

## SYNOPSIS

# Is 1.5°C within Reach for the Asia-Pacific Region?

## Ambition and Potential of NDC Commitments of the Asia-Pacific Countries

1.5°C

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The joint ESCAP, UNEP, UN Women and the greenwerk report on ***Is 1.5°C within Reach for the Asia-Pacific Region? Ambition and Potential of NDC Commitments of the Asia-Pacific Countries*** provides an assessment of the NDC commitments of countries in the Asia-Pacific region, discusses the critical need to drive up climate ambition in the region and assesses and reviews how far are countries in Asia-Pacific to closing the gap towards carbon neutrality by 2030 with the current NDC commitments. It also examines country level climate ambition, enabling factors, including gender mainstreaming that have been put in place, and what more can be done, especially considering the ongoing COVID-19 pandemic and its implications on fiscal space.

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## Urgent need for higher climate action in the Asia-Pacific region

Ahead of the 26th United Nations Climate Change Conference of the Parties (COP26) United Nations Secretary-General António Guterres has called “for all countries to commit to net zero emissions by 2050, backed up by concrete long-term strategies, and enhanced Nationally Determined Contributions (NDCs), which collectively cut global emissions by 45 per cent by 2030, compared to 2010 levels” to address the most profound climate crisis our civilization is facing, categorized as “code red for humanity”.<sup>1</sup>

The Asia and the Pacific region will be in the spotlight of COP26 given the seven G20 members from this region are responsible for over half of global GHG emissions; and five of the 10 top countries with the greatest historic responsibility for emissions since the beginning of the twentieth century are from Asia.

At the same time, the Asia-Pacific region, with its dense populations, especially along coastal zones, heavy dependence on agriculture and natural resources, high levels of poverty and food insecurity and vulnerable populations, is highly susceptible to the impacts of climate change. Indeed, the “window of opportunity to prevent the worst climate impacts is rapidly closing”.<sup>2</sup>

Lying at the heart of the Paris Agreement, the Nationally Determined Contributions (NDCs) represent the climate action commitments made by countries to reduce their national emissions and address the need for adaption measures to the increasing and devastating impacts of climate change. Despite of the COVID-19 pandemic, an impressive number of countries in the Asia-Pacific region have taken the opportunity to update their NDCs.

This Synopsis is based on the full report, *Is 1.5°C within Reach for the Asia-Pacific Region? Ambition and Potential of NDC Commitments of the Asia-Pacific Countries*, developed by a joint team from ESCAP, UNEP, UN Women and the greenwerk, Germany, which provides an assessment of the NDC commitments of countries in the Asia-Pacific region. It discusses the critical need to drive up climate ambition in the region and assesses and reviews how far are countries in the Asia-Pacific region to closing the gap towards carbon neutrality by 2030 with the current NDC commitments. It examines country level climate ambition, enabling factors that have been put in place, and what more can be done, especially considering the ongoing COVID-19 pandemic and its implications on fiscal space. It also highlights the need to pursue a shift in development that is more sustainable, particularly by embracing greener post-COVID-19 measures aligned with NDC commitments, including phasing out fossil fuels, stimulating innovations for renewable energy and putting a price on carbon. Throughout the assessment the report showcases how gender integration within climate action plans ensures inclusive sustainable development and protection of the most vulnerable. This comprehensive assessment represents a first baseline of ambition and enabling factors in 2021, and the NDCs that were analysed were the ones submitted up to the end of August 2021.

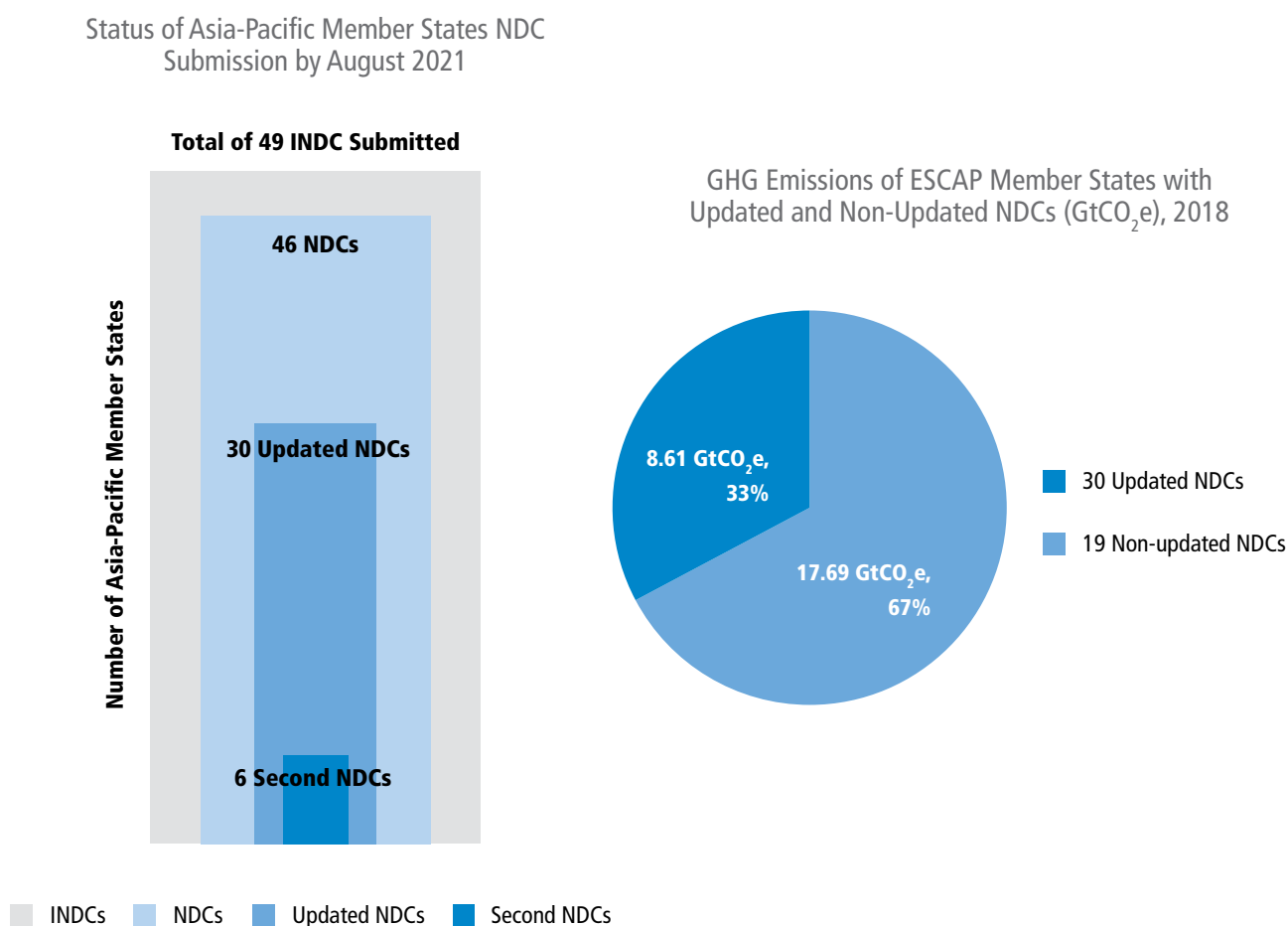
## Status of NDCs in the Asia-Pacific region

