



# 2022 Review of Climate Ambition in Asia and the Pacific

**Raising NDC targets with  
enhanced nature-based solutions**





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# 2022 Review of Climate Ambition in Asia and the Pacific

## Raising NDC targets with enhanced nature-based solutions

### With a Special Feature on Engagement of Children and Youth in Raising National Climate Ambition





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## Foreword

The 27th United Nations Climate Change Conference of the Parties (COP27) marks the 30th anniversary of the adoption of the United Nations Framework Convention on Climate Change (UNFCCC). Ahead of this milestone, the United Nations Secretary-General António Guterres has called “for commitments to deliver on emissions reduction by 45 per cent by 2030”, and for working together to “steer humanity to the path of living in harmony with the planet”. The Egyptian COP27 Presidency is also emphasizing the need to accelerate global climate action through reducing emissions, scaling-up adaptation efforts, and enhancing flows of appropriate finance for a rapid and ‘just transition’.

Nowhere is the urgency for action more apparent than in the Asia-Pacific region. In 2022, countries experienced unprecedented climate-induced disasters, such as dreadful typhoons and floods, as well as heatwaves and droughts, resulting in human and economic losses that are undermining hard-won development gains in developed and developing countries alike.

The historic responsibility for ensuring a healthy, safe and promising future for the next generation is weighing heavily on today’s policymakers. As this report explains, it is children, currently aged ten or younger, who are expected to experience a nearly four-fold increase in extreme events. More violent storms, more severe heatwaves and more perilous floods and droughts will create unliveable conditions for the next generation. It is our responsibility and duty to act now and do everything in our power to create a better future for our children.

Civil society, and especially young people, are leading the charge. They are championing more urgency, faster action and greater ambition. Strong commitments to carbon neutrality by 2050 and 2060 are on the rise. As this ESCAP, UNEP and UNICEF joint assessment report shows, 39 out of the 49 Asia-Pacific member States have made carbon neutrality and net-zero pledges, and have started developing enabling frameworks and strategies for implementation of their commitments. This progress must be applauded. However, many countries are yet to develop, or update, their long-term low emission development strategies to support achieving carbon neutrality and net-zero commitments. Action to address this crisis cannot be strong enough or come fast enough.

This assessment report conveys several recommendations for a 1.5°C pathway:

First, align the National Determined Contributions (NDCs) with long-term low emissions development strategies, and with other development policies, to support a 45 per cent reduction in emissions by 2030 and climate neutrality commitments by 2050-2060.

Second, develop and implement deep decarbonization sectoral pathways for energy, transport, urban development, trade and investment, by utilizing new forms of technology and innovation, in order to facilitate more ambitious NDCs and carbon neutrality/net-zero commitments.

Third, invest in nature-based climate solutions (terrestrial and marine) by capitalizing on Asia-Pacific’s distinctive ecosystem and carbon sequestration potential, and build on the plans for nature-based climate solutions already underway in 37 countries to increase carbon sequestration and to support adaption efforts.

Fourth, scale up innovative financial instruments tailored to country-specific conditions, such as debt for climate swaps and climate bonds to mobilize finance from capital markets, as well as emissions trading schemes and carbon taxes to mobilize domestic resources.

Fifth, create a seat at the table for all stakeholders, with a particular focus on engaging children and young people in the design, development and implementation of climate action policies, programmes and decisions.

ESCAP, UNEP, UNICEF, the regional UN development system, and other development partners are fully focused on supporting the Asia-Pacific region to realise its pivotal role in overcoming the global climate crisis and implementing the carbon neutrality and net-zero pledges.



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## Executive summary

As of August 2022, 39 out of the 49 Asia-Pacific member States included in this report, have made carbon neutrality and net-zero pledges, and have started developing enabling frameworks to the support implementation of their commitments. However, very few of these pledges are supported by updated and ambitious NDC commitments that will scale down greenhouse gas emissions to keep global warming within 1.5°C pathway. The Asia-Pacific region will only be able to drive ambitious climate action when such pledges are supported with higher ambition of NDC commitments.

Since COP26, 13 countries have updated their approach to fight climate change. Progress is being made across different subregions, and by countries with different income levels. While there is some progress in developing synergies between green growth, development strategies and long-term low-emissions strategies, more can be achieved during the NDC updates process, which can start any time with a final submission in 2025. Indeed, those Asia-Pacific countries that have included innovation and roll out of decarbonization technologies will be at an advantage during the implementation of their commitments.

