



Nationally Determined Contributions (NDC)  
Global Outlook Report 2021

# The State of Climate Ambition



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## Acronyms

AFOLU	Agriculture, Forestry and Other Land Use
AOSIS	Alliance of Small Island States
BAU	Business as Usual
CO <sub>2</sub>	Carbon dioxide
COP	Conference of the Parties
FACS	Food and Agricultural Commodity Systems
FAO	Food and Agriculture Organization
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Greenhouse gas
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
HLDE	High-level Dialogue on Energy
IEA	International Energy Agency
ILO	International Labor Organization
IPCC	Intergovernmental Panel on Climate Change
IRENA	International Renewable Energy Agency
ITMO	Internationally Transferred Mitigation Outcomes
IWRM	Integrated Water Resource Management
LDCs	Least Developed Countries
LEDS	Low Emission Development Strategy
LTS	Long Term Strategy
LULUCF	Land-Use Change and Forestry
MRV	Measurement, reporting and verification
NAP	National Adaptation Plan
NBS	Nature-based solutions
NDC	Nationally Determined Contribution
OECD	Organization for Economic Co-operation and Development
REDD+	Reducing Emissions from Deforestation and Forest Degradation
SDG	Sustainable Development Goals
SIDS	Small Island Developing States
SLCPs	Short-Lived Climate Pollutants
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children's Fund

# Foreword

Climate change is the greatest challenge of our time: a crosscutting, multidimensional threat multiplier. The most recent Intergovernmental Panel on Climate Change (IPCC) report confirms that climate change is now rapid, intensifying, and widespread. The United Nations Children's Fund's (UNICEF) first children's climate risk index estimates that roughly one billion children – nearly half the world's 2.2 billion children – live in countries extremely vulnerable to climate change's impacts. Cumulatively, this signals a moment of reckoning for humanity.

We are in the race of our lives, with only days remaining until new climate talks begin under the United Nations Framework Convention on Climate Change (UNFCCC) 26<sup>th</sup> Conference of the Parties (COP26). We must secure consensus from all countries to keep the 1.5-degree Celsius (°C) goal within reach and we must also ensure adequate support is in place for all countries to respond to growing climate impacts, ultimately to maintain hope in our shared future on our blue planet.

It is heartening to see in this report that there is a recognition of the climate crisis. The majority of countries are doing their part. Multilateralism is working. The Paris Agreement's ratchet mechanism is working – even though there is much more that we must do.

The COVID-19 pandemic has however overwhelmed States' capacities, just when they were needed most to address our climate priorities. Without global solidarity and innovative solutions to tackle COVID-19's impacts, all countries risk losing hard-won development gains, as well as losing the chance to develop the capacities needed to urgently act for our planet's climate health.

While the UNFCCC is the primary international, intergovernmental forum for negotiating the global response to climate change, the United Nations General Assembly has a critical role in creating a space to foster political consensus, raise awareness, give strategic direction to the United Nations system and forge multi-sectoral partnerships among the broader global community for the scale and breadth of ambition needed to secure humanity's future.

Therefore, we find much that is useful in this report in terms of where we need to direct our energies. The report shows that one area where we can all improve is ensuring that just transition efforts are the centrepiece of climate action. We will not achieve the transformational change required unless we have the buy-in of the private sector and workers.

The report demonstrates that countries have made deliberate and concerted efforts to engage policymakers, the private sector and citizens through whole-of-government and whole-of-society approaches. It is also pleasing to note the efforts being made to reach out to youth, who are rapidly becoming disaffected by our climate inaction.

The report makes clear – as we have always known – that finance remains a hurdle for climate ambition. But this barrier can be easily resolved if we recognise and treat climate change as the crisis that it is.

A loss of hope in climate action is at an all-time high globally, especially among youth. A sustained sense of despair, leading to public apathy and inaction, would not augur well for humanity's future, especially at this turning point that will determine our future for the decades to come.

This report recognizes that there is broad commitment to the notion of planet, prosperity and people, but now we need the political will for a transformational climate action that will create the pathway for a cleaner, greener and bluer planet.



**His Excellency Mr. Abdulla Shahid**  
President of the 76th Session of the  
United Nations General Assembly

# Foreword

In 2019, the United Nations Development Programme (UNDP) and the UNFCCC set out to examine the world's intended level of ambition for tackling climate change. The resulting report, *The Heat Is On*, stated that 2020 would be a pivotal year to galvanise support for bold climate action so that greater ambition would be locked-in as quickly as possible. "In order to reach net-zero carbon dioxide (CO<sub>2</sub>) emissions by 2050, decisions need to be taken and enacted within the next two years," it argued.

This 2021 NDC Global Outlook report examines how far the world has progressed on this climate ambition. Despite many challenges, it demonstrates that there are many reasons to be hopeful for the future.

The number of countries that have enhanced their Nationally Determined Contributions (NDCs) or intend to do so – by strengthening greenhouse gas emission reduction targets and/or adaptation goals – rose from 75 countries in 2019 to 178 in 2021. And most countries have abided by the key principle to submit increasingly ambitious NDCs every five years. The Paris Agreement's "ratchet mechanism" is working.

UNDP has been the heartbeat of the NDC enhancement process in developing countries across the world. In 2019, it made an ambitious pledge to support at least 100 countries to enhance their NDCs through our Climate Promise. In 2021, 120 countries and 35 partners are now part of the Climate Promise, the world's largest offer of its kind.

As a result of this support, governments are taking increasingly bold steps to decarbonize and take decisive climate action. Indeed, the COVID-19 pandemic has prompted a radical re-think of deeply ingrained approaches. Consider Lao PDR, for instance, which is using its NDC to create a circular economy that will help to "design out" pollution and shape a low-carbon future. Countries such as Nigeria, Tunisia, Serbia, Chile, and Indonesia are promoting closer linkages between COVID-19 recovery and climate ambition. Over 70 countries are leveraging their enhanced NDCs to un-lock new investments in key areas like health, edu-

cation, clean energy, food and agriculture and nature. And countries are using the NDC revision process to innovate. Bolivia, Ecuador, Honduras, and Paraguay are exploring carbon market opportunities for the forest sector, for example.

The next phase of the Climate Promise, From Pledge to Impact, will increase our support to countries to accelerate the implementation of their NDCs. That involves boosting the connection between NDCs, sustainable development plans, and credible net-zero pathways. UNDP will also continue to innovate and explore, using tools like the *Peoples' Climate Vote* to engage more people on climate solutions. And we will scale-up our ability to share solutions amongst countries to drive forward an equitable and just transition.

On behalf of UNDP, I would like to express my sincere gratitude to the NDC Partnership and its implementing partners, our UN partners including UNFCCC, the UN Environment Programme (UNEP), the Food and Agriculture Organization (FAO) and the International Labour Organization (ILO), as well as the International Renewable Energy Agency (IRENA). I would also like to thank the European Union, Germany, Sweden, Spain, and Italy – early investors in this work – alongside emerging partners including Belgium and Iceland, as well as UNDP's core financing partners who make this work possible.

The initiatives and solutions detailed in the 2021 NDC Global Outlook report demonstrate that countries and communities across the globe are now taking up the baton for decisive climate action. With the Sustainable Development Goals helping to guide us out of this climate crisis, the entire UN family and its partners will continue to offer the level of support that is needed at this crossroads for people and planet.



**Mr. Achim Steiner**  
UNDP Administrator

**“This 2021 NDC Global Outlook report examines how far the world has progressed on this climate ambition. Despite many challenges, it demonstrates that there are many reasons to be hopeful for the future.”**



# Executive summary

Against a backdrop of increasing scientific concern and public awareness about the climate crisis, UNDP set out to review if policymakers were keeping the promises they made in 2019 when the global state of climate ambition was assessed with UNFCCC in the first NDC Global Outlook report, *The Heat is On*. We were curious. *Is the Paris Agreement working? And if yes, then who is doing the work? Which countries are leading the way on ambition – and which ones are falling behind?*

UNDP had also launched the *Climate Promise* initiative at the UN Climate Ambition Summit in September 2019 as a commitment to ensuring that lack of funds and/or capacity would not be a barrier for any developing country that wished to prepare a more ambitious national climate pledge, or NDC. The *Climate Promise* quickly became the world's largest offer of support to countries for the NDC revision process.

At that time, there was no warning that the world would soon be facing a global health pandemic and that UN climate negotiations would be postponed a full year to November 2021 in Glasgow. But even as countries began to indicate that they would miss the original UNFCCC deadline of December 2020 for submission of so-called “second-generation” NDCs, the intentions of *Climate Promise* countries to submit more ambitious climate pledges kept growing.

The key findings presented here unpack the concept of “ambition” against reality on the ground, drawing upon UNDP analysis and experience in *Climate Promise* countries. Do higher-quality NDCs result in more ambition? Do more inclusive approaches to NDC revision lead to greater ambition? Did the COVID-19 pandemic impact countries' intentions? And what opportunities emerging to accelerate NDC implementation? For more information on the analytic approach used, please refer to the [Methodology](#).

## The Paris Agreement’s “ratchet mechanism” is working ...

On the surface, the overall global trend of climate ambition appears promising. A key principle of the Paris Agreement adopted in 2015 was that nations would “ratchet up” their efforts to combat climate change every five years. The aim is to demonstrate a progression beyond the previous pledge, and to reflect a country’s “highest possible ambition.”

Figure 1. Ladder of ambition 2019 vs 2021

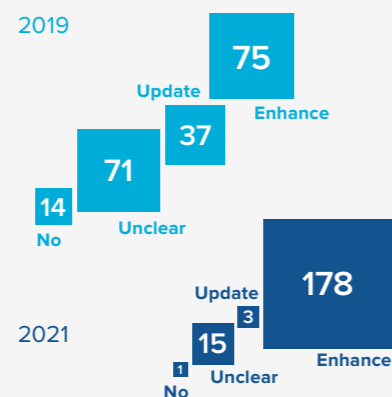


Figure 1 compares global ambition intentions in 2019 to 2021. The number of countries intending to enhance their NDCs – either by increasing their GHG emission reduction targets and/or by strengthening their adaptation goals – rose from 75 countries in 2019 to 178 in 2021. In 2019, 37 countries planned to update without raising ambition – ultimately, only three have done so. The unclear and/or no information category fell from 71 countries in 2019 to 15 in 2021, showing that even amidst one of the most devastating global health crises, countries continued to define their climate pledges. Finally, the number of countries with no intention to submit currently stands at only one, compared to 14 in 2019, many of which included some of the world’s major emitters.

Another positive trend is the increasing ratification of the Paris Agreement: Angola, Kyrgyzstan, and Lebanon ratified the Paris Agreement in 2020 and South Sudan and

Turkey in 2021, while Iraq is well-advanced towards that aim. This leaves only four countries out of 197 still pending: Eritrea, Iran, Libya, and Yemen. For all UNFCCC ratification dates, see [here](#).

## NDC submissions are strongly aligned to UNFCCC deadlines

The COVID-19 health pandemic left most countries grappling with the timing of their NDC submissions, as government priorities shifted to minimizing the economic fall-out and human impact of a world in lockdown. Despite this major challenge, as of 12 October 2021, 143 countries had submitted second-generation NDCs to the UNFCCC (including four interim NDCs) – a significant increase from the two that had submitted by September 2019. It is anticipated that 38 more countries will submit NDCs by the end of 2021, with the majority still aiming to do so by the COP26 negotiations in Glasgow in November. As shown in Figure 3, this would bring the total number of submitted second-generation NDCs to 181 – representing 92% of all Parties to the Paris Agreement.

The timing of NDC submissions aligns strongly with deadlines established by the UNFCCC for inclusion of NDCs in the NDC synthesis report. At the end of 2019, four countries had submitted second-generation NDCs, but by December 2020 – which was when COP26 was initially expected to take place – 67 more countries had made submissions, of which 84% were submitted in Q4. Similarly, in 2021, 40 countries submitted NDCs (excluding interim submissions) by the UNFCCC deadline of 30 July for inclusion in its synthesis report and an additional 32 countries made a 12 October deadline to be included in an update to the report.

## ... but the world needs even greater ambition and faster action

The updated ladder of ambition for 2021 (Figure 2) shows the potential significance of having 90% of the world submitting, or planning to submit enhanced NDCs to the UNFCCC. In total, these 178 nations are responsible for nearly 80% of global GHG emissions. Figure 2 unpacks country intentions further by examining whether these 178 countries are pledging to raise mitigation ambition – that is, are outlining commitments in their NDCs to curb their emissions of the GHGs that cause global warming – or more focused on ramping up their plans to adapt and become more resilient to climate impacts. As shown, 90% have raised mitigation ambition, or plan to do so, while 97% are incorporating stronger adaptation goals. A small subset have focused solely on strengthening either miti-

Figure 2. Ladder of Ambition 2021

Source: UNDP

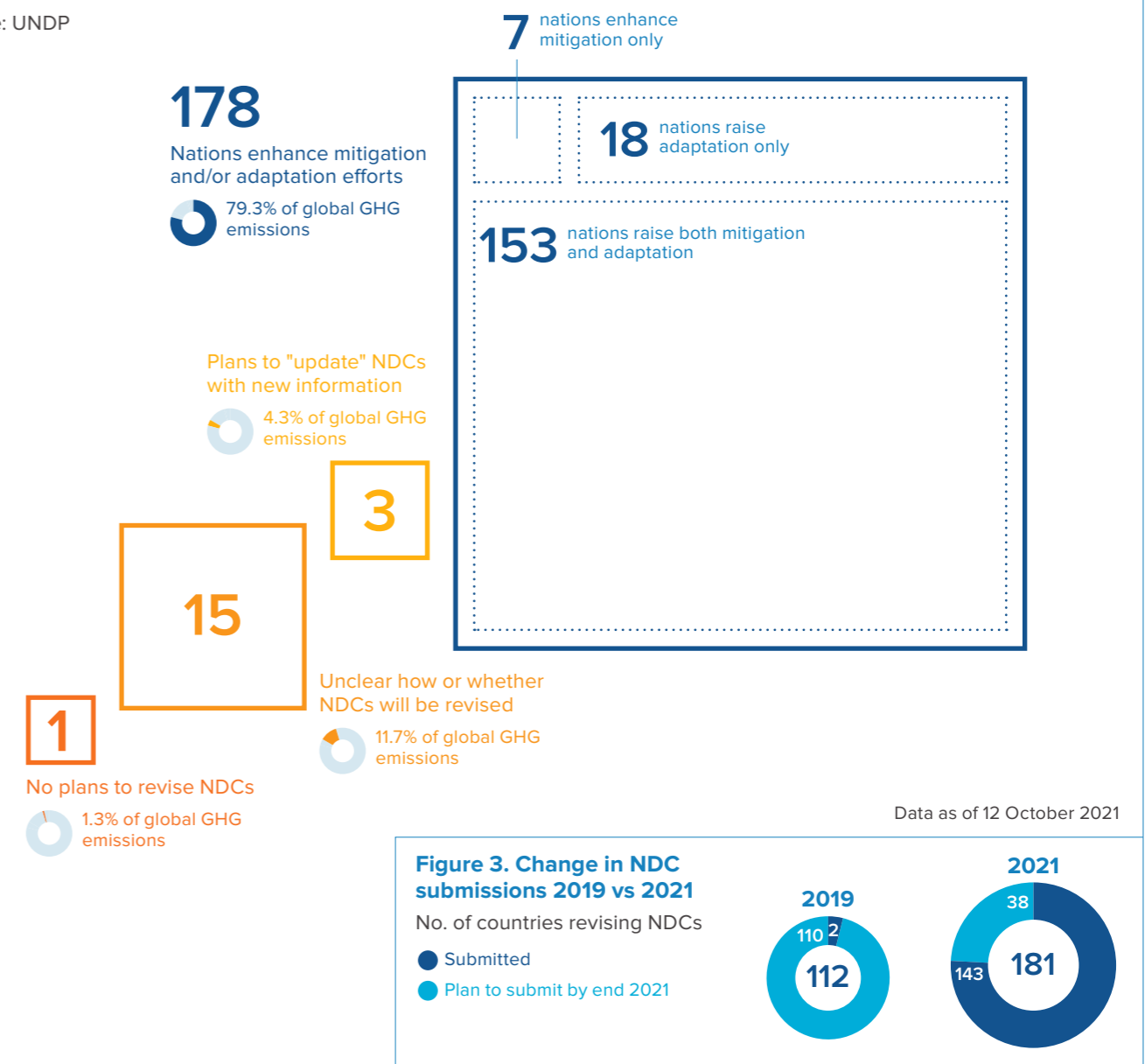
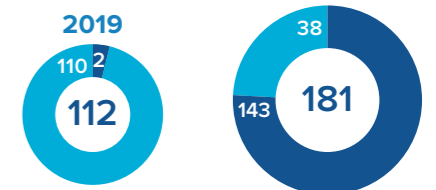


Figure 3. Change in NDC submissions 2019 vs 2021

No. of countries revising NDCs

- Submitted
- Plan to submit by end 2021



gation or adaptation plans, but not both. Figure 2 also shows that the three countries that are updating their climate pledges but not raising ambition represent only 4.3% of global GHG emissions. As of 12 October, only one higher-emitting country had not signalled any clear plans to submit an enhanced NDC. For the remaining 15 countries where intentions are unclear, or no information is currently available (representing 11.7% of global GHG emissions), there is still a possibility that more ambitious NDCs could be put forward.

Nonetheless, despite this progress the latest analyses of NDCs reveals that much greater ambition is needed across the board. The UNFCCC (2021) reports that global emissions will be 16% higher in 2030 than they were in 2010 based on current climate pledges – far from the 45% reduction by 2030 needed to limit warming to 1.5°C. UNEP (2021) similarly acknowledges

that while countries show some progress in their new climate pledges, the aggregate effect on global emissions is disappointing.

## Climate ambition is nuanced and context specific

However, beneath the surface of these promising trends lies a more nuanced picture of climate ambition. This report dives into what ambition looks like through the lens of countries' NDCs and the revision processes that defined them. Specifically, we find that:

- **Vulnerable nations are leading on NDC ambition – the role expected from the G20;**
- **Second-generation NDCs are higher quality, but finance remains a hurdle;**
- **For many countries – but not all – inclusivity drives ambition;**

## ► NDCs can provide a blueprint for sustainable development and green recovery, but countries must lock in this pathway now.

This report makes clear that higher-quality NDCs and more inclusive processes are underpinning ambition goals, but developing countries still require significant support to deliver on their targets. Finance remains a fundamental barrier to NDC ambition and acceleration of climate action in developing countries. Developed economies must therefore address their financial obligations in this context, while the G20 must show much greater leadership by acting urgently and boldly on climate action if the world is to have any hope of achieving the Paris Agreement's global goals. Finally, truly transformational change does not happen without change-makers; those most impacted by the climate crisis – and by climate solutions – must have a seat at the table.

# Introduction

Weeks after investors managing US\$ 41 trillion in assets urged world governments to “race to the top” on climate ambition, Bangladesh announced plans in July 2021 to scrap 10 proposed coal-fired power plants due to criticism from environmentalists and problems finding funds – signalling a major policy shift. Meanwhile, President Xi Jinping declared at the UN’s General Assembly in September 2021 that China will stop building coal-fired power plants abroad. At the same event, Peruvian President Pedro Castillo announced that his government will declare a national emergency on climate change as its commitment to tackling the climate change crisis.

These promising and bold announcements begin to lose their lustre when assessed against the latest climate science. Recent analyses of second-generation NDCs – which represent each country’s latest commitments to combatting the climate crisis since the landmark Paris Agreement was adopted in December 2015 – reveal that far greater ambition is needed across the board even as some positive progress has been made (UNFCCC, 2021; UNEP, 2021).