Asia-Pacific member States have made significant efforts in completing NDC updating processes. Currently, 49 member States of the Asia-Pacific region have submitted their Intended Nationally Determined Contributions (INDCs), 46 of which have evolved into Nationally Determined Contributions (NDCs). By August 2021, 30 countries submitted updated/revised NDCs, of which 6 were a second NDC submission.<sup>3</sup> However, those renewed NDC commitments are low and insufficient in their ambition as shown in Figure 1 below.

1. Antonio Guterres, United Nations Secretary General, statement at Security Council Briefing on the Role of Climate Action in Maintaining International Peace and Security, 23 September 2021.

2. Ibid.

3. The 6 countries with a second NDC submission are: Bhutan, Marshal Islands, Nepal, PNG, Samoa, and Tonga.

Figure 1: Status of ESCAP member States with NDC submissions and their GHG emissions share (GtCO<sub>2</sub>e), August 2021

Source: ESCAP

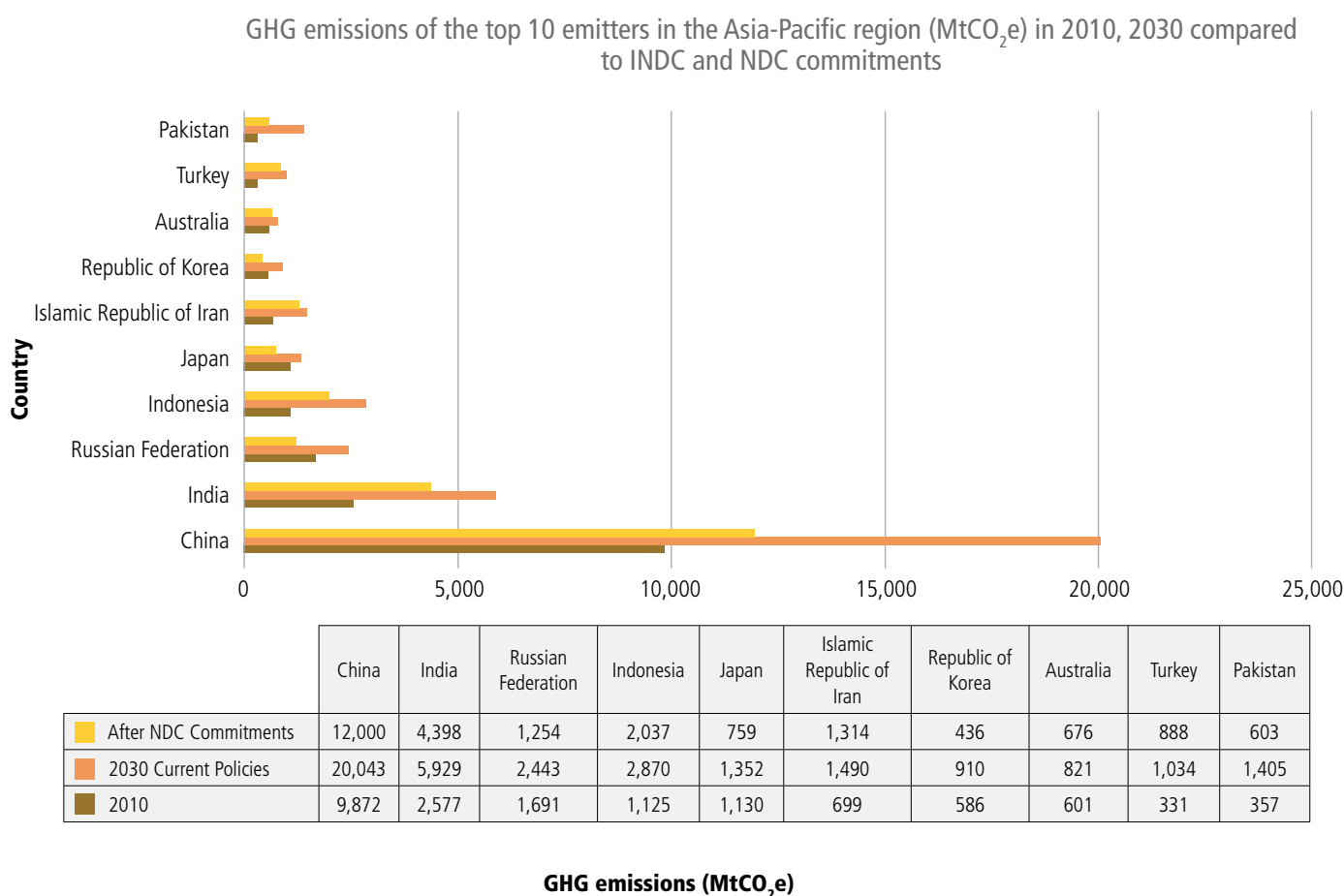
In total, these 49 countries collectively emitted over 26.3 GtCO<sub>2</sub>e in 2018. Figure 1 shows that the 30 countries<sup>4</sup> that updated their NDCs accounted for 33 per cent of the regional GHG emissions in 2018, while the countries that are yet to submit their updated NDCs accounted for the remaining 67 per cent of the regional GHG emissions. Among those 19 countries are China and India, whose NDC commitments are highly anticipated and are expected to tip positively the balance of the Asia-Pacific regional GHG emissions reductions.