Given the current volume of greenhouse gas emissions in the Asia-Pacific region, it is important to focus on removing the barriers to decarbonization of key and carbon-intensive sectors through phasing down and phasing out coal, reducing dependence on other fossil fuels, scaling up penetration of renewable energy resources and e-mobility, and enhancing energy efficiency, as well as encouraging low-carbon recovery from COVID-19 pandemic, which can create jobs and contribute to sustainable economic revival.

With the current turmoil in energy markets and fast declining costs of renewables, now is the time for Asia-Pacific countries to aggressively scale up investments in renewable energy production and improve energy efficiency in order to enhance decarbonization efforts substantially.

Additional opportunities to scale up decarbonization and enhance current NDC commitments as recommended by the Glasgow Climate Pact, include increased investments in nature-based solutions (NbS), and ensuring protection of that natural wealth, which can help reduce the gap between the current NDC commitments and the required greenhouse gas emissions reductions to keep global warming within 1.5°C pathway. Most governments in the Asia-Pacific region have indicated, in their NDCs, that the delivery on nature-based solutions (NbS) is contingent on external financing. However, international financing for NbS is contested and limited.

Further, in recent years, youth and children have begun to recognize their potential as agents for raising climate ambition and are voicing their concerns regarding current insufficient climate action. This prompts governments to ensure that the youth and children can take a seat at the decision-making table, and that their concerns are taken into account when reviewing the next steps for NDC commitments.

## Key findings

Regional NDCs continue to fall short of the required climate ambition to effectively reduce regional greenhouse gas emissions in support of the 1.5°C global warming pathway.

- Very few countries have undertaken a review of their NDC commitments after COP26, with the Republic of Korea and Viet Nam standing out with enhanced climate ambition targets.
- 39 countries have made climate neutrality pledges, and several have advanced in developing national laws, strategies and implementation plans aligning these with NDC commitments and long-term low emissions development strategies.
- Levels of commitment differ, ranging from carbon neutrality and net-CO<sub>2</sub>-zero to net-GHG-zero targets.
- National development plans are not sufficiently aligned with NDC commitments and carbon neutrality pledges and need to be further enhanced to include these targets.

## Key recommendations include:

- Conduct a critical review of current NDC commitments and strengthen mitigation targets to ensure implementation of carbon neutrality pledges and long term low-emissions development strategies that will enhance Asia-Pacific contribution to the reduction of global greenhouse gas emissions aligned with the 1.5°C goal.
- Strengthen the provisions for national nature-based solutions-related measures in the updated NDCs in 2025, including specific commitments and implementation plans, aligned with international initiatives for terrestrial and marine NbS, and make more ambitious commitments.
- Provide enabling conditions and enhanced financial flows for scaling up investments in NbS actions that address climate change adaptation and mitigation, as well as support sustainable development and biodiversity conservation.
- Develop key instruments and good practices for empowering indigenous peoples in NbS initiatives and facilitate engagement in decision-making related to climate action.
- Roll out innovative decarbonization technologies across the critical sectors in the updated NDCs and in long-term development strategies.
- Remove barriers to decarbonization within economies, cities, industries and energy production, supply chains, transport and commuting sectors, and in buildings and other infrastructure.
- Develop timelines for phase down and phase out of coal, reduce dependence on other fossil fuels, and accelerate penetration of renewable energy resources.
- Develop national policies to support capacities and human resources for innovation, governance, and roll out of innovative decarbonization technologies that have a positive impact on the climate and for economic recovery.
- Set targets for investments in R&D and deploy innovative decarbonization technologies to develop local manufacturing and accelerate national climate actions.



- Create a favourable environment by providing incentives and tax reductions and ensure that market instruments are in place to encourage private sector investment in decarbonization technologies and industries for both short-term and long-term climate action.
- Identify opportunities to protect the rights of children and youth through NbS within the context of a climate action.
- Develop a national enabling environment to engage the youth in climate action and NDC implementation policies.
- Strengthen regional cooperation including through:
  - Building a regional platform to facilitate the exchange of best practices and lessons learned from policies and projects supporting NDC implementation and updates, and increase technical cooperation for developing, deploying and replicating decarbonization technologies;
  - Engaging multiple stakeholders and increasing public awareness activities to support NDC updates and implementation;
  - Building a regional programme to unlock the potential, energy and knowledge to drive climate action;
  - Building regional dialogue around new technologies, including those on carbon dioxide removal to determine effectiveness, scientific soundness, and deployment of such technologies;
  - Increasing transboundary ecosystem adaptations and finding NbS for building the region's resilience, moving towards net-CO<sub>2</sub>-zero and achieving climate resilient development for all.