The UNFCCC finds that global emissions will be 16% higher in 2030 than they were in 2010 based on current climate pledges. Similarly, UNEP found that the newest pledges would reduce projected 2030 emissions by 7.5% – whereas cuts of 30% or 55% are what is needed to limit global warming to 2°C or 1.5°C respectively. Both reports followed on the heels of the IPCC assessment report in August that warned average global temperature was likely to reach or cross the 1.5°C warming threshold within 20 years because of our dependence on fossil fuels unless immediate, rapid, and large-scale action to slash GHG emissions was taken.

We are living in unprecedented times. The world is navigating a triple planetary crisis of climate, nature loss, and pollution. Globally, July ranked as the hottest month in recorded human history. Climate change is now widespread, rapid, and intensifying. From wildfires and floods to

hurricanes and droughts – the impacts of climate change are affecting every region across the globe and being accelerated by unsustainable land use practices, eroding ecosystems, and warming oceans. The challenge we face is that even if emissions are slashed in the next decade, average temperatures could still increase 1.5°C by 2040, and possibly 1.6°C by 2060, before stabilising because of carbon dioxide (CO<sub>2</sub>) concentrations already in the atmosphere. And if the world chooses business-as-usual, the temperature rise could be 2°C by 2060 and 2.7°C by 2100 (IPCC 2021; UNEP 2021).

Yet, we are still dragging our feet – leading the UN Secretary General to announce “code red for humanity”. After an unprecedented 5.4% drop in global CO<sub>2</sub> emissions in 2020 as a result of the COVID-19 pandemic (UNEP, 2021), the International Energy Agency (IEA) forecasts that CO<sub>2</sub> emissions will hit record levels in 2023 – in part due to a 5% rise in coal-fired electricity generation as renewables struggle to keep up with world demand.

## Glass half-empty, glass half-full

The landmark Paris Agreement agreed in December 2015 was the world’s strategy to address global warming – a legally binding international treaty to undertake ambitious efforts to combat the climate crisis and build resilience to its impacts. The primary aim is to limit global warming to well below 2°C, preferably 1.5°C, compared to pre-industrial levels. To achieve this global goal, countries must aim to peak global GHG emissions as soon as possible to reach climate neutrality by 2050.

At the heart of the Paris Agreement are NDCs in which nations describe their country-specific contributions to achieving this global goal. The Paris Agreement works on a “ratchet mechanism,” a cycle of increasing ambition through revised NDCs submitted every five years. Therefore, 2020 was building up to be a landmark year for climate action and the first real test of the Paris Agreement.

Then a global health pandemic put the world into lockdown. The COVID-19 health pandemic left most countries grappling with the timing of their NDC submissions, as government priorities shifted to minimizing the economic fall-out and human impact caused by the pandemic.

Despite this major challenge, the number of new or updated NDCs submitted to the UNFCCC grew from two in September 2019 to 143 submissions as of 12 October 2021 as countries worked hard to get Paris Agreement timelines and processes back on track.

UNFCCC (2021) found that for the group of 143 countries with new or updated NDCs analysed as of 12 October 2021, GHG emissions were projected to decrease by 9% in 2030 compared to 2010 levels. But while heading in the right direction, it is still far short of the 45% slash in GHG emissions by 2030 that is required to reach net zero emissions by 2050. The report also suggested that full implementation of all NDC components – including those that will be financed by domestic public finance (known as unconditional targets) as well as those reliant on international support (or conditional targets) could allow for global emissions to peak before 2030.

The old adage of “follow the money” remains true for climate ambition. As this report reveals, most developing countries are willing to take bolder climate action – but their ambition can only be realized through significant scaling up of investments.

Developed nations have a responsibility under the Paris Agreement to deliver \$100 billion a year in climate finance by 2030. But new data from Oxfam and the Organization for Economic Co-operation and Development (OECD) shows that wealthier nations are falling short and will continue to miss their target – meaning that climate-vulnerable countries will face a shortfall of between \$68 billion and \$75 billion in total over a six-year target period. Meanwhile, an astounding \$423 billion is being spent annually to subsidise fossil fuels (UNDP, 2021). This is four times the amount being called for to help poor countries tackle the climate crisis – one of the biggest sticking points in the UN climate negotiations that will recommence in Glasgow in November 2021.

## Creating impact with UNDP’s Climate Promise

UNDP sees climate change as a major threat to the Sustainable Development Goals and the organization’s mandate to support them. The *Climate Promise* was launched in the margins of the UN Climate Action Summit in September 2019 with a

simple objective: to support any developing country wishing to enhance its NDC in the lead-up to COP26. By leveraging a Country Office network on the ground in 170 countries and territories, an extensive climate change portfolio, and global policy expertise, UNDP was able to offer support to 120 countries around the world – making the initiative the world’s largest offer of support to the NDC revision process. The *Climate Promise* support offering is under-

pinned by quality criteria focused on core principles of inclusion and ownership, robustness, and feasibility in NDC design.

Recognising the collaborative principles of the NDC Partnership, the *Climate Promise* has been working with over 35 partners to coordinate technical and financial NDC revision support to countries – for example, partnering with IRENA on renewable energy, UNEP on nature-based solutions and

resource efficiency, FAO on agriculture and land-use, and Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ) on measurement, reporting and verification (MRV) and adaptation. The initiative is funded by Sweden, Germany, the European Union, Italy, Spain, and other core donors.



## ANTIGUA AND BARBUDA

### Transitioning from fossil fuel to green energy will offer new job opportunities

Better than any other country in the world, Antigua and Barbuda is fully aware that taking action against the harmful effects of climate change is urgent. The country is still recovering from the economic and social fallout caused by the devastating Hurricane Irma that, in 2017, directly hit Barbuda and resulted in the destruction of 95% of all infrastructure on the island.

To advance climate-resilient development without wasting time, the government has scaled up its revised NDC targets on a rapid transition to a clean, fossil fuel free economy. It proposes to reach 86% renewable energy generation from local resources in the electricity sector by 2030 and 100% of new vehicle sales to be electric vehicles by 2030.

Transitioning to green technology will imply significant moves. For instance, the transport sector is currently dominated by imported fossil fuels with 99.7% of all road transport vehicles in the country using gasoline and diesel. “For any single individual, their car is their greatest polluter, so we really want to eliminate that pollution factor”, says Stanley Barreto whose MegaPower company has been selling electric vehicles across the Caribbean since 2013.

The transition to a new energy sector based on Antigua and Barbuda’s solar and wind renewable resources offers sound development opportunities. The country is committed to ensuring a just transition of the workforce through the creation of decent work and quality green jobs as well as skills and capacity building in relevant industries. “There are new opportunities. You still need people to distribute energy, people to provide service. So, you are not eliminating people, you are just transitioning the opportunities to something that is so far better for everybody involved”, explains Barreto.

For the transition to be successful, the government has planned to develop adequate policies to ensure sustainable and socially inclusive growth for all citizens, particularly women.

### Key Finding 1

# Vulnerable nations are leading on NDC ambition – a role expected from the G20

In 2019, when UNDP first explored the state of global climate ambition with the UNFCCC in *The Heat Is On* report, it was noted that many developing countries – especially Least Developed Countries (LDCs) and Small Island Developing States (SIDS) – were looking to review and enhance their national climate pledges known as NDCs, while many developed countries were more focused on preparing longer-term (or “mid-century”) strategies for decarbonizing their economies. Meanwhile, the intentions of a significant number of countries were unclear.

the number of countries globally intending to enhance their NDCs – either by increasing their GHG emission reduction targets and/or by strengthening their adaptation goals – rose from 75 countries (representing 38.2% of global GHG emissions) to 178 (representing 79.3% of emissions). In 2019, 37 countries planned to update their first NDCs without raising ambition – ultimately, only three have done so. The unclear and/or no information category fell from 71 countries in 2019 to 15 in 2021. Finally, the number of countries with no intentions to submit NDCs fell from 14, representing 24.4% of global emissions and some of the world’s major emitters, to only one representing 1.3% of global emissions.

#### SIDS and LDCs remain the collective conscience for global ambition ...

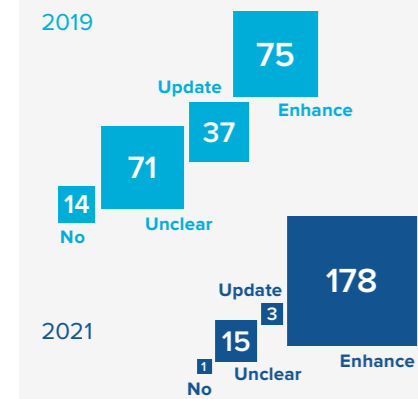
Figure 4 illustrates mitigation ambition intentions of different groups of countries. Out of the 178 countries enhancing their NDCs, 160 have dedicated sections on mitigation, or the key role of cutting greenhouse gas emissions. While a majority of the world have or are likely to raise mitigation ambition, some country groups are doing it at a higher rate than others. What remains clear is that **LDCs and SIDS** – countries that are among the most vulnerable to the impacts of climate change and contribute to only 7% of global GHG emissions – are collectively leading the way on pledging to raise ambition. In 2021, 93% of all SIDS and LDCs have plans to enhance their NDCs (up from 42% in 2019), of which 86% intend to raise mitigation ambition (up from 40% in 2019).

#### ... but they cannot resolve the problem of rising GHG emissions alone

However, far more effort is needed from the **members of the G20**, which are responsible for more than three-quarters of global GHG emissions, more than 80% of global Gross Domestic Product (GDP), and 60% of the world’s population. Only 16 G20 members had submitted revised NDCs as of 12 October 2021, of which five did not strengthen mitigation goals. Of the four G20 countries (China, India, Saudi Arabia and Turkey) that have not submitted revised NDCs by this date, China and Turkey may likely renew their national pledges given the latest political announcements from their leaders, while there is still uncertainty from India. Saudi Arabia recently announced its aim to reach net zero by 2060.

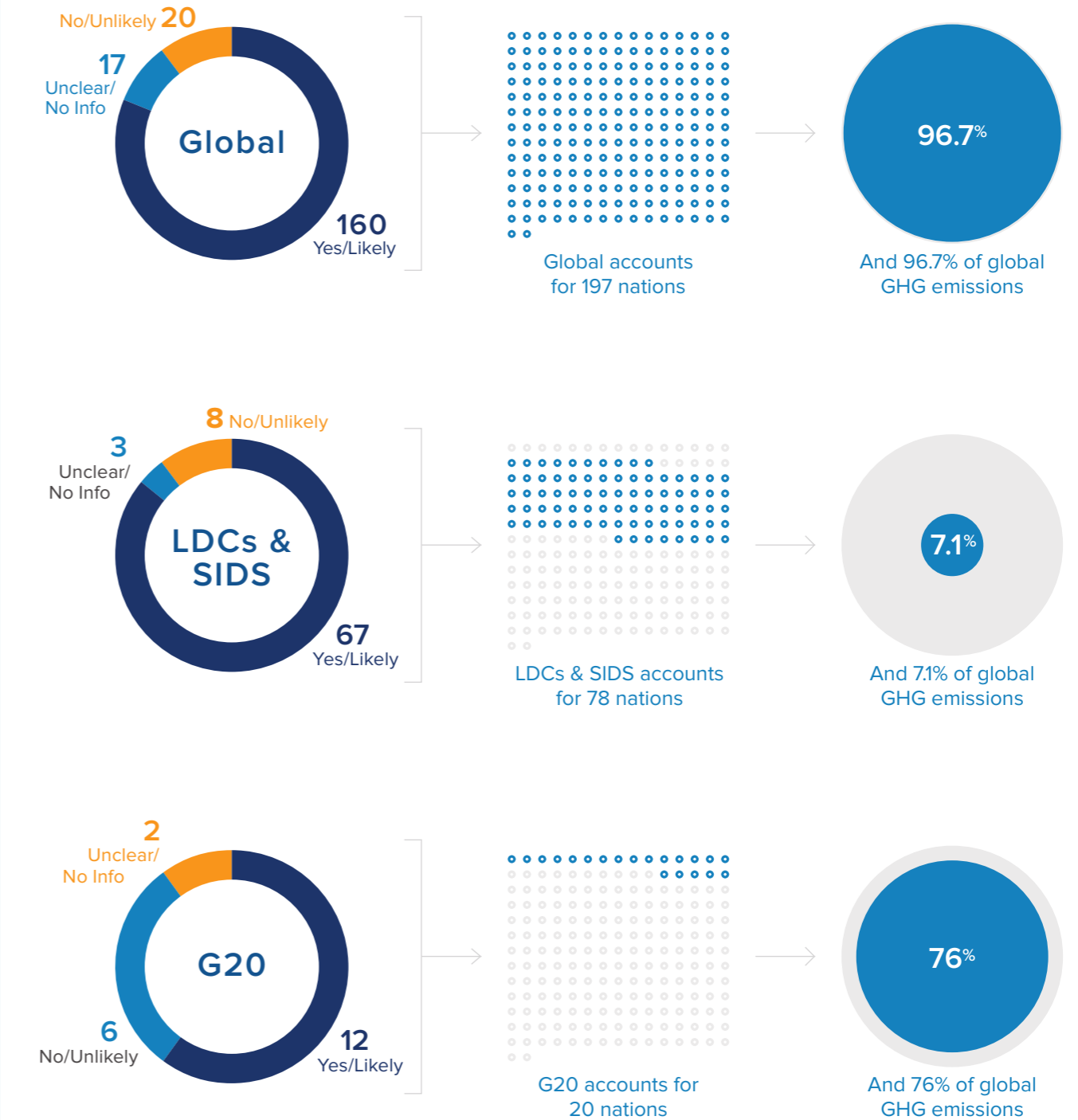
This means that nearly half the G20 are not adhering to the core principles of the Paris Agreement to ratchet up their GHG emissions targets. Even for those that have renewed pledges, more could be done. This has been called for by a [recent independent assessment](#) that all the major economies are off track in their efforts to contribute to containing global warming to 1.5°C above pre-industrial levels.

Figure 1. Ladder of ambition 2019 vs 2021



On the surface, the overall global trend on ambition is promising; 90% of the world has submitted, or is planning to submit, strengthened climate pledges to the UNFCCC (Figure 1). Between 2019 and 2021,

Figure 4. Mitigation Ambition Intention  
Comparison between G20 and LDCs & SIDS



## SOMALIA

### Fighting climate change is the key to ongoing peace and stability

While suffering prolonged periods of political upheavals and civil instability, Somalia is also particularly vulnerable to climate change impacts. Its GHG emissions are minor in comparison to many other countries, but Somalia suffers disproportionately from the climate crisis in the form of regular, and worsening, droughts and floods. Since 70% of its GDP is derived from livestock and agricultural activities, climate plays a key role in Somalia's economy and is crucial for the livelihood of the population.

The government's response to these challenges has been to develop an ambitious updated NDC as an integral part of the country's plans for a more peaceful, stable and prosperous future. As Deputy Prime Minister Mahdi Mohammed stated recently, "conflict and extremism has, to a large extent, been fuelled by the climate crisis and natural resource degradation", and consequently, "addressing climate change is an important step toward achieving peace and stability in Somalia".

Adaptation to climate change and enhancement of resilience is a national imperative. Somalia's second-generation NDC is supporting this challenge by proposing adaptation actions for key sectors such as agriculture and food security, water resources management, public health, and disaster preparedness, among others. The estimated cost of implementing these resilience and adaptation initiatives is \$48.5 billion between 2021 and 2030.

A recent example is the construction of 10 dams in the Shakda district, which the local Commissioner, Abdishakur Ise, believes play an important role in maintaining peace in the area: "The most important thing for human beings is peace," he says, "the second is water." The dams, built by the government with support and funding from UNDP and the Global Environment Facility (GEF), allow local communities and their livestock to access clean water all year long and to manage water shortages during dry seasons and droughts. The same project is also helping camel herders to protect their land and livestock from soil erosion and flash floods. The construction of stone barricades over twenty sites now protects land for nearly 50,000 families.



Photo: UNDP Somalia/Tobin Jones



## CLIMATE PROMISE IMPACT

### Supporting ambition pathways for mitigation and adaptation

Of the 120 countries supported under the *Climate Promise*, 83 had submitted second-generation NDCs as of 12 October 2021. Countries used a range of approaches to raise mitigation ambition and strengthen adaptation goals. In particular, there has been increased focus on adaptation (first noted

as an emerging trend in the 2019 *The Heat is On* report), There are also stronger links to National Adaptation Plans (NAPs), which describe a country's medium and long-term adaptation needs and implementation strategy.

#### Climate Promise by the numbers



**28**  
Small Island Developing States (SIDS)

**14**  
Higher Emitters

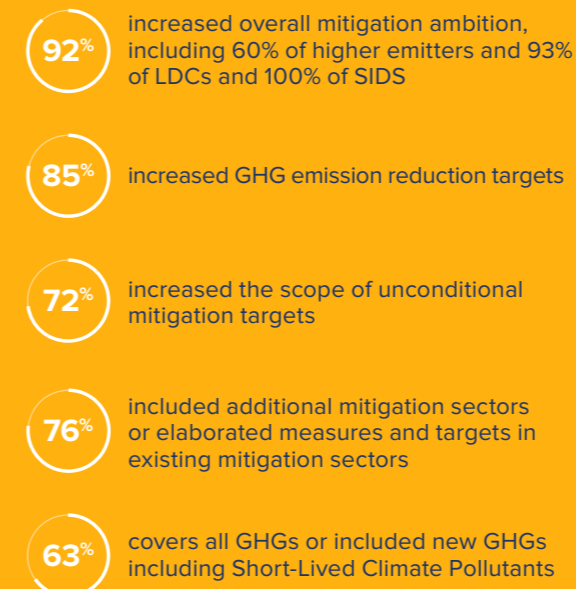
**40**  
Least Developed Countries (LDCs)

**47**  
in Fragile Settings

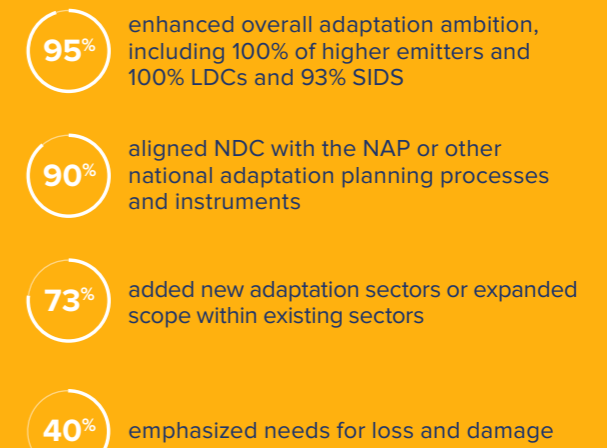
UNDP has strongly advocated for inclusive approaches when preparing second-generation NDCs that encourage whole-of-society ownership and engagement, advance gender equality, health and social justice, and strengthen social and environmental sustainability.

The *Climate Promise* has also emphasized the importance of enhanced quality and national ownership, including ensuring that NDCs are fully aligned with national sustainable development priorities in order to improve investment and implementation feasibility.

