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Summary of the UN Climate Change Dialogues: 23 November – 4 December 2020

Parties to the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement were planning to meet in Glasgow in November 2020 for the 26th meeting of the Conference of the Parties (COP 26). However, due to the COVID-19 pandemic, COP 26 was postponed to 2021. While a face-to-face meeting was not possible, the UNFCCC decided to hold a series of virtual events to keep climate action and momentum alive, implement mandated events for 2020, and discuss ongoing and emerging issues, such as a sustainable recovery from the pandemic.

The Climate Dialogues were conducted under the guidance of the Chairs of the Subsidiary Body for Implementation (SBI) and the Subsidiary Body for Scientific and Technological Advice (SBSTA), as well as the Chilean Presidency of COP 25 and the incoming UK Presidency of COP 26.

Over the course of ten days, nearly 60 openly webcasted events took place and nearly 8,000 people tuned in. Several events related to the work of the constituted bodies, which are the bodies that focus on implementing various aspects of the Convention and the Paris Agreement. These technical bodies provided updates on their work and future plans and received feedback from parties and non-party stakeholders.

Although it was agreed that formal negotiations or decision-making would not take place at these events given their virtual format, several non-broadcasted party-only events took place on outstanding negotiation issues, such as on Article 6 of the Paris Agreement (market and non-market mechanisms) or common time frames for nationally determined contributions. These aimed at increasing common understanding and ensuring progress towards reaching decisions at COP 26.

In terms of implementing key tasks scheduled for 2020 and reflecting on progress made by the constituted bodies throughout the year, the Dialogues delivered well. The success is less clear in terms of advancing discussions on outstanding issues. Overall, the Dialogues fared better at keeping parties talking than at moving the talks forward.

A Brief History of the UNFCCC, the Kyoto Protocol, and the Paris Agreement

The international political response to climate change began with the 1992 adoption of the UN Framework Convention on Climate Change, which sets out the basic legal framework and principles for international climate change cooperation with the aim of stabilizing atmospheric concentrations of greenhouse gases (GHGs) to avoid "dangerous anthropogenic interference with the

climate system." The UNFCCC, which entered into force on 21 March 1994, has 197 parties.

To boost the effectiveness of the UNFCCC, the Kyoto Protocol was adopted in December 1997. It commits industrialized countries and countries in transition to a market economy to achieve quantified emissions reduction targets for a basket of six GHGs. The Kyoto Protocol entered into force on 16 February 2005 and has 192 parties. Its first commitment period took place from 2008 to 2012. The 2012 Doha Amendment established the second commitment period from 2013 to 2020. It will enter into force on 31 December 2020.

In December 2015, parties adopted the Paris Agreement. Under the terms of the Agreement, all countries will submit nationally determined contributions (NDCs), and aggregate progress on mitigation, adaptation, and means of implementation will be reviewed every five years through a Global Stocktake. The Paris Agreement entered into force on 4 November 2016 and, to date, 188 parties have ratified the Agreement.

Recent Key Turning Points

Paris: The 2015 UN Climate Change Conference convened in Paris, France, and culminated in the adoption of the Paris Agreement on 12 December. The Agreement includes the goal of limiting the global average temperature increase to well below 2°C above pre-industrial levels, and pursuing efforts to limit it to 1.5°C. It also aims to increase parties' ability to adapt to the adverse impacts of climate change and make financial flows consistent with a pathway towards low GHG emissions and climate resilient development. The Agreement will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in light of different national circumstances.

In this Issue

| A Brief History of the of the UNFCCC, the Kyoto Protocol, and the Paris Agreement |
|---|
| Report of the Dialogues |
| A Brief Analysis of the UN Climate Change Dialogues |
| Upcoming Meetings |
| Glossary |

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Under the Paris Agreement, each party shall communicate, at five-year intervals, successively more ambitious NDCs. By 2020, parties whose nationally determined contributions (NDCs) contain a time frame up to 2025 are requested to communicate a new NDC and parties with an NDC time frame up to 2030 are requested to communicate or update these contributions.