Nonetheless, current commitments contained in the updated NDCs of countries in the Asia-Pacific region are insufficient. To achieve carbon neutrality in the decade 2050-2060, the NDCs need to be significantly enhanced. If these unconditional and conditional commitments are implemented by 2030, GHG emissions would reduce by only 8 per cent, too low to support net-zero CO<sub>2</sub> emissions by 2050.

## Critical need to update NDC commitments of higher emitters

The updated NDCs commitments of Asia-Pacific member States, such as China, India, the Islamic Republic of Iran, Kazakhstan, Pakistan, and Turkey, who are among the key top 10 emitters in the region, have the potential to tip the balance of the regional and global GHG emissions reductions, as shown in Figure 2. The GHG emission shares of the top 10 emitters equals 87 per cent and 89 per cent of the regional GHG emissions in 2018 and 2030, respectively.

4. The 30 countries are: Armenia, Australia, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, Fiji, Georgia, Indonesia, Japan, the Laos People's Democratic Republic, Malaysia, Maldives, the Marshall Islands, Mongolia, Myanmar, Nepal, New Zealand, Papua New Guinea, Philippines, the Republic of Korea, the Russian Federation, Samoa, Singapore, Solomon Islands, Sri Lanka, Thailand, Tonga, Vanuatu and Viet Nam.

Figure 2: GHG emissions of the top 10 emitters in the Asia-Pacific region (MtCO<sub>2</sub>e) in 2010, 2030 compared to INDC and NDC commitments

Projections developed for this assessment report show that the expected GHG emissions in the Asia-Pacific region will continue to be too high to achieve the required 45 per cent reductions, from the 2010 GHG emissions levels, to achieve the 1.5°C goal.

Based on the unconditional and conditional, as well as the INDC commitments from the Asia-Pacific member States, there is a collective commitment<sup>5</sup> to reduce an estimated 13.2 GtCO<sub>2</sub>e GHG emissions by 2030, which represents 32 per cent of the total estimated 42.7 GtCO<sub>2</sub>e regional GHG emissions by 2030,<sup>6</sup> as per current climate policy scenario. Growth is projected to reach 50 GtCO<sub>2</sub>e by 2060.<sup>7</sup>

However, even if the Asia-Pacific regional member States adhere to this NDC commitment, the region will not deliver on the recommended reductions of 7 per cent per year for the period 2021-2030.<sup>8</sup> Based on the IPCC recommendation for 45 per cent emission reductions from the 2010 levels<sup>9</sup> to keep the world within the 1.5°C temperature rise, the recommended GHG emissions levels by 2030 for the Asia-Pacific region are estimated to be around 9.8 GtCO<sub>2</sub>e.

5. These include recent policy declarations from the Governments of these countries that have not yet submitted updated NDCs.

6. It is to be noted that these estimates are based on targets derived from the INDC, NDC and updated NDC of the Asia-Pacific member States, which differ methodologically for each document and required specific modifications to be made comparable and uniform.

7. Based on the scenarios developed by Yingying Lu, Jim West, and Heinz Jim, "Asia-Pacific Resource Outlook: Technical Input for the ESCAP Environment Division Flagship Report", (Canberra, CSIRO, 2020). Available at <https://doi.org/10.25919/5efe2eb900fee>