#### Selected mitigation pathways of Climate Promise countries



#### Selected adaptation pathways of Climate Promise countries





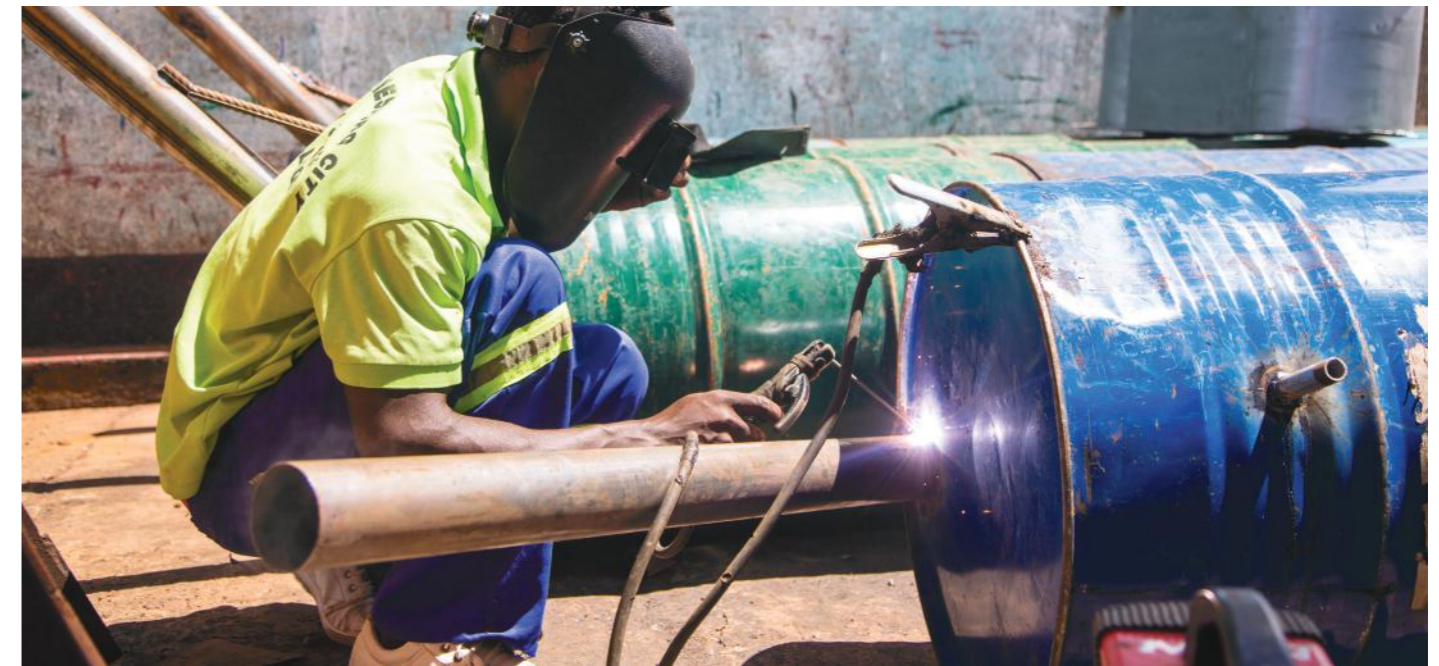
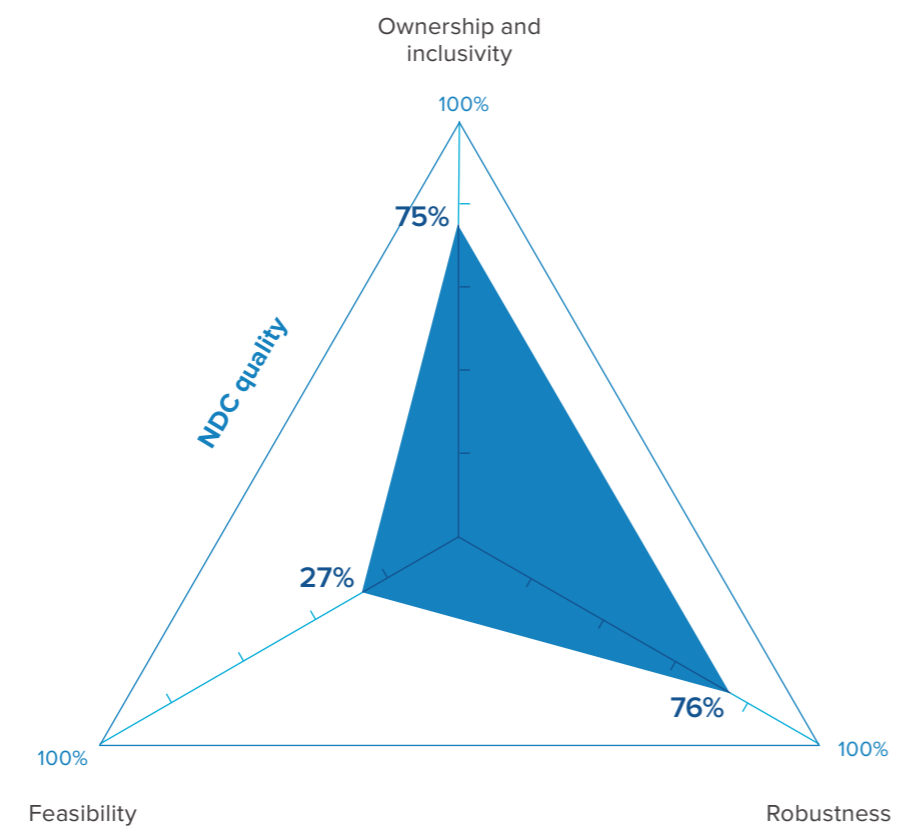
## Key Finding 2

# Second-generation NDCs are higher quality, but finance remains key hurdle

The option for countries to prepare and submit second-generation NDCs in 2020 was a key milestone agreed in the Paris climate negotiations in 2015. There were several reasons for this. The initial round of countries' climate pledges was assessed as insufficient to combat dangerous global warming. Many countries reported preparing their NDCs in short timeframes that did not allow for broad consultations and/or consideration of key issues. Developing countries cited capacity challenges that hindered their NDC preparation and called for technical support to revisit NDC assumptions (UNDP, 2016). This concern was reflected in the 2019 *The Heat is On* report, where the most commonly cited reason for preparing a second-generation NDC (identified in 92% of developing country survey responses) was to strengthen data and evidence of the initial NDC.

In order to better assess the quality of NDC submissions, in 2021, UNDP applied quality checklist criteria to 67 second-generation NDCs from *Climate Promise* countries submitted to the UNFCCC by the 12 October 2021 deadline. Three dimensions of quality – robustness, feasibility, and ownership and inclusiveness – were each given a score based on the percentage of the associated criteria that were met. (See box on the opposite page for more information on how UNDP assesses NDC quality.)

**Figure 5. Submitted NDCs of Climate Promise-supported countries assessed against three dimensions of UNDP's quality checklist**



### Robustness and inclusivity underpin NDC quality gains

Three-quarters of the assessed *Climate Promise* NDCs scored above average on both the robustness criteria and ownership and inclusiveness criteria (76% and 75% respectively). However, only 27% scored above average on feasibility (Figure 5). For reference, the median score for all 67 NDCs reviewed against the quality criteria was 59% for robustness, 68% for ownership and inclusivity, and 38% for feasibility.

This demonstrates that while *Climate Promise* countries made great improvements in the areas of robustness and inclusivity, there is an important need to focus on strengthening elements that will ensure feasible implementation – and, by implication, achievement of the NDC's stated ambition – namely attracting finance and technology to deliver targets.

The quality review also showed that NDCs which met a greater number of criteria related to robustness also tended to meet greater number of feasibility criteria, which might enable them to implement the NDC more effectively. Refer to the Understanding [NDC Quality section](#) of this report for more findings of the quality review.

An example of a second-generation NDC that scored highly on all three dimensions of quality is that of **Colombia**. The updated NDC is robust as it provides clarity and information on both mitigation and adaptation actions in line with the decisions of the Paris Agreement. Regarding feasibility, the updated NDC provided detailed fact sheets for each priority mitigation and adaptation measure and identified a leading entity responsible for each measure. The NDC also identified the types and descriptions of the support needed for capacity build-

ing, technology transfer, and finance to implement the NDC. In terms of inclusivity and ownership, the revision process was conducted under a continuous country ownership and whole-of-society engagement framework that “seeks to give the actors ownership of the process of defining and implementing their goals and measures, so that climate change management strengthens their lines of work and makes them more resilient in the short, medium, and long term”. The NDC update was based on participation and inclusion mechanisms, including socialisation, awareness-raising campaigns, and dialogues with afro-descendant groups,

indigenous peoples, youth organisations, women, and the rural community. Technical working groups and workshops were held with sectoral and territorial actors, public sector, private sector, academia, and civil society, all at different national and sub-national levels. The goals and actions of the updated NDC are based on the following principles: food security, eradication of poverty, just transition of the workforce, human rights, intergenerational equity, territorial inclusion, ethnic and vulnerable group mainstreaming, gender equality, and empowerment of women.

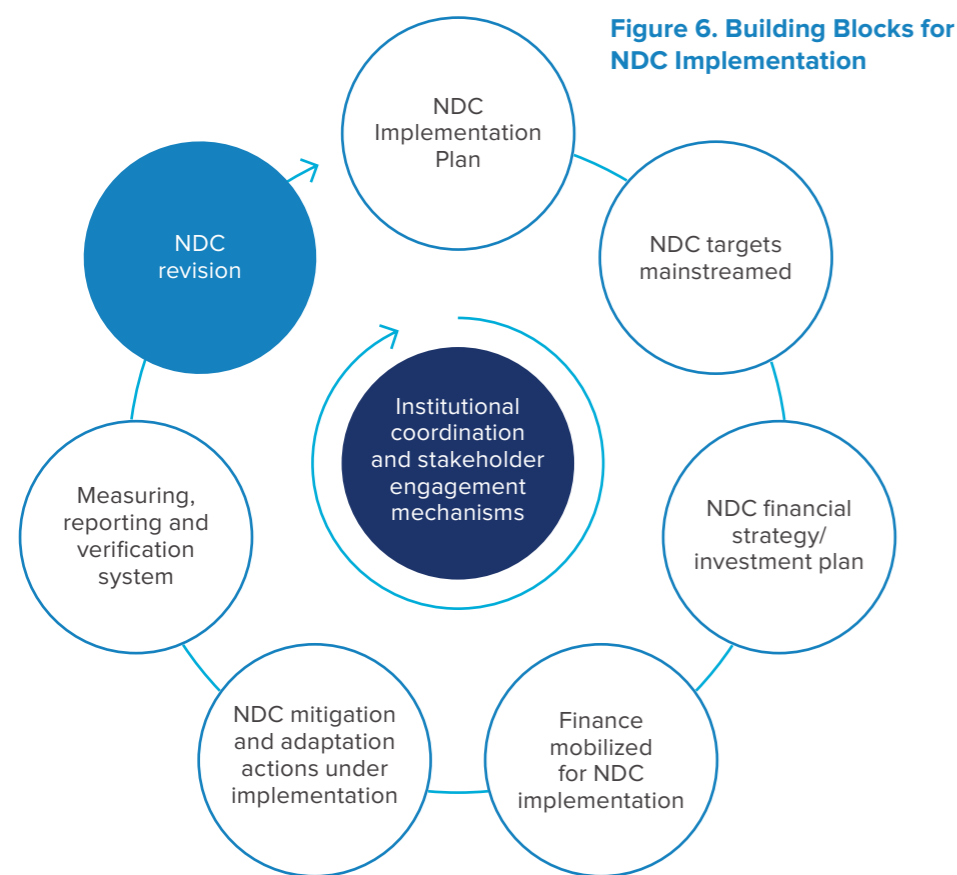
### How UNDP assesses NDC quality

UNDP developed a [Quality Assurance Checklist](#) for Revising NDCs under the *Climate Promise* that outlines a number of key questions to inform the NDC revision process. The objective was to provide governments, UNDP Country Offices, and other stakeholders with a tool for reflecting on the NDC preparation process and for systematically assessing opportunities to improve NDC quality against three dimensions:

- ▶ **Robustness:** the clarity, transparency, and understanding of mitigation and/or adaptation components of the NDC including strengthening clarity and data for key targets and measures; the degree of alignment with socio-economic development plans, including the Sustainable Development Goals (SDG), and other cross-cutting issues;
- ▶ **Feasibility:** key enabling conditions for implementing NDCs, such as mobilization of finance, technology transfer and institutional capacity building; and
- ▶ **Ownership and inclusiveness:** the degree of engagement of societal and political actors at all levels, as well as defined inclusion of engagement outcomes in the NDC.

The questions in the checklist were compiled drawing from the Paris Agreement, the [IPCC Special Report on Warming of 1.5°C](#) and the [WRI/UNDP Guide on Enhancing NDCs](#), as well as UNDP's extensive experience in supporting countries on NDC design, revision, and implementation.

## More support is needed to bring ambition to life and accelerate NDC implementation



Through research, experience and lessons learned, UNDP defined seven essential “building blocks” for NDC implementation (Figure 6). These are the critical NDC architecture and systems that UNDP considers essential for successful achievement of climate pledges and raising of ambition.

UNDP conducted extensive surveys with developing countries to better understand how they are advancing on each of these critical components, analyzing information from 133 countries in 2019 and 122 countries in 2021.

### Despite set-backs, more countries readying for NDC action...

One key trend across all seven building blocks was that, overall, more developing countries are working in 2021 to put in place these foundations compared to 2019 (as seen in Figure 7 for four of these building blocks).

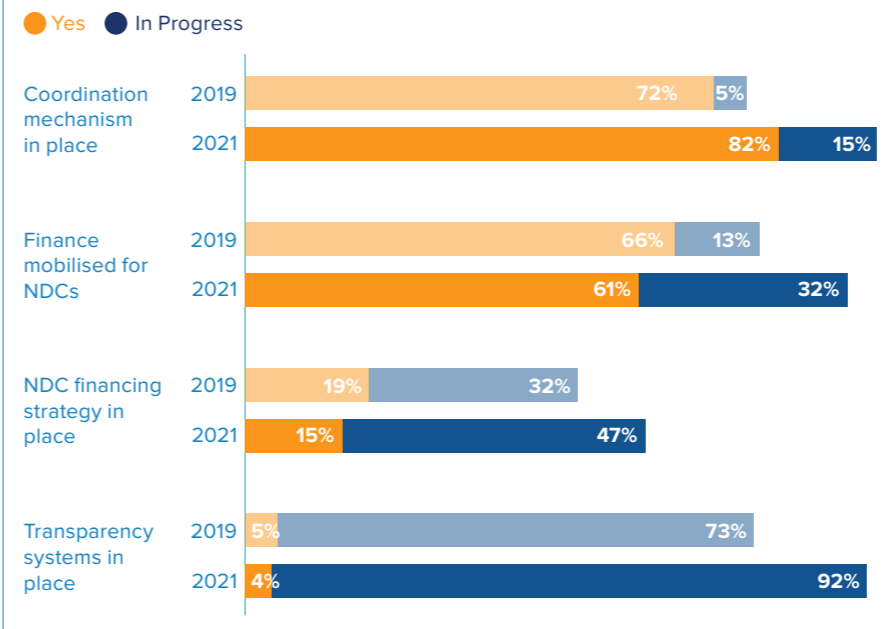
The dominating factor that impeded country progress on advancement of these NDC building blocks over the past two years was the scale of impact of the COVID-19 pandemic, which has unsurprisingly caused significant disruption. This related not

only to challenges in undertaking and coordinating analyses and consulting key stakeholders, but also to the reported shift in government focus in many countries away from NDC preparation towards virus containment and tracking, and economic stimulus and recovery measures. Fifty per cent of *Climate Promise* countries reported these challenges.

In addition, many countries reported undergoing changes in government and/or shifts in ministerial leadership, which led to redoubling efforts to secure buy-in of the new leadership and, in some cases, re-vamping of existing systems that had been put in place or were in preparation. During the second quarter of 2021, at least 15 *Climate Promise* countries reported that a change in government, government turnover or restructuring including election was a key challenge to advance support to countries on NDC revision processes.

Finally, many countries identified weak institutional coordination and capacity constraints as challenges that can delay NDC implementation. Coordination of partner support to countries was identified as important, but sometimes difficult, with several countries citing the extra effort required if parallel processes have been introduced rather than using or strengthening existing coordination mechanisms.

**Figure 7. Progress on key NDC systems and architecture, 2019 to 2021**



Source: UNDP surveys conducted in 2019 (n = 133 responses) and 2021 (n = 122 responses)

### ... but lack of overall progress raises questions about NDC feasibility

Figure 7 shines a spotlight on progress between 2019 to 2021 for four elements: 1) Strengthening coordination mechanisms, where progress is most advanced; 2) Transparency monitoring systems, where progress is least advanced; and 3) Finance mobilization and 4) Financing Strategies, where lack of progress has been cited by countries as the biggest barrier to climate ambition.

In 2021, nearly all countries (97%) have put in place, or are in the process of institutionalizing, mechanisms to support government coordination on the NDC and stakeholder consultations. At the other end of the spectrum, while 92% of countries are strengthening the systems for measuring progress of their NDCs, only 4% have a comprehensive system in place. The number of countries preparing investment strategies and mobilizing finance also shows gains since 2019, but locked-in finance appears to have declined slightly from 66% of countries in 2019 to 61% of countries in 2021. Detailed analysis of 2021 progress can be seen in Figure 8 (next page).

In assessing the status of progress under each element, many countries acknowledged that new commitments and measures being proposed as part of the second-generation NDCs would require revisiting of key tasks, such as mainstreaming of NDC targets and updating of NDC implementation plans and financing strategies for example. This

demonstrates an encouraging sign that countries are taking their time to ensure alignment and mobilise political buy-in and societal ownership for these essential systems and architecture to be efficient and effective.

What is clear from Figure 8 (overleaf) is that the overall status of current progress on these critical NDC systems calls into question whether developing countries have in place adequate means of implementation to achieve their NDC targets and reinforces the key finding that NDC feasibility needs to be strengthened.

### Access to finance tops list of critical barriers

Achieving the goals of the Paris Agreement requires mobilizing substantial amounts of public and private capital swiftly and at scale. IPCC research indicates that investments between \$1.6 trillion to \$3.8 trillion are needed every year from now until 2050 for supply side energy alone (IPCC 2018) while a handful of NDCs with financial needs assessments anticipate annual investment requirements between \$3.5 trillion and \$4.4 trillion in order to meet their emissions reduction targets. In 2017-2018, public climate finance averaged \$253 billion annually, a small fraction of what is required to meet global climate finance goals. This is a multi-trillion-dollar investment gap that needs to be addressed.

In 2019, access and availability of funding was the biggest barrier to raising ambition,

followed by political will. Access and availability to funding was also the biggest barrier to accelerating NDC implementation. In 2021, as developing countries continue to express huge financial needs to implement their NDCs, the overarching challenge of attracting investments remains.

## COORDINATION

No mechanism in place



## STRATEGY



## MAINSTREAMING OF NDC TARGETS

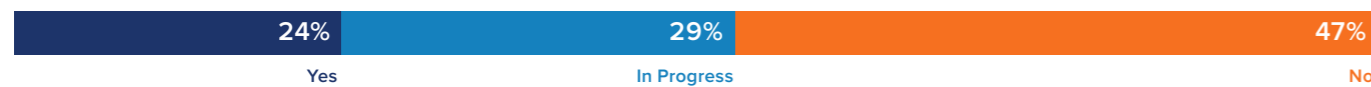
National Development plans/budget



Sectoral plans/budget



Sub-national Development plans/budget



## FINANCE STRATEGY

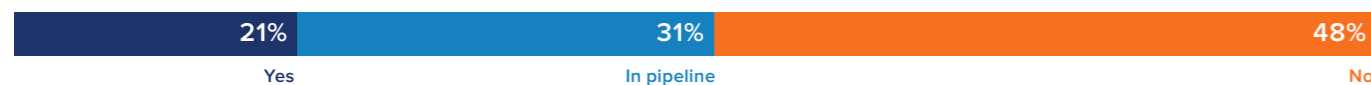


## FINANCE MOBILIZATION

From public



From private



## IMPLEMENTATION OF ACTIONS

Mitigation



Adaptation



## TRANSPARENCY



### ◀ Figure 8. 2021 progress on key NDC systems and architecture

A global snapshot of how advanced countries are in establishing key systems and architecture across seven building blocks that are essential for successful NDC implementation. Note: A country could be advanced on some building blocks but lagging on others.