Key features of the Paris Agreement include a transparency framework, and a process known as the Global Stocktake. Starting in 2023, parties will convene this process at five-year intervals to review collective progress on mitigation, adaptation, and means of implementation. The Agreement also includes provisions on adaptation, finance, technology, loss and damage, and compliance.

When adopting the Paris Agreement, parties launched the Paris Agreement Work Programme (PAWP) to develop the Agreement's operational details. They agreed to convene in 2018 a facilitative dialogue to take stock of collective progress towards the Paris Agreement's long-term goals. This process was known as the Talanoa Dialogue.

In Paris, parties also agreed on the need to mobilize stronger and more ambitious climate action by all parties and non-party stakeholders to achieve the Paris Agreement's goals. Building on the Lima-Paris Action Agenda, several non-party stakeholders made unilateral mitigation pledges in Paris, with more than 10,000 registered actions. Attention to actions by non-party stakeholders continued through the Marrakech Partnership for Global Climate Action, launched in 2016.

Marrakech: The UN Climate Change Conference in Marrakech took place from 7-18 November 2016 and included the first meeting of the Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement (CMA). Parties adopted several decisions related to the PAWP, including: that the work should conclude by 2018; the terms of reference for the Paris Committee on Capacity-building (PCCB); and initiating a process to identify the information to be provided in accordance with Agreement Article 9.5 (ex-ante biennial finance communications by developed countries). Other decisions adopted included approving the five-year workplan of the Warsaw International Mechanism on Loss and Damage associated with Climate Change (WIM), enhancing the Technology Mechanism, and continuing and enhancing the Lima work programme on gender.

Fiji/Bonn: The Fiji/Bonn Climate Change Conference convened from 6-17 November 2017 in Bonn, Germany, under the COP Presidency of Fiji. The COP launched the Talanoa Dialogue and established the "Fiji Momentum for Implementation," a decision giving prominence to pre-2020 implementation and ambition. The COP also provided guidance on the completion of the PAWP and decided that the Adaptation Fund shall serve the Paris Agreement, subject to decisions to be taken by the CMA. Parties also further developed, or gave guidance to, the Local Communities and Indigenous Peoples Platform, the Executive Committee of the WIM, the Standing Committee on Finance, and the Adaptation Fund.

Katowice: The Katowice Climate Change Conference convened from 2-14 December 2018 in Katowice, Poland, concluding a busy year that featured an additional negotiating session to advance work on the PAWP. At COP 24, parties adopted the Katowice Climate Package. The Package finalized nearly all the PAWP, including decisions to facilitate common interpretation and implementation of the Paris Agreement on the mitigation section of NDCs, adaptation communications, transparency framework, Global Stocktake, and financial

transparency, among others. Work on cooperative approaches, under Article 6 of the Agreement, was not concluded, and parties agreed that COP 25 in 2019 would serve as the deadline for this work. The COP was also unable to agree on whether to "welcome" or "note" the Intergovernmental Panel on Climate Change's (IPCC) Special Report on 1.5°C of Global Warming.

Chile/Madrid: The Chile/Madrid Climate Change Conference convened from 2-15 December 2019 in Madrid, Spain, under the COP Presidency of Chile. This COP was the longest in the history of the UNFCCC to date and several issues were left unresolved, including Article 6, common time frames for NDCs, transparency issues for the Paris Agreement, long-term finance, and the report of the Adaptation Committee. Parties decided that the second periodic review of the long-term global goal under the Convention will take place beginning in the second half of 2020 and concluding in 2022, with a structured expert dialogue. After protracted discussions, they further agreed to establish what some dubbed "an implementation arm" of the WIM in the form of the Santiago Network for Averting, Minimizing, and Addressing Loss and Damage, and adopted the enhanced five-year Lima Work Programme and its Gender Action Plan. The COP also requested the SBSTA Chair to convene, at SBSTA 52, dialogues on the ocean and climate change, and on the relationship between land and adaptation.