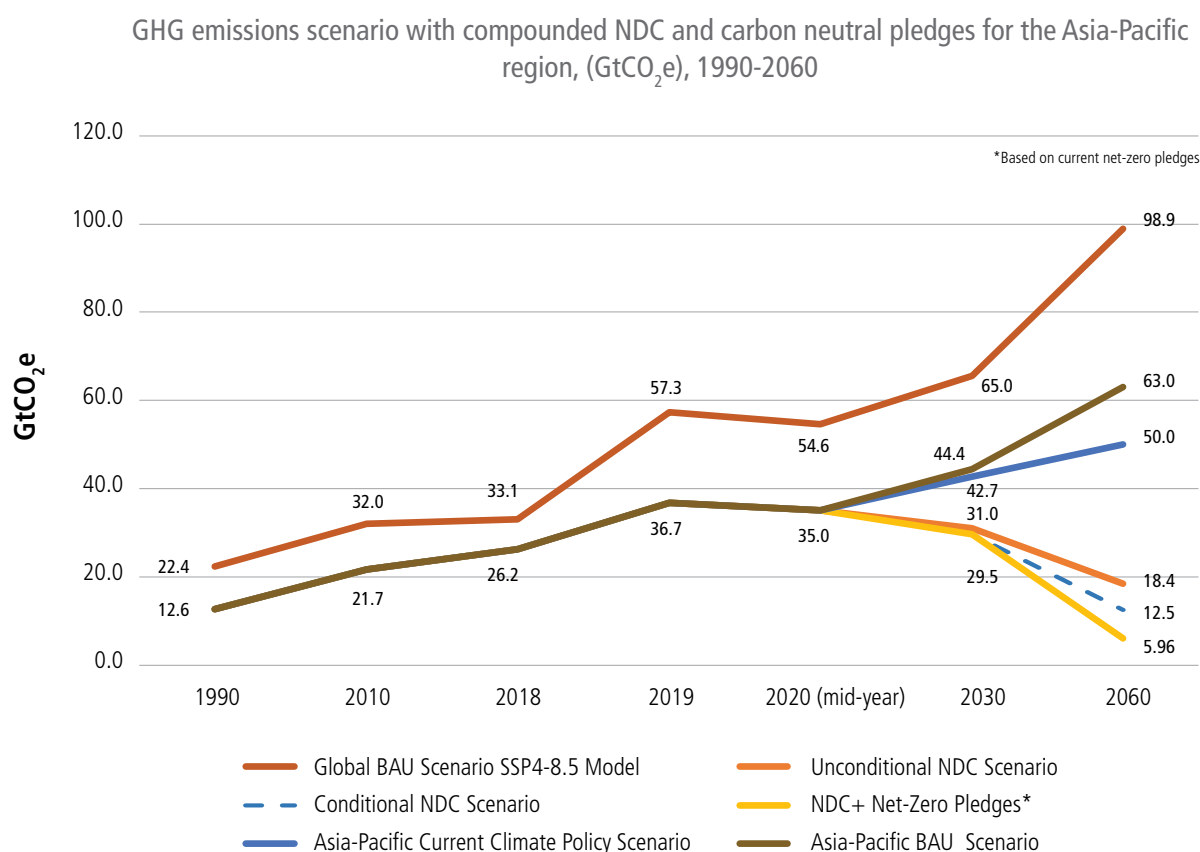
8. United Nations Environment Programme, Emissions Gaps Report 2020, Nairobi.

9. Intergovernmental Panel on Climate Change, "Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change", (Cambridge University Press, 2021). Available at <https://report.ipcc.ch/ar6wg1/index.html>

However, as shown in Figure 3, this benchmark is currently out of reach for the Asia-Pacific region, because of the very low ambition of the current regional INDC and NDC commitments. These commitments are projected to result in an estimated 29.5 GtCO<sub>2</sub>e GHG emissions in 2030, which is a threefold increase from the recommended threshold for that year and represent a 34 per cent growth from the 2010 levels.

Figure 3 also shows the eminent business-as-usual (BAU) scenario for the Asia-Pacific region with GHG emissions rising to 63 GtCO<sub>2</sub>e, when regional countries fail to follow on their NDC commitments and only some limited climate action is taken.

Figure 3: GHG emissions scenario with compounded NDC and carbon neutral pledges for the Asia-Pacific region, (GtCO<sub>2</sub>e), 1990-2060



Source: ESCAP

## Status of carbon neutrality pledges in Asia and the Pacific

Figure 3 above clearly shows that the Asia-Pacific region is at a critical juncture in terms of levels of climate action ambition, challenging the achievement of carbon neutrality by 2050 and GHG emissions neutrality between 2060-2070. Additional carbon neutral pledges, and more ambitious NDC commitments before 2030 and after are urgently needed to embark firmly on a low GHG emissions development pathway.

Some 34 of the Asia-Pacific member States have made carbon neutral pledges for 2050 and 2060. Table 1 provides the categorization of these pledges, which range from being a 'proposed legislation', a 'policy document', 'adopted a law', 'achieved', and those that are 'not yet considered'.

Table 1: Status of carbon neutral pledges of the ESCAP member States, August 2021

Achieved	Adopted a Law	Policy Document	Ongoing Consultations		Not Yet Considered	
Bhutan	Fiji	Australia	Afghanistan	Myanmar	Azerbaijan	Democratic People's Republic of Korea
	New Zealand	China	Armenia	Nauru	Brunei Darussalam	Philippines
	Republic of Korea	Japan	Bangladesh	Nepal	Georgia	Russian Federation
		Kazakhstan	Cambodia	Niue	India	Sri Lanka
		Marshall Islands (The)	Cook Islands	Pakistan	Indonesia	Tajikistan
		Uzbekistan	Kiribati	Palau	Iran (Islamic Republic of)	Thailand
		Malaysia	Lao People's Democratic Republic	Papua New Guinea	Kyrgyzstan	Turkey
			Maldives	Samoa	Mongolia	Turkmenistan
			Micronesia (Federated States of)	Singapore	Viet Nam	
			Timor-Leste	Solomon Islands		
			Tonga	Tuvalu		
			Vanuatu			