## CHILE

### Climate and green financing support the country's commitment to carbon neutrality by 2050

Chile has a strong commitment to climate change mitigation and environmental protection. To reach its mitigation and adaptation goals, the country has identified a set of implementation measures that include capacity building, technology development and transfer as well as climate finance, an area in which the Ministry of Finance has already led several notable initiatives.

Chile is one of the founding members of the Coalition of Finance Ministers for Climate Action. It also issued in June 2019 the first sovereign green bonds in South America, a climate financing tool that focus investments on sustainable public projects like low carbon transportation or the construction of green public buildings. On the same year, it published, during COP25, its first financial strategy on climate change.

The strategy provides a framework to achieve the transition towards a low emission and climate resilient economy. It determines how to finance the required transformations in all sectors that play a crucial role towards these goals: NDC target to limit total annual emissions to 95 million tonnes of CO<sub>2</sub> equivalent by 2030 and the national objective to reach carbon neutrality by 2050. This implies having reliable information, data and analysis to support better budgetary planning and decision-making on public investment priorities.

To that end, Chile has been developing a climate fiscal framework for measuring climate national public expenditure. Cristobal Gamboni, Macroeconomic and International Finance Coordinator at the Ministry of Finance, has worked, together with UNDP, on the climate public expenditure review, which is the first step of building a climate fiscal framework. "We have seen the need to have accurate and detailed information about climate-related expenditure as an input to make better decisions in a context of limited resources."

Like its NDC, Chile's financial strategy on climate change is due to be updated every five years.



## CLIMATE PROMISE IMPACT

### Applying a gender lens to strengthen NDC implementation

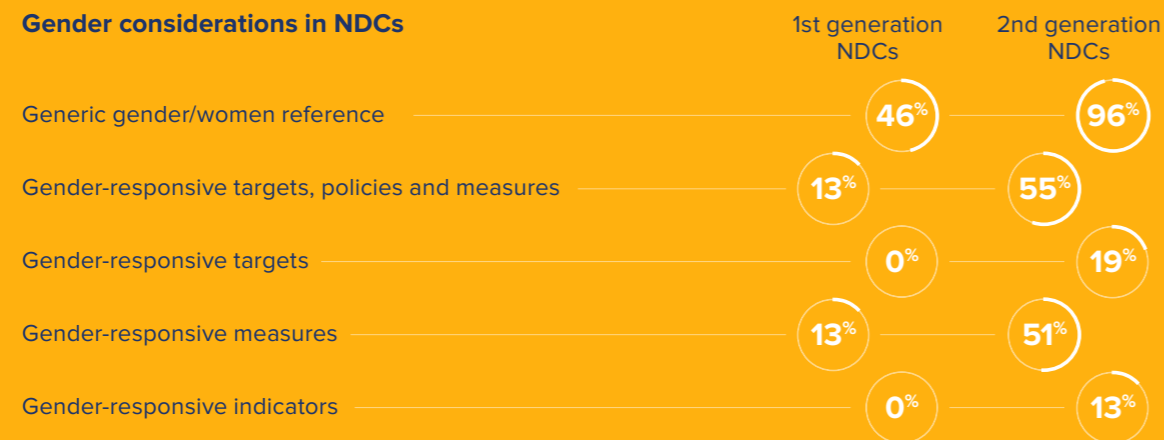
Gender equality is recognised in the Paris Agreement as integral to social transformation and climate action. Besides being a fundamental human right, advancing gender equality and women's leadership in target-setting can result in more ambitious NDCs that tackle both the climate crisis and ensure social justice. The important role that women and girls play in sectors affected by climate change – as well as their knowledge of these sectors – can be critical to the success of climate solutions.

The *Climate Promise* has promoted the use of in-depth gender analyses as a tool to understand the

roles that women play in priority NDC sectors, the structural inequalities they face regarding climate action, and the opportunities that exist to empower women's participation in climate solutions – all of which can be important factors for accelerating NDC implementation.

As a result, many countries have better acknowledged the critical role of women and girls in their second-generation NDCs compared to the first generation both at a more generic level, as well as more explicitly in terms of targets, policies, measures, and indicators as seen below.

#### Gender considerations in NDCs



UNDP's *Climate Promise* support has focused on strengthening gender-responsive climate action in three core areas: effective governance, inclusive planning, and integrated policy frameworks.

Most progress can be seen for inclusive planning, i.e., supporting multi-stakeholder processes to guide NDC planning using a gender lens to identify capacity gaps and planning priorities and mainstreaming gender-responsive climate action into national, sub-national, and sectoral strategies and plans, where **61%** of NDCs report gender equality as a cross-cutting issue for climate action. In addition, **8%** of NDCs refer to an existing Gender Action Plan, **6%** indicate they will develop a Gender Action Plan; **11%** mention that transparency systems already include gender, and **25%** plan to do so. Finally, **22%** of submitted NDCs refer to gender in relation to climate finance strategies.

**Cambodia's** NDC included gender as a key criterion for prioritising mitigation and adaptation actions in major NDC sectors. This resulted in most NDC priority actions having targets related to women's participation that range from 15% to 70%. The NDC goes one step further and suggest gender-sensitive approaches that will facilitate women's meaningful participation in climate measures. It also provides indicators to measure this new approach.

Integrated policy support refers to requiring countries to better consider gender-differentiated impacts and articulate gender in existing climate policy instruments. **29%** of submitted NDCs recognised national equality

policies as part of their climate policy framework, **24%** included gender-responsive actions related to mitigation and **52%** to adaptation. In addition, **33%** linked gender, SDGs, and NDCs, while **18%** of submitted NDC analysed mitigation and adaptation measures against SDGs and identify those contributing to SDG 5 on gender equality.

Climate action and SDGs are clearly linked in **Antigua and Barbuda's** NDCs. For instance, the NDC addresses gender inequalities by prioritizing energy poverty due to the disproportionate impact it has on women and girls. It commits to mainstreaming gender in its energy planning through an inclusive renewable energy strategy, and also, provides gender-responsive targets under mitigation and adaptation to support efforts that ensure energy access for all.

When it comes to effective governance, more NDC coordination mechanisms are emerging in *Climate Promise* countries that include national gender institutions as key partners in NDC revision and implementation. For example, **24%** countries identified these institutions as part of national climate change governance structures and **27%** referred to the importance of women's participation in decision-making on climate action.

In **Cabo Verde**, the Institute for Gender Equality and Equity, a supporting agency across numerous sectoral priority interventions, is identified as the lead agency for climate empowerment actions. The institution has the lead in defining climate policy-specific needs, targets and indicators on gender-climate mainstreaming for all industries and government offices.



## IRAQ

### Authorities empower women to attain a green and sustainable country

Considered a fragile state after the wars and protracted conflicts of the last few decades, Iraq is also classified as the fifth most vulnerable country in the world (UNEP's GEO-6 report). It regularly experiences extreme temperatures and drought, as well as frequent dust and sand storms. As political and economic instability and climate crises tend to feed into and exacerbate each other, the government has launched a series of far-reaching initiatives to combat climate change.

From the beginning, Iraq has made an effort to involve all layers of its society – including strong representation from women – in updating the country's contribution to the Paris Agreement. The government considered this important since, as Susan Bana, NDC Consultant and former Head of Iraqi Climate Change Centre at the Ministry of Environment, explains: "Men and women are vulnerable to climate change impacts in different ways, depending on their age, their livelihood, their location, their ethnicity, access to information and services. The implications of any gender differences must be discussed when planning and implementing climate change actions to ensure equality of outcome for women and men, or for marginalized groups and others frequently left behind."

At the NDC consultations, policy makers and stakeholders from the private sector participated alongside NGOs and youth organisations. 40% of the representatives were women from the energy, environment, water resources, transport, and agriculture sectors.

The revised NDC focuses on creating economic diversity in order to help promote nature-based solutions for mitigation and adaptation measures. Economic diversification also supports sustainable development objectives, such as gender equality and women's empowerment; poverty reduction; water and food security; and creation of green jobs.

Government authorities introduced the revised NDC document as a determined resolve to address the devastation of climate change. It is a "roadmap towards the future, all towards a sustainable, green Iraq."

### Key Finding 3

# For many countries – but not all – inclusivity is driving ambition

The 2019's *The Heat Is On* report identified a trend that most governments were planning more extensive outreach and targeted stakeholder engagement for the NDC revision process. This was largely in response to a key lesson learned from the initial NDC design process – that broad participation helps create stronger ownership of climate pledges.

Despite the challenges arising from the COVID-19 health pandemic, most governments working on *Climate Promise* remained committed to making conscious efforts to employ whole-of-society approaches and

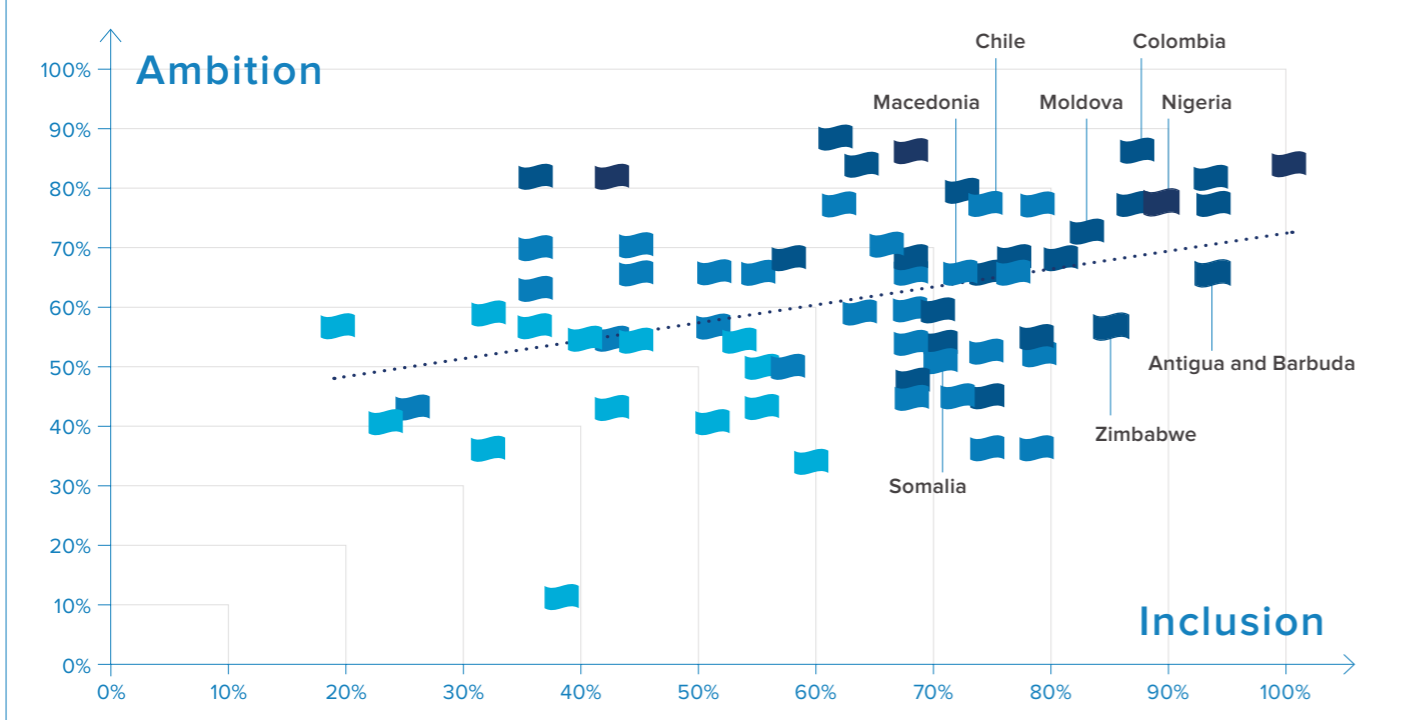
consult a range of stakeholder groups. The most predominant actors involved in consultations include:

- ▶ National/sub-national/local ministries, departments and agencies;
- ▶ Private sector and development partners; and
- ▶ Civil society groups and non-governmental organisations.

A key question that arose is whether such outreach efforts pay off by leading to

greater ambition. To answer this question, 67 NDCs submitted by *Climate Promise* countries were analysed for searching a correlation between the level of ambition and the extent of inclusivity efforts undertaken. This included both inclusive NDC revision processes and where stakeholder priorities and needs as well as engagement were reflected in policy commitments and measures. Countries' ambition and inclusion rankings were based on weighted assessments applied to key criteria from UNDP's NDC quality checklist (see [Methodology](#) for more detail).

Figure 9: Mapping NDC ambition to inclusive approaches



### CLIMATE PROMISE IMPACT

## 110,000+ people reached through 1,260 stakeholder consultations on NDC revision processes

Consultations supported through the *Climate Promise* took place at both national and sub-national level, in-person and virtually – via Zoom, Facebook, and surveys among other means. A wide range of

stakeholders were consulted, including national and sub-national policymakers, civil society, the private sector and academia (see Figure 10 below).

93%

of countries undertook consultations with private sector, development partner and business communities

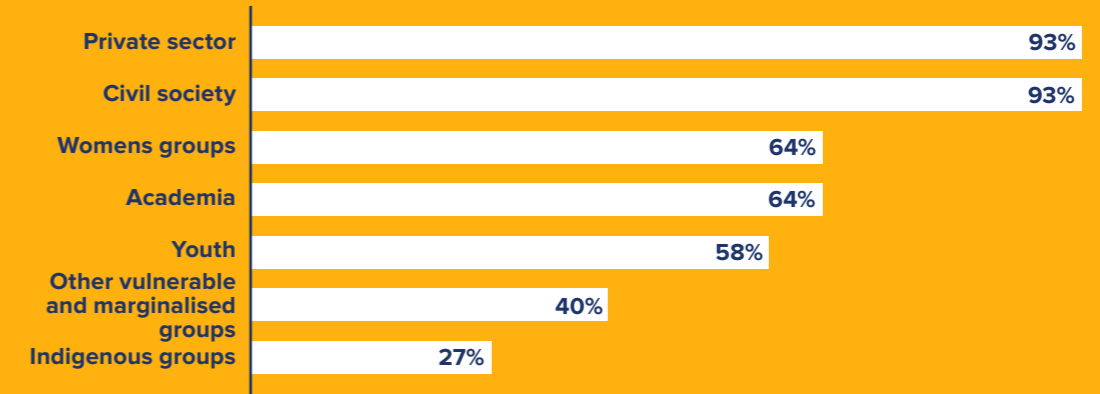
64%

of countries undertook consultations with women and/or women's organizations

58%

of countries actively engaged and consulted youth groups

Figure 10: Percentage of *Climate Promise* countries holding targeted NDC revision consultations, by types of stakeholders



For example, UNDP supported **Argentina's** National Climate Change Commission to develop 17 GHG emission scenarios for priority NDC sectors in conjunction with sectoral ministries and stakeholders, in addition to the commitment of sub-national governments to facilitating the implementation of identified adaptation and mitigation measures that was key to increasing the ambition of the revised

NDC. In **Costa Rica**, consultations on the NDC update took place with vulnerable communities that included indigenous people, elderly, women, afro-descendants, people with disabilities, and transgender. Two webinars to build capacities of the elderly and people with disabilities to participate in these discussions reached more than 7,000 people and gained 900 interactions from viewers.

As Figure 9 confirms, many countries many countries that have systematically targeted and engaged a wide range of stakeholder groups and/or who encourage greater societal ownership and inclusivity during the NDC revision process, have been able to capitalize on these efforts to drive greater ambition. However, this is not true across the board, due to different national circum-

stances and contexts, and other factors that may impact ambition (e.g., political will).

Perhaps unsurprisingly, eight of the ten success story countries spotlighted in this report as climate leaders are all located in the "high ambition-high inclusivity" quadrant of Figure 9. The two countries not included in the analysis were Iraq, which

had not submitted its updated NDC, and Pakistan, which only submitted an interim NDC as of 12 October 2021. The examples of **North Macedonia** (p. 27) and **Nigeria** (p. 29) specifically illustrate how the active engagement of the private sector and youth in the NDC revision process have encouraged, and resulted in, bolder ambition choices by policymakers.

### Private sector buy-in crucial for closing NDC investment gap

Many countries are actively working to close the financing gap through bringing private sector actors to the table. This includes engaging them in the NDC revision process, so they can direct informed decision making. For example, data inputs, feasibility studies and market surveys provided by certain private sector industries can help to better define realistic targets, while also putting in place the foundation

for potential investment during the implementation phase. In some cases, countries directly engage private sector actors in financing and investment strategy development, to help define private sector finance available for implementing NDC actions. In other cases, concrete financial de-risking instruments are developed to stimulate investments from the private sector towards NDC implementation, such as carbon pricing. And finally, some countries have gone beyond carbon finance

and already committed or earmarked investments from private actors for project implementation. All of these approaches help make NDCs more robust and likely to be implemented, while locking in potential private sector financing to advance NDC ambition and implementation of targets.



#### CLIMATE PROMISE IMPACT

### Over 100 countries engaged the private sector in the NDC revision process

UNDP's *Climate Promise* is actively committed to helping countries close the NDC investment gap by engaging with the private sector to support climate action and NDCs' enhancement and implementation

in almost all countries that are part of the initiative. According to an analysis on private sector engagement activities under UNDP's *Climate Promise*, this included:

- 96** countries broadly engaged private sector actors to inform climate policy decision making;
- 68** countries consider the private sector as a key actor and contributor in NDC implementation and planning including financing and investment strategies;
- 14** countries supported financial de-risking instruments, such as establishing or using carbon pricing for NDC implementation. For example, in **Peru**, the World Bank is providing support through the Partnership for Market Implementation programme, with UNDP support for direct implementation; and
- 15** countries committed investments from private actors for the implementation of projects that fall outside of the definition of carbon finance. For example, in **Bhutan**, a partnership has been created with the Loden Foundation to mobilise capital for climate-friendly business proposals submitted by youth and women entrepreneurs.



### NORTH MACEDONIA

#### Private sector are the leaders in the green economy

In North Macedonia, the private sector leads the way in greening the economy. An outstanding example is Propoint, a printing company in Skopje. Despite initial scepticism from some investors, Propoint recently went ahead with introducing a new 100% green production model inspired from a similar Finnish company. In 2018, they switched to solar energy for their printing house by installing photovoltaic panels with a capacity of 425 KWh. They also began phasing out their old petrol-powered delivery vans and replacing them with electric vehicles.

The result: In the first year alone, the clean electricity produced 500 megawatts, with CO<sub>2</sub> emissions reduced by an impressive 470 tons. The company does not even use all the electricity produced, so any surplus is placed on the distribution network. They are justifiably proud of their new lean, clean workplace and of their contribution to tackling global warming. They are enthusiastic about continuing. "We are gradually achieving our goal to become a '100% green company'," says owner Filip Hristov.