## Explanatory notes

This report includes 49 of the ESCAP member States in Asia and the Pacific, which are listed in groupings of countries and territories/areas listed alphabetically as follows:

- **49 ESCAP member States:** Afghanistan; Armenia; Australia; Azerbaijan; Bangladesh; Bhutan; Brunei Darussalam; Cambodia; China; The Democratic People's Republic of Korea (the); Fiji; French Polynesia; Georgia; Guam; Hong Kong, China; India; Indonesia; Iran (Islamic Republic of); Japan; Kazakhstan; Kiribati; Kyrgyzstan; the Lao People's Democratic Republic; Macao, China; Malaysia; Maldives; Marshall Islands; Micronesia (Federated States of); Mongolia; Myanmar; Nauru; Nepal; New Zealand; Pakistan; Palau; Papua New Guinea; the Philippines; Republic of Korea (the); Russian Federation (the); Samoa; Singapore; Solomon Islands; Sri Lanka; Tajikistan; Thailand; Timor-Leste; Tonga; Türkiye; Turkmenistan; Tuvalu; Uzbekistan; Vanuatu; and Viet Nam.
- **Least developed countries:** Afghanistan, Bangladesh, Bhutan, Cambodia, Kiribati, the Lao People's Democratic Republic, Myanmar, Nepal, Solomon Islands, Timor-Leste, Tuvalu, and Vanuatu. Samoa was part of the least developed countries prior to its graduation in 2014.
- **Landlocked developing countries:** Afghanistan, Armenia, Azerbaijan, Bhutan, Kazakhstan, Kyrgyzstan, the Lao People's Democratic Republic, Mongolia, Nepal, Tajikistan, Turkmenistan, and Uzbekistan.
- **Small island developing States:** Cook Islands, Fiji, Kiribati, Maldives, Marshall Islands, Micronesia (Federated States of), Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Timor Leste, Tonga, Tuvalu, and Vanuatu.
- **East and North-East Asia:** China; The Democratic People's Republic of Korea (the); Hong Kong, China; Japan; Macao, China; Mongolia; and Republic of Korea (the).
- **North and Central Asia:** Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Russian Federation (the), Tajikistan, Turkmenistan, and Uzbekistan.
- **Pacific:** American Samoa, Australia, Cook Islands, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Micronesia (Federated States of), Nauru, New Caledonia, New Zealand, Niue, Northern Mariana Islands, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu.
- **South and South-West Asia:** Afghanistan, Bangladesh, Bhutan, India, Iran (Islamic Republic of), Maldives, Nepal, Pakistan, Sri Lanka, and Türkiye.

Bibliographical and other references have not been verified. The United Nations bears no responsibility for the availability or functioning of URLs.

Data for this assessment report was used from a consistent and credible scientific source: Our World in Data, "Data on CO<sub>2</sub> and Greenhouse Gas Emissions by Our World in Data", 2022. Available at <https://github.com/owid/co2-data>.