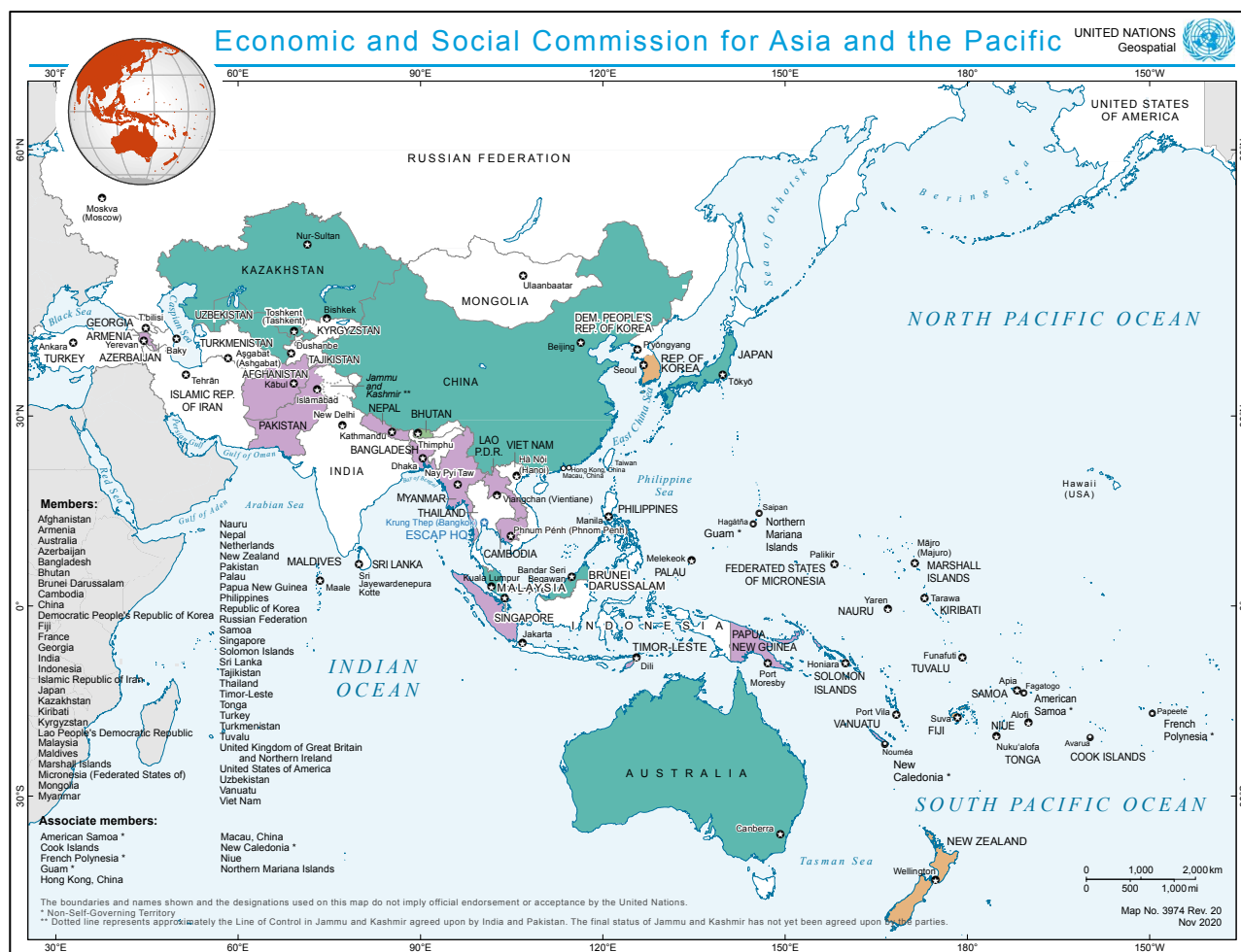
Note: Cook Islands and Niue are associated members of ESCAP

Bhutan is one of the two first carbon neutral countries in the world,<sup>10</sup> while the Maldives has set an ambitious carbon neutrality target for 2030. New Zealand has issued a decree on its carbon neutrality pledge, while the Governments of the Republic of Korea and Fiji have submitted a proposed legislation to their national parliaments. Australia, China, Japan, Kazakhstan, Malaysia, Marshall Islands and Uzbekistan have issued policy documents about their carbon neutrality pledges.

Figure 4 illustrates the carbon neutrality pledges by the 34 Asia-Pacific member States and associated members. These 12 countries emitted 21.1 GtCO<sub>2</sub>e in 2019, which is the year of the highest GHG emissions for the Asia-Pacific region, representing a sizable 57 per cent of the regional emissions in that year. Furthermore, these countries have pledged in their NDCs a total of 9.0 GtCO<sub>2</sub>e emissions reductions by 2030, which represents 66 per cent of the regional NDC commitments. This provides a good start for these countries to achieve their carbon neutrality pledges by 2050.

10. Omri Wallach, "Race to Net Zero: Carbon Neutrality Goals by Country", Visual Capitalist, 8 June 2021. Available at <https://www.visualcapitalist.com/race-to-net-zero-carbon-neutral-goals-by-country/>



Figure 4: Map of Asia-Pacific member States with carbon neutrality pledges at various stages<sup>11</sup>

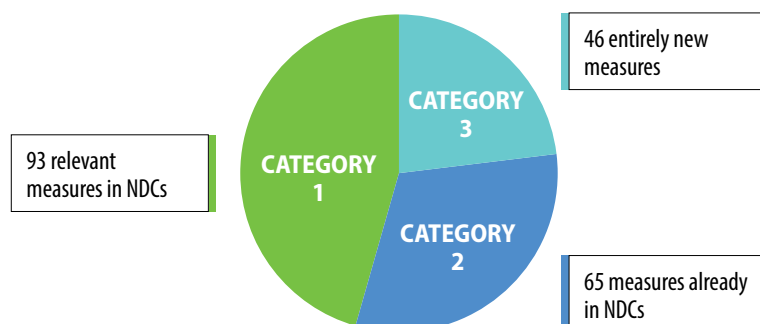
## Building forward better with green post-COVID-19 recovery

Countries in the Asia-Pacific region need to develop more ambitious climate mitigation and adaptation commitments in the next review and update for their NDCs scheduled for 2025, especially in terms of building forward better after COVID-19.