Proprint's success is an inspiring example of what can be achieved when the private business sector mobilises. North Macedonia's second national pledge, released in April 2021, involved the private sector committing to deliver the majority (85%) of the total investment needed for implementing green policies in industry. Thanks to this bold move, the Republic of North Macedonia has been able to revise its targets from 36% to 82% reduction in net greenhouse gas emissions by 2030, compared to 1990.

### Clear institutional arrangements pave way for advancing gender equality

Analysis of submitted NDCs supported under the *Climate Promise* shows that:

- ▶ Around 25% of countries have involved women's groups and civil society organizations in the NDC design and revision compared to 1% in the first generation NDCs;
- ▶ Around 41% mention multi-stakeholder/ consultative/ inclusive approach that includes gender will take place in NDC implementation compared to 1% of first generation NDCs

For example, in Honduras's NDC, the government recognizes the role and leadership of women, indigenous and Afro-Honduran peoples (PIAH) and young people in their diversity as fundamental agents of change in mitigation and adaptation actions. During NDC revision, the *Climate Promise* supported active listening and consultation sessions with these groups, which led to the creation of a social inclusion component in their NDC. This component strengthens support for vulnerable groups to be involved in climate action decision-making, planning and implementation and proposes specific measures to strengthen the social inclusion, leadership and empowerment of women, PIAH and

young people in the NDC. The NDC sets out a target for Honduras to develop and implement a strategy for the inclusion of social groups in the implementation of the NDC by 2030.

### Youth are the generation most invested in higher climate ambition

Based on reviews of submitted NDCs supported under the *Climate Promise*:

- ▶ Around 80% include broad consideration of youth/children compared to just 40% in the first generation NDCs;
- ▶ Around 60% of NDC include targets, measures and policies that are children and/or youth-sensitive, and that address youth-specific needs and roles, compared to 8% of first generation NDCs.

There are 1.8 billion young people in the world, representing the largest generation in history. Therefore, investing in, and partnering with young people is essential, urgent and a democratic imperative. Integrated solutions to the climate crisis, as well as economic recovery, cannot be adequately performed without the effective inclusion of youth and other vulnerable communities.

Pressure on governments has been steadily mounting. UNDP's People's Climate Vote – the largest ever survey of public opinion

on climate change – showed that around two-thirds of the world believes there is a climate crisis (UNDP and the University of Oxford, 2021a and 2021b). This concern rises to 70% of under-18s in G20 countries and demonstrates that support for climate action is already widespread and will only strengthen in the years ahead, as young people exercise their voices and votes to reward ambitious leadership.

Meaningful youth participation is fundamental to climate ambition and NDC processes should be designed to ensure that, at each step, the rights of youth are considered and those of future generations are protected. Youth can also play an important role in terms of accountability. Whereas youth needs and aspirations were largely under-represented in the first round of NDCs under the Paris Agreement, with only 40% of NDCs containing direct references to children or youth, there has been a shift in the preparation of revised-first and second-generation NDCs to undertake targeted consultations with youth groups.

As a result of a broader awareness of the importance of meaningfully engaging with young people in climate policymaking, 60% of revised-first and second-generation NDCs now mention children, and 80% contain direct references to youth and future generations, doubling the figure found in intended and first NDCs.



#### CLIMATE PROMISE IMPACT

### Almost 60% of Climate Promise countries consulted with youth groups

Through the *Climate Promise*, UNDP supported active youth participation in the NDC enhancement process. This includes **Bhutan, Liberia, Malaysia, North Macedonia, Panama, Peru** and **Sierra Leone**, where youth constituencies actively participated and engaged with other national stakeholders during the NDC revision process. In **Lebanon**, youth members were included in NDC consultations for the first time in 2020 and the updated NDC included a climate action enabler which tackles the comprehensive integration of youth into climate-related policymaking. In **Liberia**, the government enabled broad-based and exclusive youth par-

ticipation in the revision of its NDC which aims to meet its sectoral emissions reduction targets. In **Malaysia**, UNDP and UNICEF collaborated with a youth-led organization called **Ecoknights** to conduct a National Youth Climate Change Survey to examine youth's perception and understanding of climate change, identify key challenges and priorities, and understand how they are taking action. Findings from the survey was used to support recommendations for the youth-sensitive NDC and other climate policies and strategies, and to shape the design of future climate change programmes.



## NIGERIA

### Youth inspire updated ambitious and high-quality NDC

Nigeria, the most populous and one of the most prosperous countries on the African continent, is positioning itself as the leader on sustainable development. This African powerhouse is home to the continent's largest economy but is also its second highest emitter of GHG emissions. The Nigerian government revealed itself as a role model for the rest of Africa by submitting an ambitious updated NDC in July 2021 raising its economy-wide mitigation targets to 47%, with 20% of emissions unconditional.

Nigeria's approach to drafting the revised NDC was collaborative and inclusive. From March 2020, it held virtual (due to the COVID 19 pandemic) meetings and workshops involving a wide range of stakeholders, including youth groups, women's groups, parliamentarians, civil society organizations, and the private sector. 50% of Nigerians are less than 19 years old, so the government was particularly adamant that young people should play a key role in the consultations. About 1,000 youths participated in a Climate Action Youth Dialogue across the country, a three-week consultation during which they were invited to submit written input on changes they would like to see across the seven sectors of the economy prioritized in the draft NDC. Chiagozie Udeh, one of the facilitators and the 2019 Youth Constituency for UNFCCC (YOUNGO) Global South Focal Point, says: "It was a beautiful and inclusive experience working with amazing young people. One of the major outcomes of our consultation was the proposal by the Ministry to set up a Youth working group to follow up on the NDC implementation."

The suggestions from the youth consultation include the adoption of climate smart-agriculture practices, the revision of taxes on renewable energy, and the introduction of climate change as a topic in national education curriculum. The latter is already happening with the recent introduction of Climate Change manuals across the education system for students from ages 5 upwards.

When it comes to targets, measures and policies that are children and/or youth sensitive, about 60% of revised-first and second NDCs prioritize children and/or youth, compared to 8% of first generation NDCs. A strong focus on environmental and climate education, training and capacity building and/or the creation of green jobs is found for instance in the revised-first and second NDCs of **Argentina, Cabo Verde, Cam-**

**bodia, The Gambia, Indonesia, Mexico, South Sudan and Tunisia**, amongst others. Another aspect emerging from the newly submitted NDCs is the digital gap and efforts towards a green and digital transition as part of the recovery plans of countries such as **Albania, Angola, Argentina, Armenia, Costa Rica, Dominican Republic, Papua New Guinea, Paraguay, Peru, South Sudan and Tunisia**.

## Key Finding 4

# NDCs provide blueprint for sustainable development and green recovery, but countries must lock in this pathway now

In 2020, the IEA announced that a ‘green’ coronavirus recovery could keep global emissions below the 2019 peak. At the same time, according to the ILO (2021), a green recovery scenario with investments into renewable energies, building efficiency and green transport would create some 20.5 million additional jobs by 2030. The opportunity to use second-generation NDCs as the blueprint for greening stimulus and recovery plans seems too good to miss – and yet that is exactly what has been taking place in far too many countries, according to recent analyses and *Climate Promise* intelligence.

A “helicopter” view of the climate planning landscape from 2020 to 2050 reveals that the opportunity afforded by NDCs to serve as a blueprint for sustainable development and green recovery is only just beginning to be utilised. For the most part, NDCs remain focused on sectoral priorities – rather than identifying integrated solutions that target broader systems – and have not been integrated into the green stimulus and recovery plans that countries are putting forth to rebuild their economies after the COVID-19 pandemic. This is a missed opportunity to realign investments from “brown” to “green” and to address the financial barrier that is hampering scaled-up climate action and ambition.

It is important, therefore, to reimagine NDCs as sovereign plans for gender-responsive and climate-friendly investments in key engines of sustainable development and recovery – such as energy, water, nature-based solutions, forests, agriculture, and green economy, while also laying the foundation for emerging trends like circular economy and new carbon markets. At the same time, countries must also begin to plan for when and how GHG emissions will peak and how

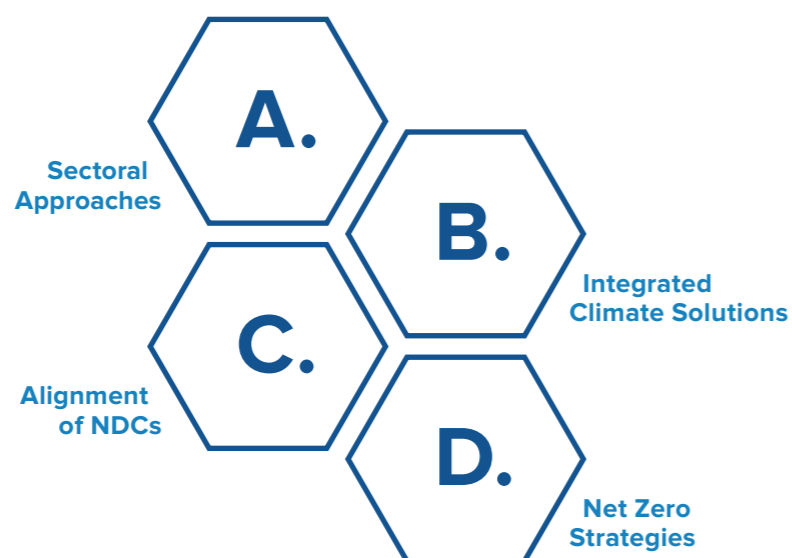
the five-year cycles of NDCs can articulate the agreed pathway to net-zero emissions, while also advocating for an equitable and rights-based just transition in impacted sectors.

This report identifies four opportunities for further leveraging NDCs to immediately guide more ambitious and sustainable development pathways: *A) Sectoral approaches with mitigation potential; B) Integrated climate solutions; C) Alignment of NDCs and green recovery plans; and D) Net zero, climate-resilient strategies.*

For policymakers, it is worth noting that around two-thirds of the world believes there is a climate crisis – whether that is people in a broad spectrum of countries globally or the G20 specifically – and this rises to 70% of under-18s in G20 countries

(UNDP and the University of Oxford, 2021a and 2021b). This demonstrates that support for climate action is already widespread and will only strengthen in the years ahead, as young people exercise their voices and votes to reward ambitious leadership. Furthermore, there are climate solutions that are consistently popular with the majority of people the world over – both young and old. In the world’s largest climate poll of 1.2 million people launched in 2021, four climate policies were favoured by the majority of respondents: conserving forests and land (54%), promoting renewable energy (53%), climate-friendly farming techniques (52%), and investing more in green businesses and jobs (50%). Those same policies are also among the most popular in **G20** countries, along with clean transport, disaster preparedness, and climate-resilient and nature-based infrastructure.

Key trends and ambition opportunities are further described below.



## Sectoral approaches: Renewable energy remains the top sector choice globally for NDC mitigation targets – but more potential could be unlocked in other sectors

Collectively, **Energy, Forests and Land Use**, and **Agriculture and Food Systems** are the three sectors responsible for the majority of GHG emissions in developing countries – and therefore represent the greatest opportunity for raising ambition. While all submitted NDCs to date have included the **energy** sector, forestry and agriculture are increasingly recognized and included but more can be done to unlock their full mitigation potential.



### Energy

- ▶ 100% of submitted NDCs include the energy sector
- ▶ Renewable energy generation remains most favoured option for reducing GHG emissions globally – included in 86% of NDCs (up from 55% in previous NDCs); energy-efficient buildings and transport also popular (UNFCCC, 2021)

Given that energy is responsible for 73% of global GHG emissions, planning and implementing ambitious mitigation targets for the energy sector is indispensable to reaching net-zero emissions by 2050. At the same time, raising ambition on energy can lead to many development co-benefits. This includes poverty alleviation and social progress, e.g., through basic electrification and lighting; women and youth empowerment, e.g., new livelihood opportunities, clean cooking; enhanced resilience, e.g., more reliable energy sources during disasters or recovery (i.e. COVID-19 response); and economic growth and environmental sustainability, e.g. less fuelwood collection and deforestation, cost savings from energy efficiency measures.

There is a clear trend for SIDS to commit up to 100% renewable energy targets with international support, given ambitious aims and potential development benefits of meeting such targets. In fact, the **Alliance of Small Island States (AOSIS)** committed to deliver 10 GW installed renewable energy capacity by 2030 as part of an energy compact announced at the recent High-level Dialogue on Energy (HLDE) in September 2021.



### Forests and land use

- ▶ 90% of submitted second-generation NDCs include the forestry sector (compared to 76% of previous NDCs)
- ▶ 57% of NDCs refer to forests as domestic opportunity for reducing GHG emissions (UNFCCC, 2021); the most favoured options are afforestation, reforestation and revegetation (52%) and sustainable forest management (31%)

The Land-Use Change and Forestry (LU-LUCF) sector can provide up to one-third of the emission reductions needed to avoid the most severe impacts of climate change (IPCC, 2019). Conserving and sustainably managing forests can unlock significant emissions reductions, with approximately 3.3 GtCO<sub>2</sub>/year of cost-effective mitigation potential in the tropics alone, representing the most significant opportunity to increase the ambition of NDCs in many tropical forested countries.

Many countries refer in their NDCs to reducing deforestation as a priority with high mitigation potential, including efforts to implement Reducing Emissions from Deforestation and Forest Degradation (REDD+). Many Parties also highlight the importance of social and environmental co-benefits resulting from these mitigation activities, including adaptation co-benefits.

Nonetheless, despite the political will demonstrated, both public and private efforts have not made sufficient progress towards reducing emissions from forest loss. Tropical primary forest loss has generally increased, with 4.2 million hectares lost in 2020 (NYDF Assessment Partners, 2021). Substantially accelerated efforts (at least five-fold by 2030 and three-fold by 2050) are needed to ensure that reduced deforestation and restoration contribute fully to achieving the Paris temperature goal.



### Agriculture and food systems

- ▶ 90% of submitted second-generation NDCs include the agriculture sector (compared to 73% of previous NDCs)
- ▶ 71% of NDCs identify agriculture as domestic opportunity for reducing GHG emissions (UNFCCC, 2021)

Many countries identify the agriculture sector as a high priority for adaptation in their NDCs, while most are also aiming to utilise mitigation opportunities in the sector. The importance of focusing on climate-friendly policies and measures that also ensure food security is frequently highlighted, however more could be done to capitalize on the mitigation potential in the agriculture sector. Some NDCs describe the potential co-benefits of specific agricultural adaptation measures, including climate-smart agriculture, reducing food waste and vertical farming, but more could also be done to strengthen these links.

Only a few NDCs address food loss – and even fewer address food waste. Noting that loss and waste of food caused 8% to 10% of global GHG emissions in the period 2010-2016 (IPCC, 2019), more countries should tackle this issue as part of their NDCs (IPCC, 2019).



## CLIMATE PROMISE IMPACT

### Energy

- ▶ 95% of submitted NDCs from *Climate Promise* countries have standalone or detailed sections on energy targets or policies; 34% included references to gender/women
- ▶ *Climate Promise* countries focus not just on energy transition, but also include energy access and resilience as opportunities for advancing climate action

In line with UNDP's Strategic Plan Signature Solution on Energy, the *Climate Promise* assesses countries' energy targets across three dimensions that aim to close the energy gap: **transition, access, and resilience**. This analysis has highlighted that all three aspects are being considered by countries when setting NDC targets, policies and measures.

For **energy transition**, the mitigation measure mentioned most frequently in *Climate Promise* countries' updated NDCs is renewable energy generation followed by energy efficiency improvements. Transport and buildings are the most frequently cited sub-sectors. SIDS supported by the *Climate Promise* have presented much more ambitious renewable energy targets in their updated NDCs than other countries as they are heavily reliant on imported fossil fuels to power their economy, which adds to their energy fragility. For example, **Cabo Verde's** updated NDC contains ambitious renewable energy generation targets, through increasing the existing 18.4% share of renewable energy in the electricity supply to 30% in 2025, up to 50% in 2030, and to 100% by 2040 – with adequate support.

Currently, 759 million people still lack access to electricity and 2.6

billion people in the world are without clean cooking solutions. This has a “knock-on” effect of causing nearly 4 million premature deaths every year (WHO, 2021). Common **energy access** solutions include mini-grid and off-grid power solutions and clean cooking, including improved cookstoves which can advance access to energy while also reducing emissions. For instance, in its NDC, **Nepal** outlines its plans to ensure that 25% of households use electric stoves as their primary mode of cooking by 2030 and aims to install 500,000 improved cookstoves by 2025, specifically in rural areas. By the same date, Nepal plans to install an additional 200,000 household biogas plants and 500 large scale biogas plants. These three combined targets would reduce emissions from the cooking sector by around 11% by 2025 and 23% by 2030.

**Energy resilience** is about scaling up sustainable energy solutions for crisis-affected contexts, as well as contributing to adaptation efforts by enhancing resilient livelihoods and promoting peace and stability, especially in crisis countries.

**Lebanon's** energy compact, submitted at the recent HLDE, explicitly links its enhanced NDC targets with its priority goal of expanding energy access for the poor and crisis-affected communities.

### Forests and land use

- ▶ Many countries were supported to enhance the role of LULUCF, and specifically forests and REDD+ in their new or updated NDCs; 30% included references to gender/women

For example, **Cambodia** officially submitted its revised NDC in December 2020. The country transitioned from sectoral targets to an economy-wide target, aiming to raise its mitigation ambition to a 42% reduction in 2030 compared to Business as Usual (BAU). This includes an Agriculture, Forestry and Other Land Use (AFOLU) sector target to halve the deforestation rate by 2030. UNDP supported Cambodia on the modelling effort leading to the inclusion of this ambitious quantitative forestry and Land Use sector target, thus addressing the largest source of emissions, in line with the national REDD+ strategy. The revised NDC is clearly more robust and comprehensive.

In **Honduras**, the technical content for mitigation in the forestry sector was supported by UNDP through the *Climate Promise*, by improving clarity on the role of the national REDD+ strategy as well as including an updated quantitative forest restoration goal: By 2030, Honduras is committed to promoting the implementation of the 'conservation and restoration functions of the rural landscape' reaching 1.3 million hectares of forest in the process of restoration. This represents an increase compared to the first NDC which included a goal to restore one million ha. Honduras also commits to reducing 39% of the consumption of firewood by families.

### Agriculture and food systems

- ▶ UNDP is working with over 70 countries to strengthen their NDCs through the agriculture sector
- ▶ 53% of submitted NDCs included references to gender/women

UNDP's support builds on the engagement related to adaptation planning whereby over 25 countries are implementing projects to strengthen their capacity to formulate and implement National Adaptation Plans (NAPs), most of which include agriculture as a priority. At least 12 countries in Africa, Asia and Latin America are supported by BMU-ICI funded UNDP-FAO joint program on Scaling up Climate Ambition on Land Use and Agriculture (SCALA). The initiative aims to support countries to translate their NDCs and NAPs into transformative climate solutions with a strong focus on inclusiveness and private sector engagement.

UNDP also has an important role to play in fixing the world's broken food systems, with \$1.2 billion of support already invested in Food and Agricultural Commodity Systems in developing countries, much of which aligning with countries' NDC targets.

This diverse portfolio includes climate mitigation (reduced deforestation from agriculture and deforestation-free supply chains), climate adaptation (climate smart agriculture), biodiversity and ecosystem maintenance within agricultural landscapes, reducing farmer poverty, and mainstreaming gender equality. These areas are critical to changing food systems, which operate beyond agricultural production and contribute to countries' NDC targets that are necessary for achieving the Paris Agreement goals. For example, under the UNDP's Global Green Commodities Programme, UNDP supports **Paraguay** to encourage soy and beef producers in the country's eastern region to comply with environmental regulations, and to create financial and market initiative. UNDP also helps beef producers in the Western Region of the country increase their productivity on existing land while preserving the environment through good agricultural practices.