Report of the Dialogues

The UN Climate Change Dialogues opened on Monday, 23 November 2020. The following summarizes selected open sessions that were convened over the two weeks.

Opening Segment

Opening the session, Marianne Karlsen, Chair of the Subsidiary Body for Implementation (SBI), stressed that despite the COVID-19 pandemic, 2020 remains a vital year for climate action and called for continued progress. She said the Climate Dialogues aim to ensure that key tasks scheduled for 2020 are conducted, progress made throughout the year is reflected, and views and experiences are shared.

Tosi Mpanu-Mpanu, Chair of the Subsidiary Body on Scientific and Technological Advice (SBSTA), said the Dialogues are an opportunity to implement events mandated for 2020, interact with the various constitutive bodies, and deepen understanding of outstanding issues.

Moderator Melinda Crane, Deutsche Welle, said while the pandemic has compelled adaptation of ways of working, keeping the process on track is imperative. Contrary to the usual speaking order, where observer statements are heard at the end, groups of parties and observers alternated their interventions during the opening segment.

Amina Mohammed, UN Deputy Secretary-General, highlighted recent "encouraging signs," including a growing number of commitments to net zero carbon emissions by 2050. She said that for these targets to be credible, they must be reflected in national plans and policies as well as NDCs. She urged more progress on finance, including on the goal for developed countries to jointly mobilize USD 100 billion per year by 2020.

COP 25 President Carolina Schmidt noted the importance of non-state actors as key players and welcomed recent announcements on carbon neutrality from major economies such as China, Japan, and the Republic of Korea. She stressed that a sustainable economic recovery from the pandemic can help accelerate the transition to a low carbon economy and called for

boosting investments to generate large numbers of jobs while at the same time advancing the green transition.

Ecuador, for the Group of 77 and China, urged rebuilding trust in multilateral institutions, and strong and deliberate policy choices with the provision of financial and technical resources to stabilize GHGs and rebuild economies. She said developed countries must continue to take the lead on emission reductions, and stressed the need for adequate support, particularly additional and scaled up finance that is secure, predictable, and sustainable.

Switzerland, for the Environmental Integrity Group (EIG), called for building a common understanding on outstanding issues so that parties can arrive at COP 26 ready to adopt the required decisions to fully operationalize the Paris Agreement. He encouraged all parties to submit adaptation communications and updated NDCs, and expressed support for a solution-oriented approach to the new long-term finance goal. He supported capturing the outcome of discussions in written form.

Gabon, for the African Group, noted that most events in the Dialogues are on reporting and communication, rather than the core priority of implementation, and registered concern as to the consideration of pre-2020 ambition on mitigation and the finance gap. He called for using the Dialogues as an opportunity to close the ambition gap, welcoming that there will be no formal negotiations but only informal discussions.

Business and Industry called on governments to submit enhanced NDCs and work with all stakeholders to ensure a just and fair recovery. They noted the Race-to-Zero Dialogue, convened earlier in November 2020, showcased unprecedented momentum from non-state actors and highlighted the need for governments to put in place enabling frameworks to further enhance ambition.

Climate Action Network (CAN) South Asia, for Environmental Non-Governmental Organizations (ENGOs), lamented devastation from cyclones; called for ending fossil fuel production, especially coal; and pressed for finance for loss and damage. Pointing to closed-door discussions on Article 6, common time frames, transparency, and finance, he emphasized "the world we want is one where we are safe from climate change and where we are part of decision making."

Alok Sharma, COP 26 President, emphasized that climate action cannot be postponed. He noted the Climate Ambition Summit on 12 December will provide a platform for leaders to make announcements on mitigation, adaptation, and support, and called for long-term strategies towards net-zero emissions. He highlighted that the Dialogues would help improve mutual understanding of parties' positions and help identify what can be done to secure agreement at COP 26. He emphasized efforts to consult with non-state actors ahead of the Dialogues, particularly those whose voices are often marginalized.