During 2020, Asia and the Pacific countries introduced 111 new “green recovery” measures in six different sectors. 58 per cent of these 111 new measures were contained in the NDCs prior to the COVID-19 pandemic. Thus, the COVID-19 crisis neither derailed nor accelerated these actions.

11. The map is developed based on the data for the ESCAP member States from the global assessment provided by Omri Wallach, “Race to Net Zero: Carbon Neutrality Goals by Country”, Visual Capitalist, 8 June 2021. Available at <https://www.visualcapitalist.com/wp-content/uploads/2021/06/Race-to-Net-Zero-Carbon-Neutral-Goals-by-Country-Full-Size.html>

Figure 5: Three categories of “green measures”



Source: ESCAP

Also, 19 countries in the Asia and the Pacific region had introduced one or fewer “green recovery” policies, at all levels of income, although the largest emitters in the region; India, China and Japan, all were taking action.

However, there were inconsistencies, across countries in the region, between the implementation of their COVID-19 recovery policies and their NDC policies. That is, though some countries in the region implemented new COVID-19 policies fairly decisively, the lack of NDC-related sectoral policies indicated that their governments or citizens lacked some understanding of the urgency and the need for more ambitious climate action. For other countries, it was found that NDC policies were not mainstreamed or discussed with sectoral ministries, even though NDC policies that could be used as COVID-19 response measures were present. Finally, countries that neither had nor implemented COVID-19 or NDC policies in the sectors indicated a lack of financing or governmental capacity.

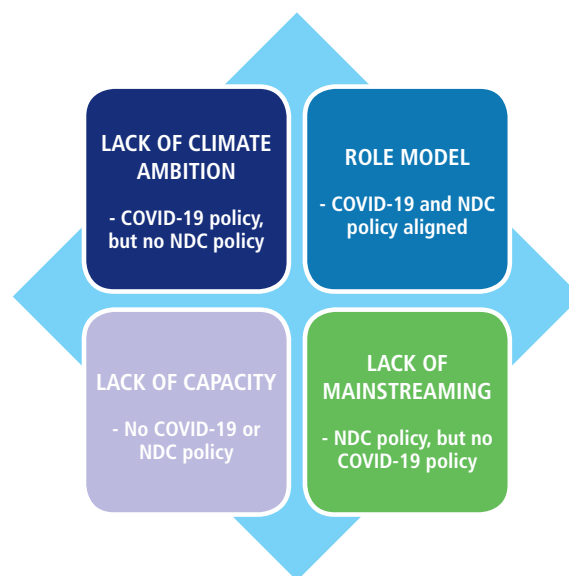
Thus, increased focus towards building forward better with a green COVID-19 recovery is essential. In particular, investments into nature-based solutions, including the restoration of coastal, terrestrial and ocean ecosystems, promises a greater reduction in CO<sub>2</sub> emissions. In the short term, member States can align current NDC commitments with green post-COVID-19 recovery and develop Long-Term Low Emission Development Strategies to support their implementation.

## Assessing levels of national climate ambition and enabling factors

While NDCs and overall emission reduction targets are developed as the key means for countries to express their ambition, each economy is different, and transformation of economies can take place through various interrelated actions. Furthermore, there are some specific policy measures - such as carbon taxes or emissions trading - that once in place can enable a steep ramping up of ambition, and others that hinder ambition – such as fossil fuel subsidies. These are all critical to understand.

In this report ambition aspirations at the country level were scored through 6 indicators, which are supported by 4 indicators measuring status of the national enabling environment. Then the scoring of all the 49 Asia-Pacific member States were compared on an equally-weighted basis to visualize which countries have advanced and which countries need to do better. The six indicators selected

Figure 6: Four categories of Asia Pacific countries’ “green recovery” from COVID-19 during the COVID-19 pandemic





to measure ambition providing a basis for a holistic analysis of NDCs, pledges and actions beyond NDCs include: carbon neutrality pledges, timeline of peaking carbon emissions, precise national level targets, levels of decarbonization of primary sectors, introduction of carbon prices, and lack of subsidies for fossil fuels. The results of combining the analysis of these six indicators by country shows that the majority of Asia-Pacific economies fall into the “emerging slowly” category when it comes to ambition.

The report also takes a closer look at the enabling factors that can support a more ambitious climate action. The enabling factors are assessed through four indicators mainstreaming climate change into laws and policies, allocation of financial resources (including sectoral budgets to support NDC targets), horizontal and vertical coordination mechanisms (including for local governments and the private sector), and monitoring capacity through transparency measures. It is important to note that gender mainstreaming is integrated within each of the enablers.

The two sets of scores are then used to derive a matrix to understand the relationship between ambition and enabling factors in the region. Figure 6 provides the combined ranking of countries in the Asia-Pacific region according to their ambitions and enabling levels. Figure 7 demonstrates that more countries in the Asia-Pacific region have advanced in developing enabling conditions but have not taken full advantages of those national frameworks to drive-up their climate action ambition. With a little push, including innovative financial mechanisms and investment approaches, those countries will be able to drive forward higher commitments to low greenhouse gas emissions development.

These indices were analysed against income (GDP), CO<sub>2</sub> emissions and population, however the results the correlation showed that ambition is not determined by income, by population or current emissions, and that higher ambition is not a privilege of the high-income countries in the region as shown in Figure 7. There are several countries that have high income and low ambition, and several that are have low income, however, demonstrate higher ambition.