## Abbreviations

<b>ACE</b>	Action for Climate Empowerment	<b>LTR</b>	Lands, Territories and Resources
<b>ADB</b>	Asian Development Bank	<b>LULUCF</b>	Land Use, Land-Use Change and Forestry
<b>AFOLU</b>	Agriculture, Forestry and Other Land Use	<b>MDBs</b>	Multilateral Development Banks
<b>APDRN</b>	Asia-Pacific Disaster Resilience Network	<b>MEA</b>	Millennium Ecosystem Assessment
<b>BAU</b>	business as usual	<b>MRV</b>	Monitoring, reporting and verification
<b>BTRs</b>	Biennial Technical Reports	<b>NAPs</b>	National Adaptation Plans
<b>BURs</b>	Biennial Update Reports	<b>NbS</b>	Nature-based Solutions
<b>CBD</b>	Convention on Biological Diversity	<b>NCS</b>	Natural climate solution
<b>CCRI</b>	Children's Climate Risk Index	<b>NDCs</b>	Nationally Determined Contributions
<b>CDM</b>	Clean Development Mechanism	<b>NGO</b>	non-governmental organization
<b>CEDAW</b>	Convention on the Elimination of All Forms of Discrimination against Women	<b>PES</b>	Payment for ecosystem services
<b>CIF</b>	Climate Investment Funds	<b>R&amp;D</b>	Research and Development
<b>COP</b>	Conference of the Parties	<b>PIPA</b>	Phoenix Island Protected Area
<b>CO<sub>2</sub></b>	carbon dioxide	<b>REDD+</b>	Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
<b>CPEIR</b>	Climate Public Expenditures and Institutional Review	<b>REEEP</b>	Renewable Energy and Energy Efficiency Partnership
<b>EAP</b>	East Asia-Pacific	<b>SADDD</b>	sex, age and disability disaggregated data
<b>EbA</b>	ecosystem-based adaptation	<b>SDG</b>	Sustainable Development Goals
<b>EbM</b>	ecosystem-based mitigation	<b>SIDS</b>	small island developing States
<b>Eco-DRR</b>	ecosystem-based disaster risk reduction	<b>SMEs</b>	small and medium-sized enterprises
<b>ESCAP</b>	United Nations Economic and Social Commission for Asia and the Pacific	<b>V-ETS</b>	Voluntary Emissions Trading System
<b>EEZ</b>	Exclusive Economic Zone	<b>UNEA</b>	United Nations Environment Assembly
<b>ETF</b>	Enhanced Transparency Framework	<b>UNEP</b>	United Nations Environment Programme
<b>ETS</b>	Emissions Trading System	<b>UNICEF</b>	United Nations International Children's Emergency Fund
<b>FCPF</b>	Forest Carbon Partnership Facility	<b>UNDP</b>	United Nations Development Programme
<b>GCF</b>	Green Climate Fund	<b>UNDRIP</b>	United Nations Declaration on the Rights of Indigenous Peoples
<b>GEF</b>	Global Environment Facility	<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>GHG</b>	greenhouse gas	<b>UNSAID</b>	United States Agency for International Development
<b>GIZ</b>	Deutsche Gesellschaft für Internationale Zusammenarbeit	<b>UN Women</b>	The United Nations Entity for Gender Equality and the Empowerment of Women
<b>GNI</b>	gross national income	<b>YouCCAN</b>	Youth Network for Climate Change and Clean Air
<b>GT</b>	giga ton	<b>YOUNGO</b>	Children & Youth Constituency of the UNFCCC
<b>IPCC</b>	Intergovernmental Panel on Climate Change	<b>VCM</b>	Voluntary Carbon Market
<b>IRENA</b>	International Renewable Energy Agency		
<b>IUCN</b>	International Union for Conservation of Nature		
<b>IPMG</b>	Indigenous Peoples' Major Group for Sustainable Development		
<b>LDCs</b>	least developed countries		
<b>LT-LEDs</b>	Long-Term Low Emissions Development Strategies		



## Acknowledgements

This joint ESCAP, UNEP and UNICEF report on *2022 Review of Climate Ambition in Asia and the Pacific*, is the second critical review of the current NDC commitments of the regional member States after Glasgow COP26 and of the regional carbon neutrality pledges. The report assesses how these NDC commitments and pledges contribute to keeping global temperatures well below 2°C as per the Paris Agreement, with the aim to stay below 1.5°C. The report includes an assessment of the status of enabling frameworks that support implementation of NDC and carbon neutrality pledges, an assessment of enhanced investments in nature-based climate solutions to accelerate implementation and develop ambitious NDC reviews and makes a case for the inclusion of children and youth in climate action.

The report has been developed by a joint team led by Aneta Nikolova, including Frank Thomalla, Hannah Ryder, Hitomi Rankine, Maya Tsuboya Newell, Poonperm Vardhanabindu (ESCAP), Mimansha Joshi and Nicholas Rees (UNICEF), Mozaharul Alam (UNEP), that was guided with substantive inputs from Katinka Weinberger, Chief, Environment and Development Policy Section, Environment and Development Division, ESCAP. Specific inputs to Chapter 3 were provided by the Carnegie Climate Governance Initiative (C2G) team, and by the UNESCO communication teams of the GreenTech Cluster and the Energy Transitions Commission. The report was peer reviewed by the IBC/RCM members, including Jens Radschinski and Banashri Sinha (UNFCCC/RCC for the Asia-Pacific region), Sudhir Sharma (UNEP), and Deo Gabinete and Putera Zenata (NDC Partnership).

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