## PAPUA NEW GUINEA

### Sustainable forest management is vital to curb emissions and build resilient communities

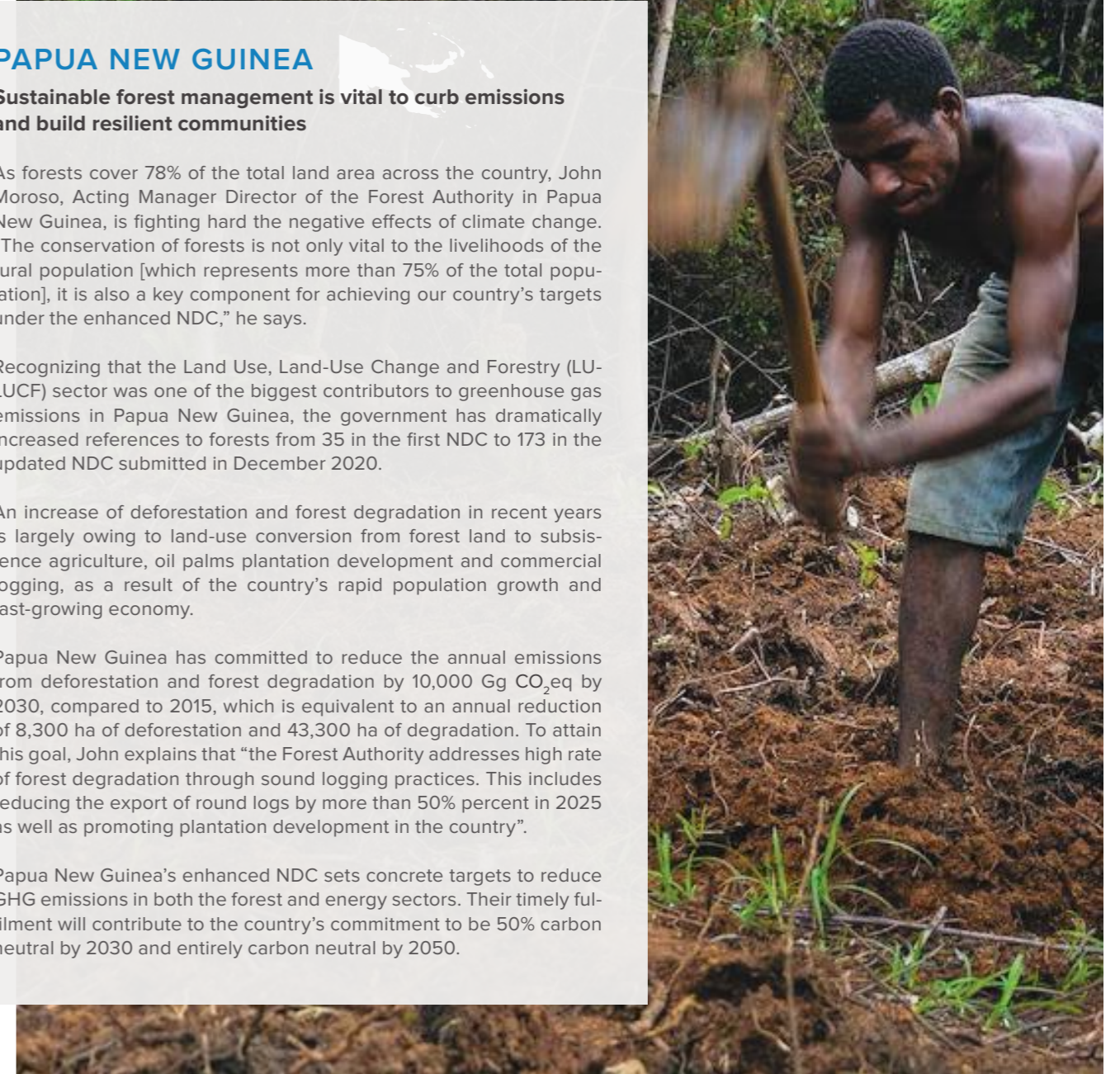
As forests cover 78% of the total land area across the country, John Moroso, Acting Manager Director of the Forest Authority in Papua New Guinea, is fighting hard the negative effects of climate change. “The conservation of forests is not only vital to the livelihoods of the rural population [which represents more than 75% of the total population], it is also a key component for achieving our country's targets under the enhanced NDC,” he says.

Recognizing that the Land Use, Land-Use Change and Forestry (LULUCF) sector was one of the biggest contributors to greenhouse gas emissions in Papua New Guinea, the government has dramatically increased references to forests from 35 in the first NDC to 173 in the updated NDC submitted in December 2020.

An increase of deforestation and forest degradation in recent years is largely owing to land-use conversion from forest land to subsistence agriculture, oil palms plantation development and commercial logging, as a result of the country's rapid population growth and fast-growing economy.

Papua New Guinea has committed to reduce the annual emissions from deforestation and forest degradation by 10,000 Gg CO<sub>2</sub>eq by 2030, compared to 2015, which is equivalent to an annual reduction of 8,300 ha of deforestation and 43,300 ha of degradation. To attain this goal, John explains that “the Forest Authority addresses high rate of forest degradation through sound logging practices. This includes reducing the export of round logs by more than 50% percent in 2025 as well as promoting plantation development in the country”.

Papua New Guinea's enhanced NDC sets concrete targets to reduce GHG emissions in both the forest and energy sectors. Their timely fulfilment will contribute to the country's commitment to be 50% carbon neutral by 2030 and entirely carbon neutral by 2050.





## Integrated climate solutions are emerging trend in NDCs that can be scaled up for higher ambition

An emerging trend in second-generation NDCs has been higher uptake of integrated climate solutions, such as **nature-based solutions (NBS)**, **circular economy**, and **integrated water resource management (IWRM)**. While more complex to undertake, systemic approaches to addressing the climate crisis can potentially create more scale and better anticipate cross-sectoral impacts that can result from more siloed sectoral solutions. **Carbon markets** are also emerging more frequently in new NDCs.

### Nature-Based Solutions

Recognizing the important ecosystem and hazard protection services they provide, an increasing number of countries are turning to nature-based solutions to advance mitigation and adaptation efforts. Water-related ecosystems such as wetlands and peatlands can sequester carbon or reduce pollution, including water treatment costs and emissions from other gases. For example, **Uganda** aims to increase wetland coverage from 10.9% in 2014 to 12% by 2030 by restoring approximately 260,000 hectares of degraded wetlands. The revised NDC includes a mitigation assessment that estimates annual emission reduction potential of approximately 0.4 MtCO<sub>2</sub>e.

Restoration of ecosystems to enhance a healthy water cycle is another important area of work. **Peru** is piloting an ecosystem-based adaptation project in the hills around Lima to relieve the city from water shortages and landslides. The project is also pioneering 'fog catchers' as an innovative water harvesting approach. The findings are informing Peru's NDC implementation plan for the water sector.

A few countries have turned to green infrastructure to manage the quantity and quality of water, but this option remains underutilized. For example, **Liberia**, heavily affected by floods, plans to design and implement green-gray infrastructure approaches along 60% of its highly vulnerable coastline and also sees nature-based solutions as a risk mitigation and economic development opportunity. Liberia will escalate urban resilience through blue-green infrastructure in five cities by expanding the volume of runoff/storm water captured by at least 10% annually to 2030 and by increasing the number of rain garden and cistern/rainwater harvesting installations in urban areas by 15% annually to 2030. In addition, 15% of small businesses in these five cities will be supported to focus on contributions to green infrastructure.

### Circular Economy

Low-carbon and circular economy policies are complementary and mutually reinforcing. GHG emissions are decoupled from economic growth by making material use regenerative, rather than depletive. That means materials should be kept at their highest possible value as they move and are retained within the value chain. This reduces the use of natural resources and environmental impacts, while continuing to enable improvements in human well-being. For developing countries, circular economy can be a useful way to shift development and growth from a linear pathway.

In **The Gambia, Lao PDR, South Sudan, Uganda** and **Vanuatu**, countries are conducting detailed circular economy assessments as part of the NDC revision process to identify domestic and transboundary mitigation options to include in the NDCs. **Qatar** is targeting its circular economy interventions in the construction sector through the recycling and re-use of construction waste. In addition, **Nigeria** is looking at the waste sector as the entry point to a more circular economy and **Mexico** is developing and implementing training programs for subnational authorities to support the identification of circular economy actions at the subnational level as part of the NDC implementation process.

### Integrated Water Resource Management

Water is fundamental to growing the world's economy and sustaining life on the planet. It also is the primary medium through which we feel the climate changing. In the first round of NDCs, more than 100 countries described the water sector as vulnerable, and nearly as many elaborated specific plans, actions or strategies for the water sector. In the revised NDCs, these actions have become more specific and holistic, acknowledging the inter-connectedness across various sectors and thematic areas such as energy, agriculture and food, and industry waste. For example, in the **Maldives**, where fresh water will become increasingly scarce due to climate change, IWRM systems will secure the water needs of various sectors and populations. Meanwhile, **Guinea** is a water-abundant country with substantial hydropower potential. Given Guinea's strategic location upstream of the main West African catchment basins, its choices in respect of water resource management will inevitably have impacts downstream in neighbouring countries, and the NDC explicitly states that these international implications mean that Guinea has an even greater responsibility to manage its resources responsibly in the face of climate change. The NDC elaborates an IWRM approach, including conservation and restoration of riparian forests and banks, seeking alternatives to economic activities that are detrimental to water quality, and ensuring the integration of climate change in institutional and legal frameworks for cross-border catchment areas.

Many of the new or revised NDCs show a stronger focus on adaptation planning, aligned in particular to National Adaptation Plans (NAPs) where water is commonly a key sector area. And yet, the full potential of water-based mitigation opportunities remains unrealized. In the first round of NDCs, emissions reduction through water was primarily considered in the energy sector, agriculture, land use, and the waste sector. This time around, more countries chose to integrate nature-based solutions in the NDCs, with 21% of the newly submitted NDCs referring to wetlands as a mitigation strategy (UNFCCC, 2021). The new or revised NDCs also show increased attention to renewable power, including hydropower, and the production of hydrogen, and 26% of the parties chose to include wastewater (UNFCCC, 2021).

### Harnessing Carbon Markets

Article 6 of the Paris Agreement recognizes that some countries will choose to pursue voluntary cooperation in the implementation of their NDCs to allow for higher ambition in their mitigation and adaptation actions and to promote sustainable development and environmental integrity. The share of countries that plan to or will possibly use voluntary cooperation, primarily referring to use of carbon market mechanisms, has nearly doubled (from 44 to 85%) in the new or updated NDCs, compared with those countries' previous NDCs. Additionally, there has been a strengthened emphasis on quality and integrity of market mechanisms, with countries having set qualitative limits on their use of voluntary cooperation for achieving NDC mitigation targets, such as using units that adhere to standards and guidelines to ensure additionality, permanence or avoidance of double counting of emission reductions.

In addition, the share of countries that have set such qualitative limits on their use of voluntary cooperation has doubled from 20% to 36% in the new or updated NDCs, as compared to those countries' previous NDCs.

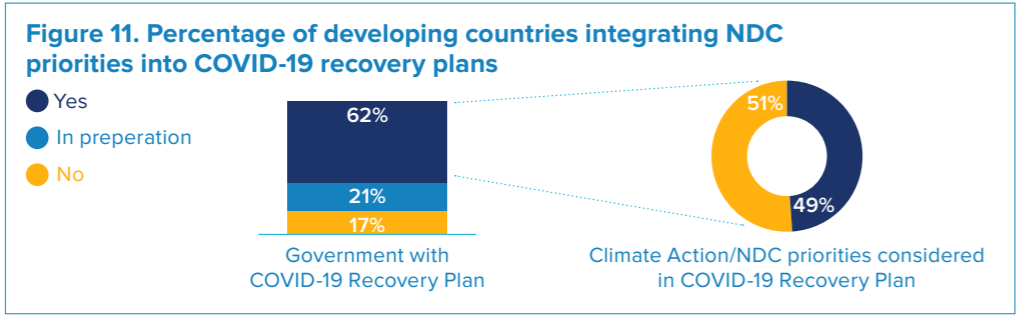
**Ghana, Peru** and **Senegal** are already pioneering the implementation of carbon market instruments developed under voluntary cooperation among countries. In **Ghana** a bilateral agreement and National Clean Energy Access Programme (NCEP) has been developed, which can be considered the primary means of delivery of the country's conditional NDC targets. The programme will produce the Internationally Transferred Mitigation Outcomes (ITMOs) that will be sold to Switzerland, and the mitigation outcomes counted towards the achievement of Ghana's NDC targets. The NCEP will engage with domestic businesses and suppliers to finance, produce or import, distribute, install and maintain energy-related equipment and technologies. It will also help advance development outcomes, by providing access to clean and affordable energy, creating jobs, and transforming lives through improvements in health, education, sanitation and food production for communities and economies throughout the country.

**Ghana** is also, along with countries such as **Costa Rica, Honduras**, and **Paraguay**, exploring carbon market opportunities for the forest sector as well. For example, both Ghana and Costa Rica, amongst others, have submitted proposals to the Lowering Emissions by Accelerating Forest Finance (LEAF) Coalition and have successfully completed an initial technical screening process led by a panel of technical experts, making them eligible for purchase agreement discussions with Coalition participants.



## Countries can leverage the NDCs to guide efforts to tackle the COVID-19 pandemic, turning recovery plans into a springboard toward 1.5°C

Despite the enormous focus on the dual crises of the global health pandemic and climate change, and many countries starting to recognize the relationship between the two, there are still limited concrete results to date on how recovery is contributing to climate action and vice versa. Around 60% of the 122 developing countries that responded to UNDP’s 2021 survey have formulated a COVID-19 recovery plan, while another 21% are in preparation (Figure 11). Yet only half of these countries have considered NDC priorities and other climate action in these plans. This represents a significant missed opportunity to finance climate solutions by centring them in green stimulus and recovery plans to drive sustainable development.



Source: 2021 UNDP survey (n = 122 developing country responses)



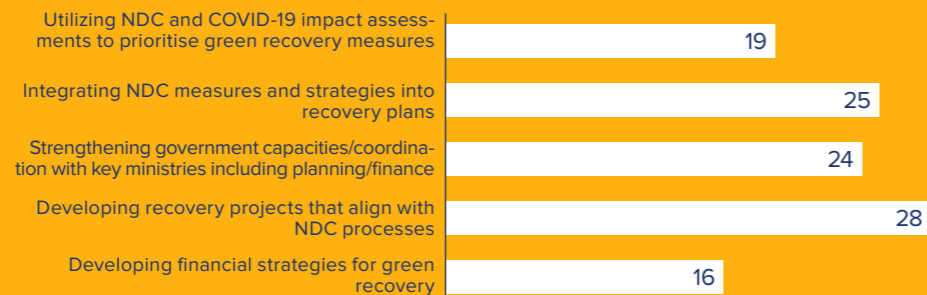
### CLIMATE PROMISE IMPACT

84 countries are leveraging UNDP *Climate Promise* support to build forward better after COVID-19. The most common approach is through green jobs creation, where 47 countries are identifying and prioritising NDC and other climate measures that could contribute to green jobs

UNDP has been working actively to guide countries to promote closer linkages between COVID-19 recovery and climate ambition. Through its *Climate Promise*, it is helping countries identify and realize strategic co-benefits of NDC implementation. Specifically, these include job creation, women’s empowerment/leadership, and strengthened health and education systems, which all contribute to a strong COVID-recovery and sustainable long-term development. More than 80 countries are leveraging *Climate Promise* support and the NDC enhancement process and architecture to guide government’s efforts to build forward better.

Figure 12 provides a snapshot of how countries are leveraging NDCs towards green recovery efforts, supported by UNDP’s *Climate Promise*. Work is also being undertaken with OECD to expand a UNDP/UN Women COVID-19 Global Gender Response Tracker gender-environment dimension that can help frame post-COVID-19 recovery in a more resilient, gender-responsive and green way. Green jobs creation is one of the most common approaches to link COVID-19 recovery and climate ambition. In total, over 45 countries are identifying NDC measures and other climate actions that could contribute to green job creation.

Figure 12: Approaches to aligning NDCs with green recovery under *Climate Promise*, by number of countries



Across Africa, many countries under the *Climate Promise* are making explicit efforts to link NDCs and green recovery. Five countries (Côte d’Ivoire, Nigeria, Sao Tome and Principe, Uganda, and Zimbabwe) are integrating NDC measures and strategies into re-recovery efforts, while conversely 12 countries (Benin, Central African Republic, Democratic Republic of the Congo, Eswatini, Ethiopia, Gabon, Liberia, Mali, Mozambique, Namibia, and Rwanda) are developing recovery projects that align with NDC processes.

In Zimbabwe and Nigeria, both have built nationally-owned green jobs assessment models and evaluated socio economic impacts of NDCs and Long Term Strategy (LTS). This helps to guide NDC enhancement and a just transition, while also contributing to informing green recovery efforts – where green jobs can play a leading role. More information on the outcomes of Zimbabwe’s analysis is featured opposite.

## ZIMBABWE

### Measuring green job creation for a fairer, greener economy

Zimbabwe is among the world’s 50 most vulnerable countries to climate change (Zimbabwe revised NDC), so its revised NDC, and wider climate policy, focuses on adaptation as much as mitigation. Zimbabwe’s economy is highly reliant on agriculture and forestry, and the government has expressed its determination to ensure a “just transition to a climate-resilient, low-carbon economy”. The revised NDC combines Zimbabwe’s commitments to the Paris Agreement with its national Vision 2030, the aim of which is to turn Zimbabwe into an upper middle-income economy “with no-one left behind.” The government is anxious to ensure that the benefits of delivering a greener economy are widely shared, and support is provided to those that may be at risk from the move, for example those that currently work in polluting industries.

To measure the economic and social impact of the proposed new climate policies across the whole of society – including women and young people – Zimbabwe has been amongst the first countries in the world to conduct a green job assessment. The International Labour Organization (ILO) and UNDP carried out the research involving a wide range of stakeholders. Nathan Banda, Safety Health and Environmental Officer at the Zimbabwe Congress of Trade Unions, was involved in the process. He reports: “We are proud as a country for having come up with the NDC followed by the Low Emission Development Strategy. It has remained my hope that more jobs will be created as we migrate from brown to green economy.”

The assessment found that overall, Zimbabwe’s climate policies present huge potential for job creation as long as they are backed up by social policies which support appropriate labour-market and skills-enhancement. For example, investments in conservation agriculture could create up to 30,000 jobs for every million US dollar invested.

Such findings provide precious insights for policymakers to understand the impact of certain NDC-related policies and enable them to choose those which reduce greenhouse gas emissions whilst also bringing economic and social benefits that can be widely shared across all levels of society.





## Momentum for net-zero is growing, but requires solid, credible strategies and better alignment with NDCs

The goal of net-zero emissions is achieved when there is balance between the amount of GHG emissions produced and the amount removed from the atmosphere. Science says we need global net-zero CO<sub>2</sub> emissions by around 2050, if not earlier (IPCC 2018). The Paris Agreement invites countries to submit long-term strategies (LTS) for their climate plans, to define such long term goals and how to reach them. In many cases, these also include net-zero pledges to align with the science.