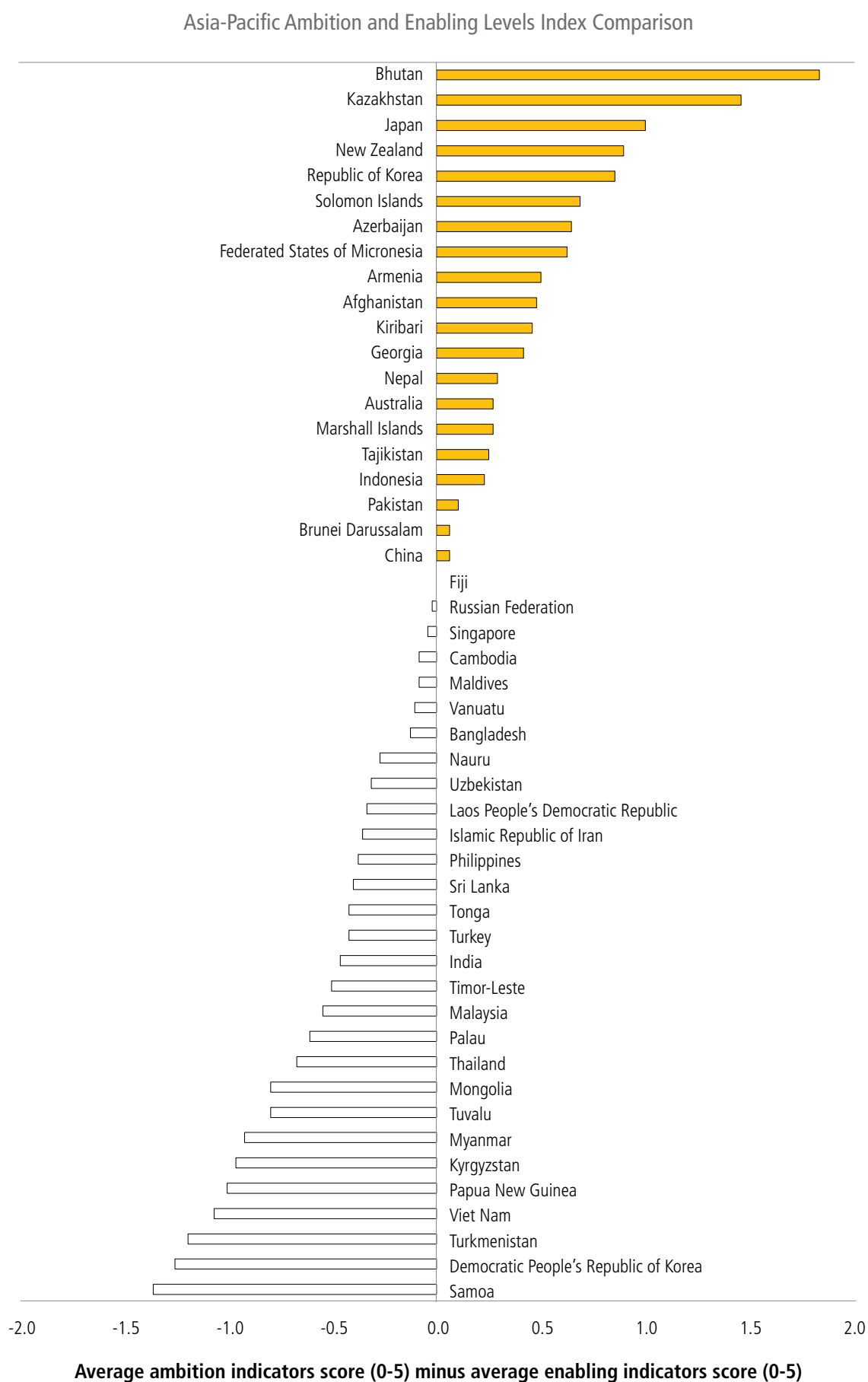
The Solomon Islands, Kazakhstan and the Republic of Korea, have an abundance of ambition in comparison to the level of their enabling factors. However, these are also countries with both high and low-incomes, with large and smaller land-coverage and varying populations densities. These countries could be described as the most “ambitious”, relative to their enabling factors and with a small push would be able to commit to higher level GHG emissions reductions strategies.

Singapore, India, China, and Indonesia have developed very solid enabling conditions but are among those countries categorised with insufficient “ambition” and did not take advantage of their institutional and policy frameworks to drive-up their ambition to the full potential.

Most countries in the region, and at all levels of income, have an abundance of enabling conditions to help drive up their climate ambition, for example, Cambodia, Malaysia, and Bangladesh. These countries, though being most ready to forge ahead with high mitigation commitments, have been modest in their planned GHG emissions reductions.

Countries, such as the Democratic People’s Republic of Korea, Turkmenistan, Kiribati, the Marshall Islands, Nauru and Brunei Darussalam have not managed to develop their enabling conditions to the fullest, which has also prevented them to demonstrate higher ambition.

