>
Protecting and restoring nature	<ul style="list-style-type: none"> Promote measures for greenhouse gas removals through the promotion of forest management/forestry industry measures 	<p>●</p> <p>NDC provides inexplicit or unclear information on the critical transition (topic is mentioned, but not as a policy action)</p>
A healthy and productive ocean	<ul style="list-style-type: none"> N/A 	<p>●</p> <p>NDC does not mention any detail on the critical transition</p>
Diversifying protein supply	<ul style="list-style-type: none"> N/A 	<p>●</p> <p>NDC does not mention any detail on the critical transition</p>
Reducing food loss and waste	<ul style="list-style-type: none"> Reduction of municipal solid waste disposed of by direct landfill, reduction of municipal solid waste incineration. Introduction of semi-aerobic landfill system for final disposal site of municipal solid waste 	<p>●</p> <p>NDC provides inexplicit or unclear information on the critical transition (topic is mentioned, but not as a policy action)</p>
Local loops and linkages	<ul style="list-style-type: none"> N/A 	<p>●</p> <p>NDC does not mention any detail on the critical transition</p>
Digital revolution	<ul style="list-style-type: none"> Japan will strive to achieve a "decarbonised society" as close as possible to 2050 with disruptive innovations, such as artificial photosynthesis and other CCUS technologies and realisation of a hydrogen society Japan will, together with all major emitters, undertake domestic emission reductions and also contribute to reducing global greenhouse gas (GHG) emissions through Japan's leading technologies and support for developing countries. Introduction of technology which uses CO2 as a feedstock; introduction of semi-aerobic landfill system for final disposal site of municipal solid waste 	<p>●</p> <p>NDC provides inexplicit or unclear information on the critical transition (topic is mentioned, but not as a policy action)</p>
Stronger rural livelihoods	<ul style="list-style-type: none"> Introduction of energy efficiency and conservation farming machinery 	<p>●</p> <p>NDC provides inexplicit or unclear information on the critical transition (topic is mentioned, but not as a policy action)</p>

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Critical transition	Details	NDC Assessment
Gender and demography	<ul style="list-style-type: none"> N/A 	<p>●</p> <p>NDC does not mention any detail on the critical transition</p>
What specific institutional arrangements for climate have countries put in place?		
<p>Dedicated body in place:</p> <ul style="list-style-type: none"> Joint Experts' Meeting of the Central Environment Council (Subcommittee on Global Warming Measurement after 2020, Global Environment Committee) and the Industrial Structure Council (INDC working group, Global Environment Subcommittee, Committee on Industrial Science and Technology Policy and Environment) <p>Consultation processes:</p> <ul style="list-style-type: none"> The discussions of the Joint Experts' Meeting were open to public consultation 		
SUMMARY		
<p>Summary of the NDC analysis:</p> <ul style="list-style-type: none"> The NDC provides some specific detail on actions and orientations in the food and land sector but lacks detail for it to provide a framework for national implementation. Agriculture and food are never explicitly mentioned in the NDC, however some specific mitigation measures (e.g. to reduce CH₄ emissions from rice and N₂O emissions from fertilisers) are described. More detail is provided for the LULUCF sector to which a section is dedicated. Here, specific removal targets and actions to be taken are described. However, no policies are listed to support these orientations, nor is information provided on funding and resources, spatial information or technology. The NDC addresses five critical transitions all inexplicitly, except for the transition on "digital revolution". Most of the critical transition have little detail and no dedicated commitments or strategies to implement them. Strategies to reduce waste are detailed, including new technologies and waste management systems. However, this seems to be more related to waste disposal techniques than reduction of waste itself. Strategies to achieve a decarbonised society through new technology is detailed, and addresses developing disruptive technology such as artificial photosynthesis. 		
REFERENCES		
<ol style="list-style-type: none"> Source: ClimateWatch, accessed 30 August 2021. https://www.climatewatchdata.org/compare-all-targets? Source: UNFCCC, Greenhouse Gas Inventory Data, accessed 30 August 2021. https://di.unfccc.int/detailed_data_by_party Source: UNFCCC, Greenhouse Gas Inventory Data, accessed 30 August 2021. https://di.unfccc.int/detailed_data_by_party This analysis refers to the update to the NDC submitted on 31 March 2020 (Source: UNFCCC) which has since been archived. Japan has since submitted a new and strengthened update on 12 October 2021 (which was after the cut-off date of 30 September 2021 set for this policy brief). https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Japan%20First/SUBMISSION%20OF%20JAPAN%27S%20NATIONALLY%20DETERMINED%20CONTRIBUTION%20(NDC).PDF Submitted 26 June 2019. Source: UNFCCC. https://unfccc.int/sites/default/files/resource/The%20Long-term%20Strategy%20under%20the%20Paris%20Agreement.pdf Source: Climate Action Tracker, accessed 15 September 2021. This rating refers to the newest update to the NDC submitted by Japan on 12 October 2021, which ranks "insufficient". The analysis instead refers to the previous update submitted on 31 March 2020 which CAT still rates "highly insufficient". https://climateactiontracker.org/countries/japan/ 		