A growing number of countries are committing to achieving net-zero emissions, which can help to propel climate ambition. However, it will be critical to ensure that credible pathways are defined to meet these goals and aligned with medium-term emission reduction targets, specifically those that are set in the second-generation NDCs. As seen in Figure 13, 80 countries globally (including 16 G20 members) have made net-zero commitments as of 12 Octo-

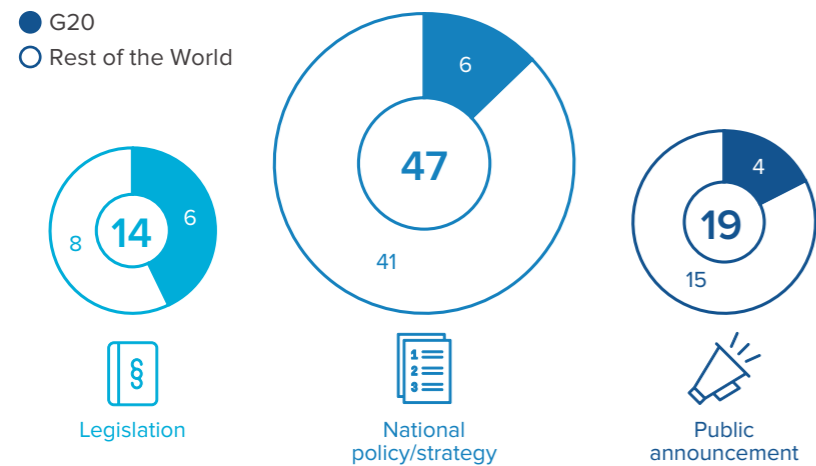
ber 2021. Of these, 14 countries have embedded their commitment in **legislation**. This type of commitment is most robust to sustain changes in government. A further 47 countries have included net-zero in **national development and/or climate policies** or strategies (including NDCs) indicating a high likelihood for implementation, while 19 countries have only made **public announcements** thus far.

It is also worth noting that while most countries commit to reach net-zero by 2050 in line with the recommendations of the IPCC, several countries have committed to a later date while others have pledged to reach their net-zero goal earlier than 2050 – even as soon as 2030. Several countries are also shifting their net-zero targets to earlier than previously committed, e.g., **Indonesia** from 2070 (public announcement) to 2060 or sooner (LTS), **Antigua and Barbuda** from 2050 (public announcement) to 2040 (updated NDC), and **Sri Lanka** from 2060 (first updated NDC) to 2050 (second updated NDC).

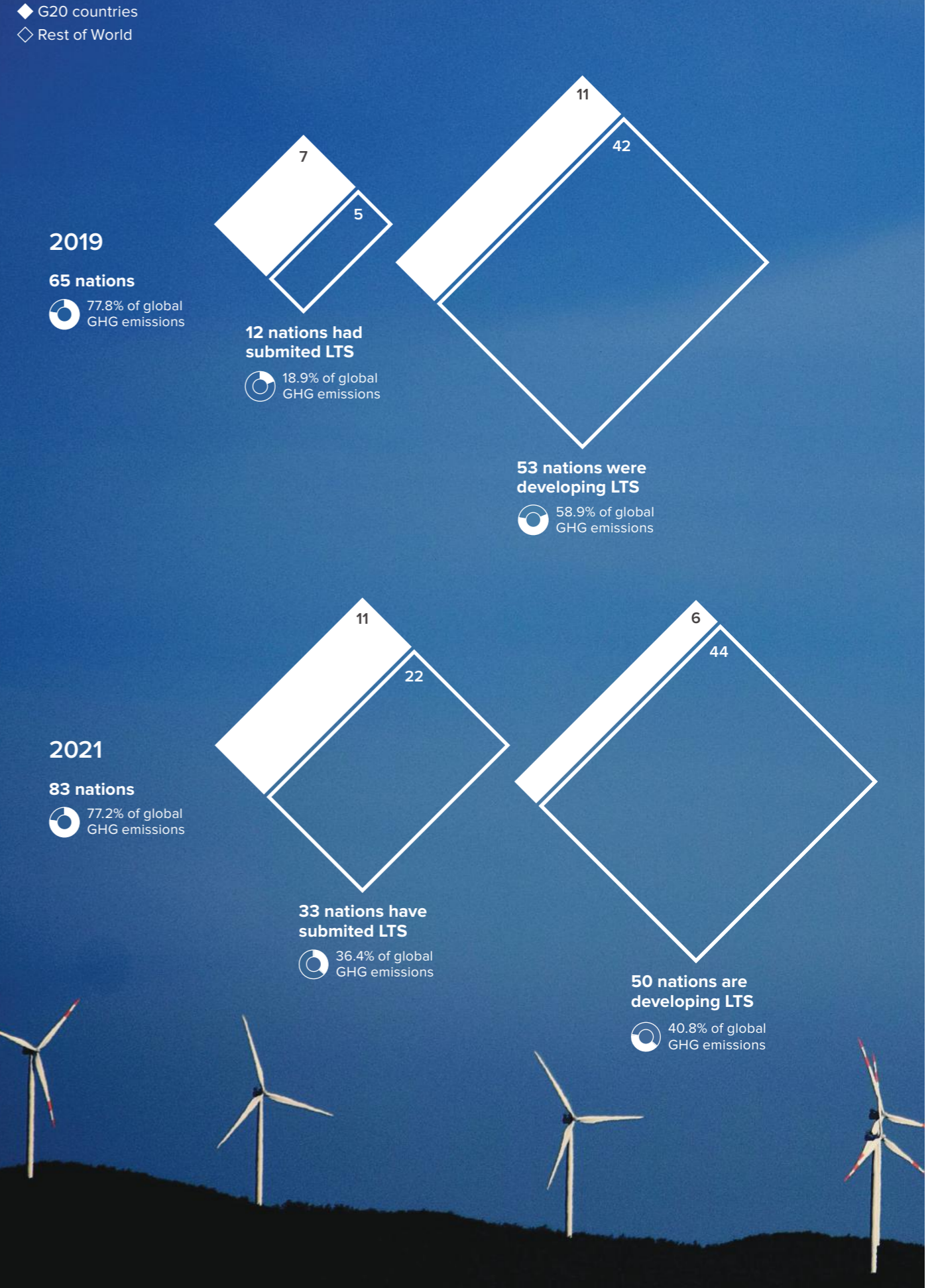
LTS can be used to set long-term goals for climate and development while also directing short-term decision-making of the kind described in the NDCs. Both of these elements are required to support necessary shifts to limit global temperature increase.

Figure 14 illustrates a growing trend in the submission and preparation of LTS – up from 65 countries in total in 2019 to 83 countries in 2021. It is encouraging to see that almost all of the 33 countries that have communicated a LTS have clearly indicated their net-zero goal in those strategies. Many more countries are also in the process of preparing these strategies following the recent commitments made by their government leaders.

**Figure 13: Number of countries with net-zero commitments, by strength of pledge**



**Figure 14: LTS preparation status for G20 and Rest of World in 2019 and 2021, by number of countries**



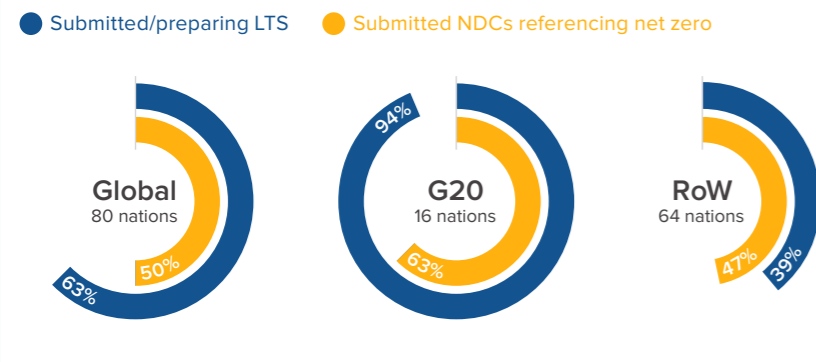
However, in many countries there is still a mismatch between these promising long-term, net-zero commitments to medium-term goals, as well as a misalignment between the preparation of LTS and the NDC revision processes. In fact, just over half of countries which submitted NDCs

make reference to these long-term goals, and more than a third have not initiated any preparation for developing long-term strategies. The difference is even more significant for the Rest of the World compared to the G20 group (Figure 15). This represents a significant missed opportunity.

For many countries, especially for non-G20 countries, there are still relatively limited concrete plans and strategies to underpin ambitious long-term mitigation ambitions. Further work remains to be done for these countries to align NDCs with long-term plans towards net zero pathways. This requires that countries revisit their tangible near term and medium-term targets in NDCs, NAPs and relevant national and sector policies and plans, and put in place necessary strategies, institutions and capacities for implementation to ensure alignment with the net-zero emission pathways.

Finally, in the context of longer-term pathways and net-zero goals, many countries are examining how to ensure a just transition of the workforce, particularly those that are dependent on carbon intensive industries. Greening the economy can include the design and implementation of social protection systems and labour market policies, through dialogue and inclusive consultations, to ensure a just transition of the workforce, especially for women and vulnerable workers.

**Figure 15: Degree of alignment between NDCs, net-zero commitments, and LTS**



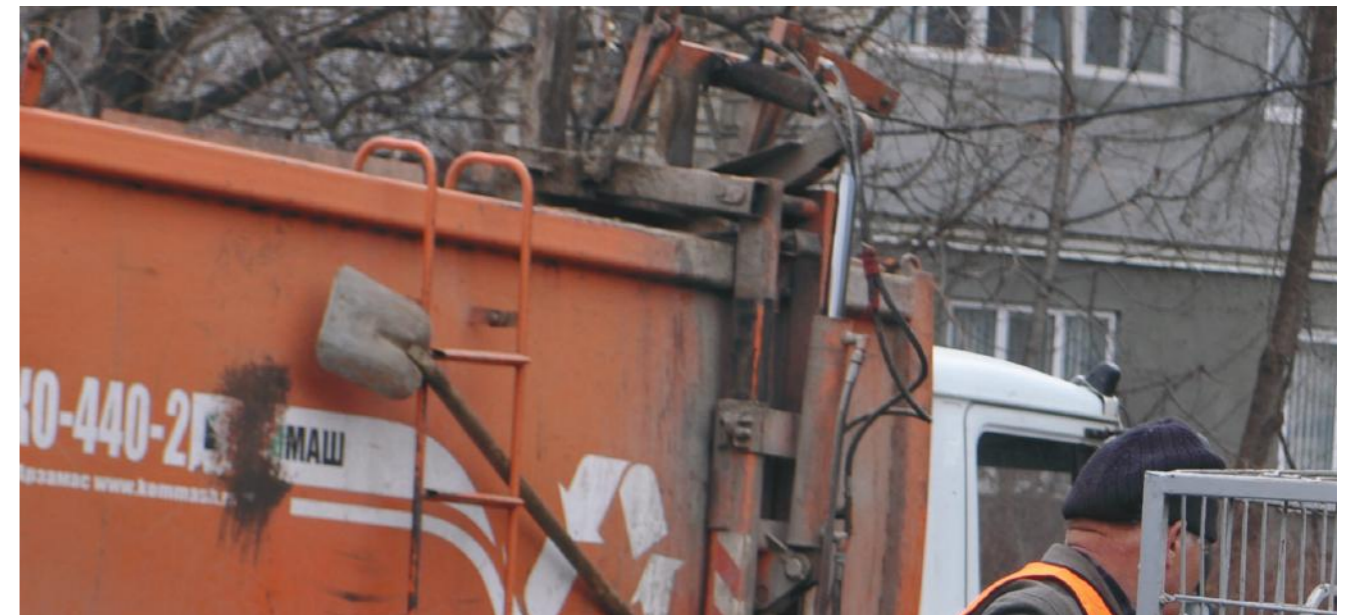
#### CLIMATE PROMISE IMPACT

**24 countries being supported to develop LTS that are linked to second-generation NDCs, with defined pathways for just transition**

Two notable examples of UNDP support on long-term pathways are in Belize and Viet Nam, where the truly cross-sectoral, integrated and inclusive nature of LTS development is on full display. In **Belize**, UNDP collaborated with the National Climate Change Office to develop a Low-Emission Development Strategy and Action Plan in partnership with a diverse team of sectoral leaders and international, national and grassroots non-profit agencies. Political validation is now underway. In **Viet Nam**, UNDP is working closely with the Ministry of Natural Resources and Environment and GIZ to advance the National Climate Change Strategy for 2021-2025 and assess alternative strategies and prioritized long-term policies with an eye towards making recommendations for incorporation in the final LTS.

UNDP is also helping countries to make a case for long-term green economy development efforts and put in place en-

abling environment, systems and mechanisms. For example, **Colombia** has been developing a strategy for the just transition of the workforce towards a resilient and low-carbon economy by 2030. The strategy seeks to improve the quality of life and the social and economic inclusion of the population, leaving no one behind by considering a social dialogue between employers, workers and government and ensuring active citizen participation during its design and implementation. Meanwhile, **Belize's** NDC implementation plan will include specific considerations for incorporating stakeholder engagement and delivery of actions that promote a just transition, ensuring that intergenerational impacts of climate change are understood, and that current and future needs of children and young people are adequately considered. In part, identified adaptation actions reflect an application of just transition principles on a global scale.



## MOLDOVA

### Creating synergies nationally and internationally

In Moldova, climate change contributes to an estimated average economic loss of 2.13% of its Gross Domestic Product (GDP) per year, exacerbating inequalities and vulnerabilities within Moldovan society. The government's new NDC, presented in 2020, commits to reduce GHG emissions to 70% below 1990 levels by 2030, a significant increase on their original 2015 commitment of 64-67%.

It is an ambitious target and, in order to meet it, the Moldovan government will be relying on its Low Emission Development Strategy (LEDS) 2030. Originally approved in 2017, and currently being updated to reflect the new NDC targets, the strategy aims to translate Moldova's commitments under the Paris Agreement into national development policies. This is a comprehensive package of activities addressing emissions from the energy, industry, buildings, transport, agriculture, waste and forestry sectors.

LEDS is linked in with other policies and strategies, such as the National Adaptation Programme, which focuses on the resilience and adaptation components of the NDC. All documents should be formally approved next year.

The government's intention is to create synergy by interconnecting all of its development strategies and instruments in a coherent way, thus generating a win-win situation in which Moldova's commitment to its NDC ambition helps accelerate the implementation of the 2030 Agenda for Sustainable Development.

This approach is already proving successful across many of the seven targeted sectors of the LEDS, with concrete strategies and approaches designed to deliver on the multiple aims. For example, in waste management in North Moldova, Mihai Ioncu is the administrator of the waste company S.A. Salburitate Șoldănești. He explains: "We have a vegetable waste shredder which means we can process the waste we collect from the streets and from farmers into a form which we can sell to biofuel producers or use to create compost. The result is that we produce ten times less vegetable waste than previously. The volume of stored waste has been greatly reduced, and the main source of fires at landfills has been eliminated. We have even been able to close many former landfill sites."



# Understanding NDC Quality

This section of the report provides insights on the three key dimensions that UNDP has defined for assessing quality of NDCs: 1. Ownership and inclusion; 2. Feasibility and 3. Robustness. Data shown in the figures below draws upon expert analysis of 67 second-generation NDCs submitted by countries supported through the *Climate Promise*, which were assessed using UNDP's quality review checklist.

ures below draws upon expert analysis of 67 second-generation NDCs submitted by countries supported through the *Climate Promise*, which were assessed using UNDP's quality review checklist.

## Ownership and inclusion

This dimension focuses on efforts to strengthen country ownership through an inclusive engagement process, taking a whole-of-government approach, and engaging across society in the design and implementation of the enhanced NDC.

As shown in Figure 16, the NDC revision process in most countries was driven by the government, with active engagement of key relevant institutions at different levels. A majority of second-generation NDCs are also adopting inclusive approaches particularly addressing gender and youth, showing much progress compared to first generations where far fewer NDCs have done so. There appears to be much more effort needed to ensure that NDCs identify steps to address just transition and consider rights-based approaches.

**Figure 16**

Key ministries, departments and agencies of government played an active role in revising the NDC.

Different government institutions from relevant sectors, at both the national and sub-national levels, have been engaged and consulted on the NDC revision.

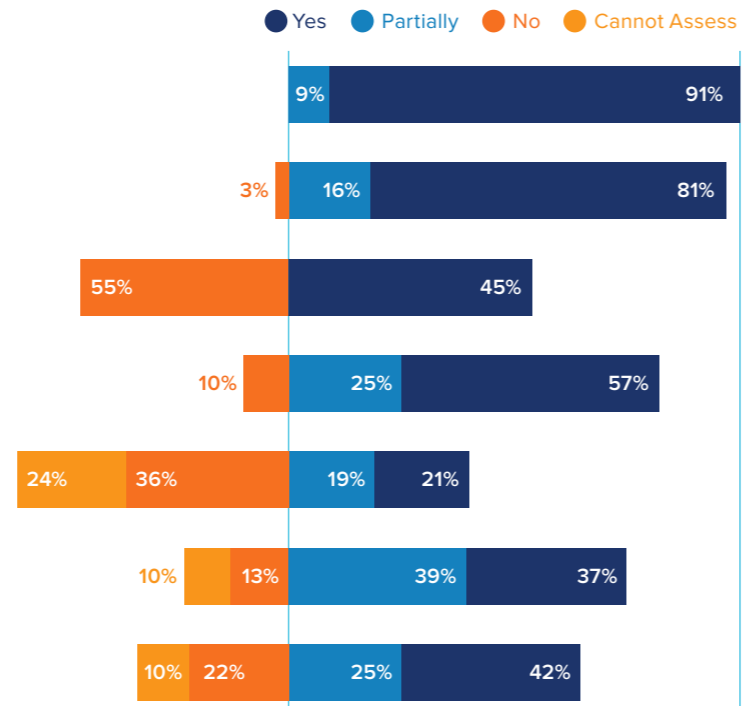
NDC includes gender-responsive targets, measures and policies.

NDC includes targets, measures and policies that are children and/or youth-sensitive, and that address youth-specific needs and roles.

NDC identifies steps for an inclusive, rights-based, just transition of the workforce.

NDC includes targets, measures and policies related to vulnerable groups, including indigenous people.

NDC includes targeted awareness-raising, advocacy and education related activities.



## Feasibility

This dimension reviews whether the NDC revision process has undertaken assessments of costs and benefits, financing options, and investment opportunities of NDC actions – for both international and domestic funding from both public and private sources. It also assesses the institutional, human and technological capacity of governments required for successful NDC implementation.

A majority of countries appear to have identified the necessary institutional structure and mechanisms as well as policies and regulatory frameworks to support effective implementation of NDCs (Figure 17), but more work is still required to fully materialize the commitments, particularly in mobilizing finance to support implementation of actions (Figure 18). In particular, private finance is a major gap identified by most countries.

**Figure 17: Finance, costs and investments**

NDC includes information on the costs of climate inaction.

NDC includes information on the financing strategy for achieving targets or implementing specific policies or actions.

NDC includes information on NDC-related financial mechanisms established or being developed.