China, for Brazil, South Africa, India, and China (BASIC), noted that it is essential to advance the process in an open, transparent, comprehensive, balanced, party-driven, and consensus-based manner to ensure the full and effective participation of developing countries, stressing the need for maintaining balance across items.

Germany, for the European Union (EU), highlighted the expectation for the Dialogues to bring about informal exchanges and substantive progress in advance of the next in-person session. She emphasized that the enhanced transparency framework and Article 6 remain key priorities. She noted the structured expert dialogue as an opportunity to better understand the long-term global goal, and said finance remains key for increasing ambition.

Bhutan, for the Least Developed Countries (LDCs), said it is crucial to maintain the timelines originally set and emphasized that, although being the most vulnerable and hardest hit, all 47 LDCs are determined to communicate updated NDCs. Referring to the COVID-19 pandemic, he said "The world is hitting a reset button." He emphasized it is time to invest in the lives and livelihoods of "the many, not the few," and called for every policy decision to be consistent with the Paris Agreement.

Farmers called for ambitious NDCs, the building of skills and capabilities to support a global just transition, investments in research and development, and ambitious political and financial frameworks, particularly for farmers in the Global South.

Local Governments and Municipal Authorities highlighted the Santiago Declaration on access to information to achieve sustainable development in Latin America and the Caribbean, adopted in August 2020.

UNFCCC Executive Secretary Patricia Espinosa underscored that, despite less than ideal conditions, there is a need to make progress on the climate agenda, build ambition, and ensure COP 26 is successful. She welcomed recent leadership and momentum, and urged robust NDCs, completion of the tasks required to operationalize the Paris Agreement, and continued climate ambition.

Panama, for the Independent Association of Latin America and the Caribbean (AILAC), stressed the importance of climate finance, highlighting that nearly 80% of climate finance has taken the form of loans, which he said only increase the debt burden in the Global South. Lamenting the devastating impacts of Hurricanes Eta and Iota, he urged advancement on implementing the WIM.

Australia, for the Umbrella Group, noted the importance of completing negotiations on the enhanced transparency framework and Article 6 by COP 26, emphasizing the need for continued discussions. On finance, he said donors are on a pathway to meeting the USD 100 billion goal in 2020.

Nicaragua, for the Bolivarian Alliance for the Peoples of Our America (ALBA), called on developed countries to fulfil their pre-2020 commitments regarding ambition. He stressed the urgent need for means of implementation.

Trade Union NGOs said COVID-19 has brought much hardship to workers and lamented that opportunities to build back better are being lost. He welcomed many countries' NDC commitments to a just transition and pointed to good initiatives for social dialogue processes.

Women and Gender noted that the COVID-19 pandemic, like climate change, is not "a great equalizer" but, rather, amplified existing inequalities. She said these crises show that deep fault lines in societal structures prioritize capital and property over people and the planet. She cautioned against "false claims" of reaching net-zero emissions while adhering to business-as-usual, and against "green colonialism" via carbon offsetting.

SBSTA Chair Mpanu-Mpanu and SBI Chair Karlsen delineated the objectives of the Dialogues. Mpanu-Mpanu emphasized the Dialogues are designed to maximize progress, minimize delay in the process, and enable parties to be well prepared to negotiate decisions when the time comes to reconvene in person. They said specific objectives are:

- to advance the implementation of activities mandated for 2020;
- to reflect on progress made in 2020 and facilitate exchanges on matters considered by the Subsidiary Bodies (SBs);
- to interact with constituted bodies to reflect on progress made in 2020 and planned activities in 2021; and

• to deepen understanding of unresolved issues and exchange views on possible solutions.

Karlsen noted guidance from all stakeholders helped to shape the Dialogues. She underscored that the choice of events and their framing are determined by the agendas of the SBs and the governing bodies, and that no formal negotiations are envisaged. She added no formal outcome is expected, but there will be reports from mandated events.