Figure 7: Asia-Pacific Ambition and Enabling levels Index Comparison



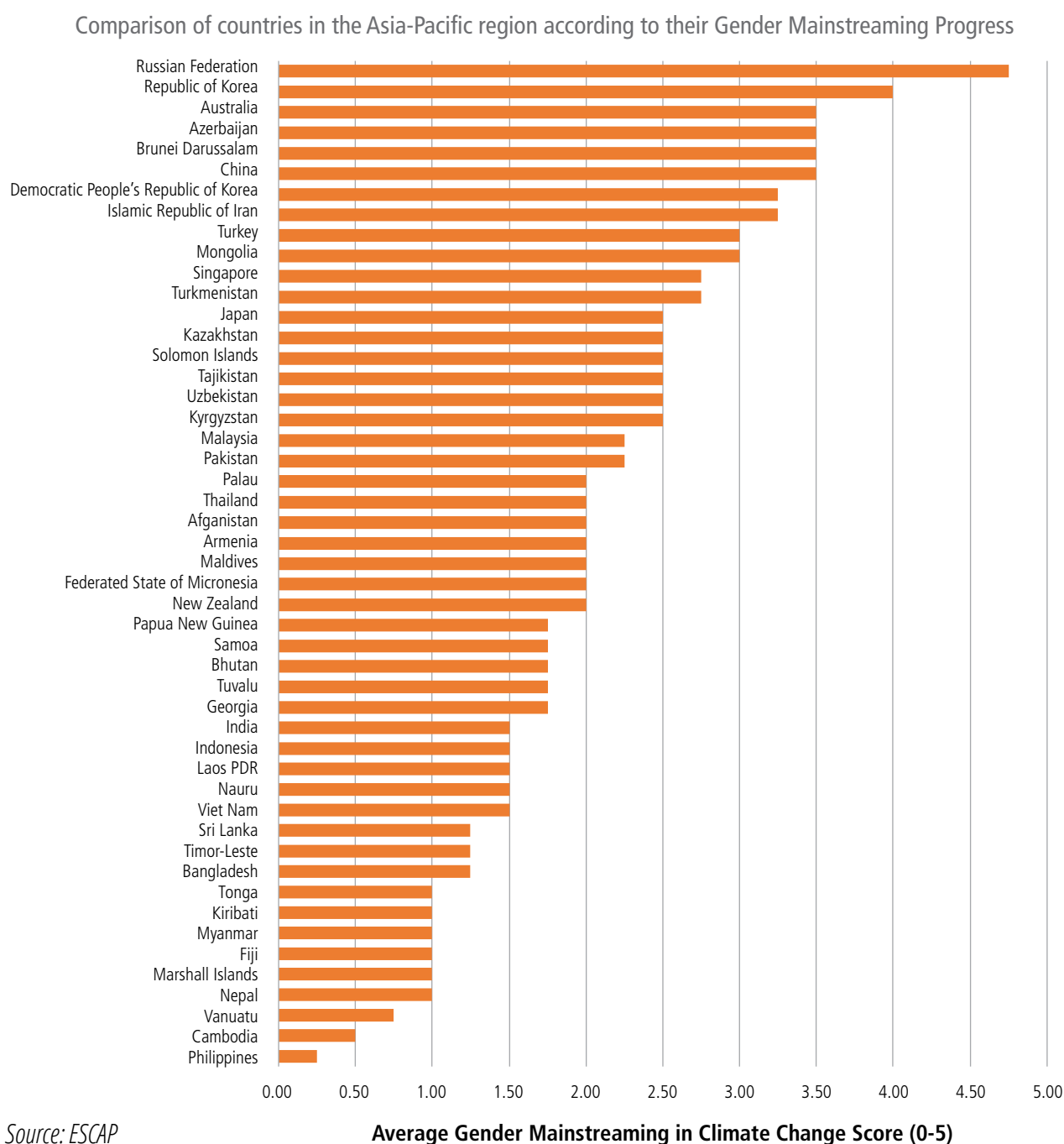
Source: ESCAP

## Mainstreaming gender within INDCs and NDCs

This report also analyses the role of gender mainstreaming in NDCs and climate action commitments. Those who are most impacted by global change are often the ones who already experience many forms of socioeconomic discrimination, especially women. This assessment report provides an innovative review of gender mainstreaming as an enabling factor for climate action and suggests steps for enhancing that.

Across the board, gender mainstreaming is crucial to driving ambitious climate action policies, while increasing adaptive capacities and safeguarding the needs of the most vulnerable. Some countries lead the way in mainstreaming gender into climate change action, as shown in Figure 8. The Philippines, Cambodia and Vanuatu, in particular, stand out for their progress, while countries, such as the Republic of Korea and China could improve significantly, given their leadership positions globally.

Figure 8: Comparison of countries in the Asia-Pacific region according to their Gender Mainstreaming Progress



Source: ESCAP

Integrating gender into climate action plans brings about sustainable development co-benefits along with the application of a human-rights based approach, thus creating synergies with climate action policy frameworks, including enhancing adaptive capacities while safeguarding the needs of the most vulnerable.

## Recommendations to drive-up climate ambition

The report offers the following recommendations for strengthening and significantly increasing the Asia-Pacific climate ambition, based on the analysis of the current NDC commitments national ambition and enabling factors. It is critical for the Asia-Pacific member States to:

- ✓ **Commit firmly to implementing the current, even if low ambition commitments of the updated nationally determined contributions;**
- ✓ **Undertake a critical review of the greenhouse gas emissions trajectories based on the current NDC commitments and develop appropriate greenhouse gas emissions scenarios to significantly raise the ambition of the second and revised nationally determined contributions during the stocktaking process;**
- ✓ **Adhere to and follow through on carbon neutrality pledges;**
- ✓ **Put a price on carbon and apply carbon pricing instruments to generate revenues and create the fiscal space that can support a shift towards low-carbon and no-carbon energy sources;**
- ✓ **Commit to freezing the expansion of coal-based capacities and phasing out existing capacities in defined timeframes;**
- ✓ **Align COVID-19 recovery with nationally determined contribution targets and commitments, and with implementation of the 2030 Agenda and long-term low emissions development strategies;**
- ✓ **Increase efforts under all four enabling factors - especially coordination and transparency (Measurement Reporting and Verification) that will support higher ambition; and strengthen gender mainstreaming, ensuring more equal, inclusive and effective climate outcomes;**
- ✓ **Further assess any COVID-19 recovery measures for their climate compatibility;**
- ✓ **Share best practices and lessons learned, including for investments in nature-based climate solutions with all stakeholders at the local, national, and regional levels to build a stronger case for decisive climate action and policy measures from the whole society.**

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