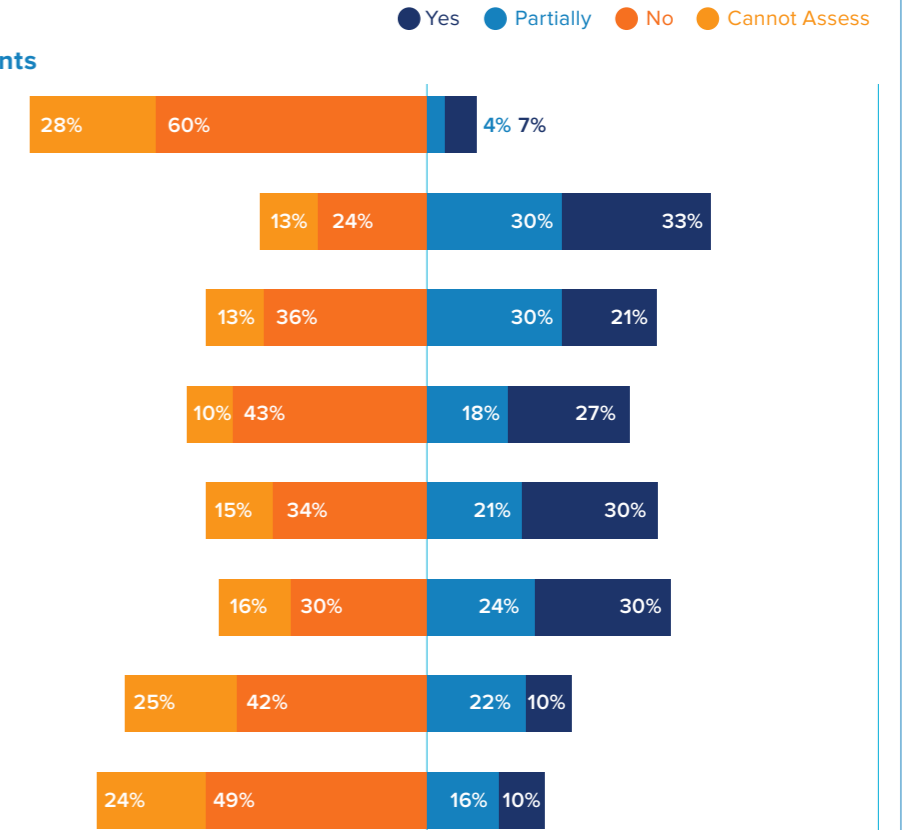
NDC indicates detailed international grant and/or loan support.

NDC indicates domestic public funding sources.

NDC indicates international public funding sources.

NDC indicates options to leverage existing or potential private sector investments.

NDC describes measures that are planned or being implemented to reduce investor risks and/or remove barriers to attract private sector finance.



**Figure 18: Institutional arrangements and capacities for implementation**

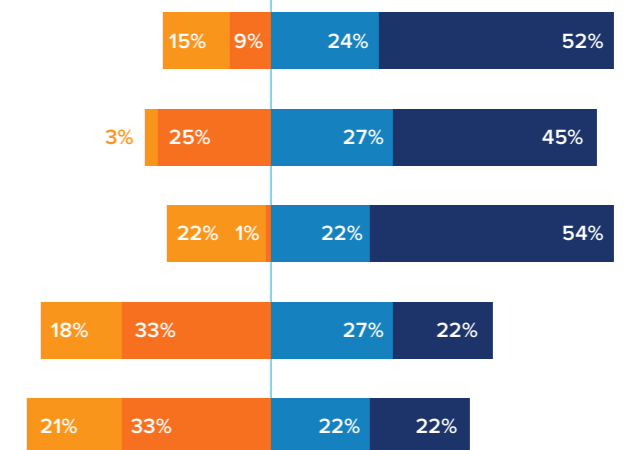
NDC includes information on institutional arrangements for NDC implementation with clear roles and responsibilities across key sectors and different levels of government structure.

NDC describes capacity development needs and plans in terms of human resources and technologies.

Targets/measures within the NDC are supported by national legislation and/or relevant legal frameworks.

NDC has identified policy, legal and regulatory gaps.

NDC includes policy recommendations or potential solutions to address policy/legal/regulatory gaps.



### Robustness

This quality dimension looks at the clarity and transparency of information communicated in the NDCs, such as baseline information, emission reference point, methodologies for GHG scenarios, target year/timeframe for NDCs, and alignment with development strategies and plans, including the SDGs.

Most countries are meeting most criteria for both mitigation and adaptation robustness, as well as alignment with national, sectoral and/or sub-national development strategies and policies

(Figures 19, 20 and 21 below). Notable areas where improvements can be made are related to alignment with long-term mitigation strategies, linking to the government’s commitment to net-zero where they exist, and provision of clear quantifiable or qualitative adaptation goals with clear indication of how to measure and report on their progress. Furthermore, many NDCs have yet to further leverage opportunities to align with the SDG related processes.

**Figure 19: Mitigation robustness**

NDC includes information elements identified in Decision 4/CMA.1 and its annex on clarity, transparency and understanding.

Quality assurance of data, methodologies, and other relevant information has been carried out.

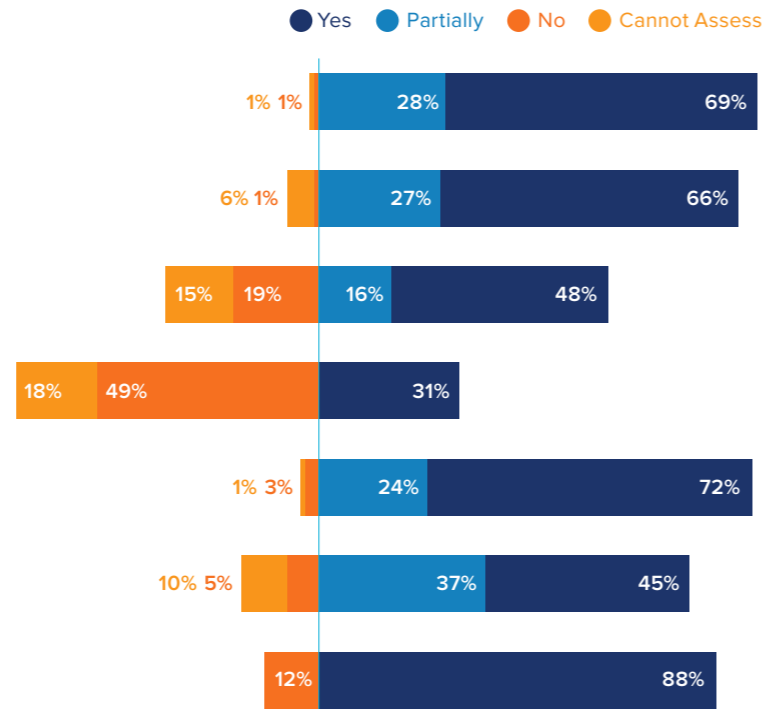
NDC aligns measures and priorities with long-term mitigation strategies.

NDC references the government's commitment to net-zero or carbon neutrality goal.

NDC is based on updated or new information on relevant sectoral trends and/or identifies relevant sectoral or development priorities, strategies, policies, or plans.

NDC considers how to track progress made in implementing and achieving its NDC mitigation targets.

NDC has a 2030 target year.



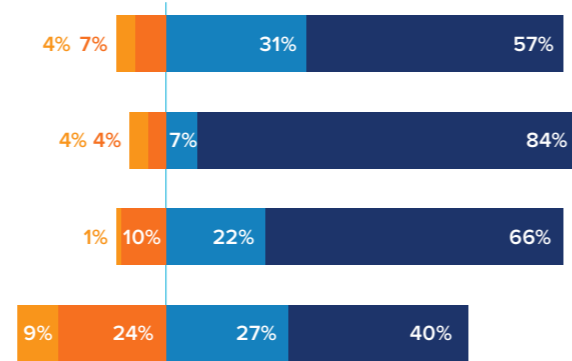
**Figure 20: Adaptation robustness**

NDC includes information elements identified in Decision 9/CMA.1 and its annex on elements of an adaptation communication.

NDC includes clear adaptation objectives in line with the Paris Agreement adaptation objectives.

Quality assurance of data, methodologies, and other relevant information has been carried out.

NDC includes quantitative or qualitative targets on adaptation and provisions for a monitoring and evaluation system for adaptation.



**Figure 21: Alignment with development plans and SDGs**

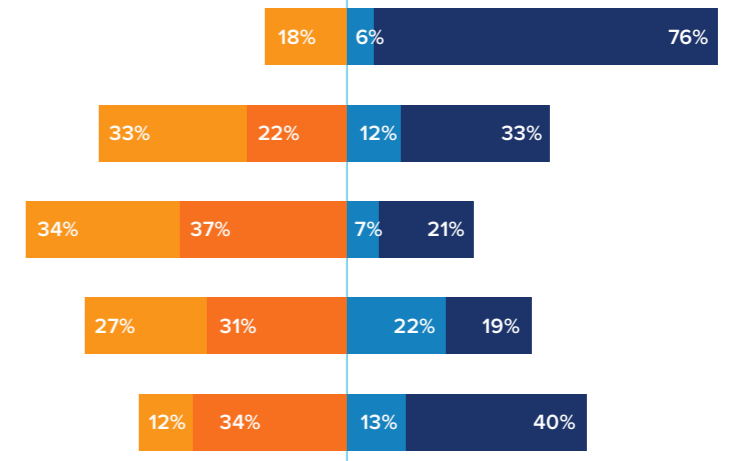
NDC aligns with national, sectoral, and/or sub-national development strategies/plans.

Socio-economic impacts of NDC targets and measures have been considered.

NDC revision process has considered the improvement of an MRV system for financial support.

NDC revision process has considered the improvement of an MRV system related to SDGs and other cross-cutting issues.

NDC has elaborated how its targets, policies and actions align with the SDG targets.





## PAKISTAN

### Driving towards a clean-green energy future

Pakistan is moving towards cleaner transportation solutions. In 2019, the country approved its first National Electric Vehicle Policy which sets ambitious goals to limit oil import and reduce air pollution in big cities, thus “strengthening Pakistan’s resolve to fight climate change at the national level”. Targets establish that electric vehicles (EV) sales would constitute 30% of cars and trucks new sales by 2030, and 90% by 2040.

Domestic electric vehicles manufacturers have made significant investments in the sector to support the government’s policy. For instance, Sapphire Group is running the e-bus fleet in Karachi. “We are actively pursuing the launch of various e-mobility solutions in Pakistan as our core business strategy, which aligns with the government’s vision on climate action. To this end, our group takes great pride in launching the first ever fleet of electric buses and commercial vehicles in Pakistan”, says Ahmed Jaudet Bilal, CEO, Sapphire Energy Pvt Limited.

Another company, Jolta Electric, launched the first locally manufactured electric motorcycle last July. The event was a major step towards electric mobility in a country where more than 20 million of two and three-wheelers are on road. The large number of bikes and rickshaws already in use led the National Electric Vehicle Policy to set more ambitious goals for them, 50% of new sales by 2030 and 90% by 2040. “We aim to develop a sustainable electric vehicle ecosystem to bring safe, affordable and cleaner mobility solutions to our customers. We are the first EV company in Pakistan to employ the graphene based super capacity batteries for our product range”, explains Usman Sheikh, CEO, Jolta Electric.

The policy foresees several measures to support the successful transformation of the vehicle industry, mainly with the development of charging infrastructure. It also provides incentives, such as reduced customs and sales tax, to lower the cost of electric vehicles.

The National Electric Vehicle Policy is part of the larger government’s initiative to make a clean and green Pakistan.

# Conclusions

As the world’s focus moves from pledges to concrete action after COP26, all countries must be fully committed to prioritising the financing and implementation of second-generation NDCs.

These policy instruments of the Paris Agreement remain the only clearly-defined and universally-agreed mechanism for driving the immediate and urgent climate action that is clearly required by the science.

Governments are showing promise on ambition, but the task ahead requires an even stronger policy signal that can drive transformational change and ensure we fulfill our obligation to youth and future generations to preserve the planet.

► **The Paris Agreement’s “ratchet mechanism” is working – but the world needs greater ambition and faster action.** The science is clear that the world must peak GHG emissions as soon as possible, followed by sharp reductions. The G20 must take decisive leadership given its collective share of the global GHG emissions.

► **Climate ambition is nuanced and context specific.** The analysis presented in the report has revealed that ambition should not just be assessed based on the targets defined in the NDC. Consideration must also be given to the feasibility of the means of implementation and the commitment of policymakers. Momentum for net-zero is growing, but requires solid, credible strategies and better alignment with NDCs.

► **A promising sign is that second-generation NDCs are of much higher quality in terms of robustness and inclusivity, which can help drive higher ambition. However, finance remains a key hurdle.** Industries, sectors and investors need decisive policy signals and incentives to transition immediately from brown to green practices.

► **Combatting the climate crisis will require nothing less than a complete transformation of society – yet not all countries are using inclusivity as a driver for climate ambition.** There must be greater recognition and empowerment of the roles of key change agents. Countries are increasingly engaging the **private sector** in NDC design and implementation, as they are critical to ensuring sufficient scaled up climate action, but not adequately defining their needs in just transition processes. **Gender** and **youth** considerations have improved significantly in second-generation NDCs, but more needs to be done to capitalise on their potentials – particularly youth as the generation most invested in the call for higher climate ambition.

► **NDCs can provide the blueprint for sustainable development and green recovery, but countries must lock in this pathway now and use take advantage of myriad opportunities as a springboard to 1.5°C.** Renewable energy remains the top choice globally for raising ambition, but countries will also need to unlock potential in other sectors. There is also a positive emerging trend of holistic climate solutions that could provide new opportunities for raising ambition.



# Methodology

## Explanatory notes on visualised data and key terms used in this report

### Ladder of Ambition

The purpose of the Ladder of Ambition is to provide an overall snapshot of momentum with respect to the direction of overall climate ambition. The intention is not to provide individual analysis or comment on the work of any one nation. The ladder of ambition is based on UNDP's analysis of information from the submitted NDCs to the UNFCCC. For those that have not yet been submitted, assessment is done based on NDC enhancement activities and engagement through UNDP's *Climate Promise* and support from our key partners including through the NDC Partnership's Climate Action Enhancement Package.

Four primary categories were identified in a review of country ambition intentions for the communication of new or updated NDCs and the following terms and definitions were applied for classification purposes:

- ▶ **Enhance:** Information indicates that the country is engaged in an exercise of identifying opportunities to raise ambition of either mitigation targets, adaptation targets, or both, as self-defined by the country, or believes the country has already communicated a more ambitious new or updated NDC.
- ▶ **Update:** Information indicates that the country is engaged in an exercise of updating information in its NDC but there are no activities that imply they have or intend to raise ambition on mitigation or adaptation. Updates could include, for example, revising underlying data and assumptions, incorporating latest trends of sectoral action and others.
- ▶ **Unclear:** Information available does not allow a country's intentions to be clearly predicted, although the underlying reasons differ. In some cases, the country is willing to revise its NDC but either the process has not yet started and/or support does not appear to be currently available and so it is unclear if a revised NDC will be communicated. In other cases, information received is either conflicting or it indicates that the

country is still undergoing a formal decision-making process on their ambition intention. Finally, in select cases, no substantiated information was available.

- ▶ **No plan:** Information indicates that the country does not plan to update or communicate a new NDC.

### Defining ambition:

- ▶ **Mitigation ambition:** Updated NDC aims to achieve greater GHG reductions by either increasing previously stated target(s) and/or by expanding to new sectors or actions that help achieve higher emission reduction targets.
- ▶ **Adaptation ambition** is complex to measure and assess compared to mitigation ambition as there is no globally agreed indicator. Based on UNDP's experience, adaptation ambition means the updated NDC has clear adaptation objectives or goals, expanding scope, geo-coverage and sectors as well as quantitative or qualitative targets on adaptation.

### Building Blocks of NDC Implementation

To understand the progress countries have made on NDCs, UNDP defined seven building blocks considered as essential to support effective NDC implementation. This was based on UNDP's experience and key lessons learned through support to countries. To better inform the seven building blocks, UNDP undertook a confidential survey with all developing countries. Responses were received from 133 countries in 2019 and 122 countries in 2021. The purpose of the survey was to provide a global snapshot on the overall progress across each of the key building blocks for NDC implementation, with quick multiple-choice questions without details. The intention was not to provide individual analysis on each country nor comparison among countries. Survey responses were verified by UNDP Country Office focal points, *Climate Promise* Country Coordinators and Regional focal points.

### NDC Quality Assessment

A review of 67 second-generation NDCs from *Climate Promise* countries was conducted by three independent NDC quality review experts. The review was based on UNDP's [Quality Assurance Checklist](#) for revising NDCs. The results from the review were then assessed and verified to ensure consistency and completeness of information. There were cases where information was not available or could not be assessed based on the information found in the submitted NDCs, for example those criteria that considered process-driven and may not necessary be elaborated in the NDC document itself. In these cases, UNDP *Climate Promise* progress reports as well as reports from key partners supplemented the information.

Data from the review was then compiled and a weighted score was given to each criterion of the three quality dimensions (1. Ownership and inclusion; 2. Feasibility; and 3. Robustness) as defined in the UNDP checklist. A combined score was then calculated to generate a median global score for each dimension. For example, under *Feasibility*, a score of 1 was given to each criterion that had a "yes" in the review result, and a score of 0.5 for a "partially" and a score of 0 for "no". The feasibility dimension contains two main components, finance, costs and investments (with 8 questions/criteria), and institutional arrangement and capacities for implementation (with 5 questions/criteria), resulting in a total score of 13/13. It means that the higher score the country gets, the higher likelihood is the country accelerating its implementation. The same approach was applied for the *Robustness* and *Inclusivity* dimensions. To distinguish assessment of quality from that of ambition, criteria under mitigation ambition and adaptation enhancement were not included in the Robustness overall score.

All combined scores were then converted into percentage for scaling compatibility across the three dimensions.

### Ambition and inclusivity Assessment

To assess *Ambition*, the same methodology was used as that of the overall quality. The NDC quality checklist was applied to the NDC, and criteria related to ambition were extracted and scored separately to aggregate an ambition score. Since emphasis was on identifying countries that demonstrated increased ambition in their emission reduction efforts, some criteria received a higher weighted score than others because they were considered as key factors to significantly boost a country's mitigation ambition. For example, a country that received a "yes" for demonstrating that it has "strengthened or added new GHG targets that result in less cumulative GHG emissions compared to the previous NDC" got a score of 3, and a country that received a "yes" in the "Strengthen or added new actions or policy measures under the mitigation sector" got a score of 1. A combined score from both mitigation ambition and adaptation enhancement criteria makes up the overall *Ambition* score.

A similar weighted approach was also applied in calculating the score for *Inclusivity*. If the country demonstrated clear inclusive and gender-responsive approach in its assessments, proposed targets, policies and measures or ensured a targeted approach in its consultation stakeholder and engagement processes, a score of 3 was awarded, while a generic reference to inclusivity and stakeholder engagement received a score of 1.

Combined scores were then converted into percentage for scaling compatibility across the two dimensions.

### Net-Zero and Long-Term Strategies

Data on submitted Long-Term Strategies are available on the [UNFCCC's website](#). Data on the number of countries that are working on developing Long-Term Strategies is gathered on the basis of submitted NDCs, public announcements (e.g. official statements) and information provided by UNDP Country Offices, as well as our key partners who are providing support to countries on LTS-related activities.

Data on Net-Zero commitment is, likewise, compiled on the basis of submitted NDCs, public announcements, related policies and legislations, as well as information provided by UNDP Country Offices.

Data from [Energy & Climate Intelligence Unit | Net Zero Tracker](#) and [Net-zero Target Source | Climate Watch](#) provided background reference for our analysis. In the case of differences, UNDP relied on validation from its focal point working on the ground. It is worth mentioning that data includes countries that made commitments to net-zero from January 2020 onwards. Commitments made prior to this date have not been included.

### Global GHG Emissions

All GHG emission data referenced throughout the report is based on CAIT 2018, generated from [Climate Watch Historical GHG Emissions](#) (2021, Washington DC, World Resources Institute). Note: Global GHG emissions include emissions from bunker fuels and unallocated territories accounting around 3.4%. As per IPCC reporting methodologies, bunker fuels are included in world totals, and should be shown separately from individual country totals.

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