Papua New Guinea, for the Coalition for Rainforest Nations, underscored the potential and cost-effectiveness of nature-based solutions and lamented the low level of public climate finance dedicated to forests. On Article 6, he reiterated that "no decision is better than a bad decision," emphasized there would be no agreement without ensuring environmental integrity and avoiding double-counting and called for adaptation credits under Article 6.

Belize, for the Alliance of Small Island States (AOSIS), emphasized the need for: all major emitters to deliver NDCs consistent with the 1.5°C goal; developed countries to step up support for implementing NDCs and adaptation plans, with targeted support for small island developing states (SIDS); action and support for loss and damage to be anchored as a deliverable for COP 26; and finalizing the rulebook. He noted the timing of the Dialogues is not conducive to participation by all, especially SIDS, and called for all sessions to be recorded.

Youth NGOs drew attention to the Declaration on Children, Youth and Climate Action signed by a number of governments at COP 25, calling for others to align with its objectives and to commit to fulfilling children's right to a healthy planet.

The session then turned to questions and comments from parties. Many statements related to the extent to which the Dialogues would feed into future work of the SBI, SBSTA, and COP. Some parties, including Belize for AOSIS and Switzerland for the EIG, stressed the need to advance work on the negotiations to ensure results can be delivered at COP 26. Germany, for the EU, emphasized the wish to ensure that deliberations at the Dialogues will not merely be later duplicated at in-person meetings. Others, such as Saudi Arabia, for the Arab Group, underscored that developing countries are disadvantaged with respect to accessing virtual sessions due to poor internet connections, and said any reports coming out of the Dialogues should have no status in relation to future textual negotiations.

Other questions focused on:

- how to ensure that the Dialogues are comprehensive, balanced, and meaningful;
- advancing discussions on long-term finance;
- · options for continuing negotiations in the coming months; and
- lessons learned on virtual deliberations from other UN processes.

In response, Executive Secretary Espinosa committed to addressing the situation of poor internet connectivity experienced by some countries. She noted that formal decision-making is being done virtually in some other UN processes. She stressed the need to achieve as much progress as possible regardless of conditions to build common understandings towards achieving success at COP 26.

SBSTA Chair Mpanu-Mpanu said that while no substantive negotiations are taking place at the Dialogues, some of the mandated events will generate reports. He underscored this is a party-driven process. SBI Chair Karlsen stressed the Dialogues' informal nature and reiterated that no reports would be generated from informal discussions between parties.

Julio Cordano, for the COP 25 Presidency, said the Dialogues have been organized to reflect a balance between issues. Archie

Young, for the COP 26 Presidency, noted greater emphasis put on finance and means of implementation after feedback received on the initial agenda. Young also recognized concerns over limitations of virtual meetings, and noted the Dialogues aim to "push the boundaries of what is possible."

Briefing by the SB Chairs with Observers

Opening the session, SBSTA Chair Mpanu-Mpanu underlined that 2020 has put significant strain on intergovernmental meetings, but emphasized that observers' perspectives are important to the SBI and SBSTA Chairs.

Archie Young, for the COP 26 Presidency, highlighted the observer dialogue and the pre-2020 roundtable, both of which have mandates to engage directly with observers. He said adaptation is one of the Presidency's priorities for COP 26, and a deeper shared understanding is required for what the operationalization of the global goal on adaptation might look like in practice.

Julio Cordano, for the COP 25 Presidency, pointed to the work of High-Level Champions in rallying people around examples of climate action. He stressed that transformation would take place at the level of observers and society, and that their needs must be taken into account.

Observer organizations raised questions related to ensuring stakeholders are "meaningfully engaged" in the process, with some noting that observers are not included evenly in all sessions. SBI Chair Karlsen pointed out that anyone can listen in on the open sessions, despite a technical limit of 250 active participants. She reported that two seats per observer constituency had been allocated for the roundtable on pre-2020 ambition.

Regarding the status of discussions on human rights within the Article 6 discussions, Mpanu-Mpanu stressed the process is driven by parties. He also said that the Dialogues would favor technical discussions, which are "more conducive to engagement," and underlined the need for political guidance on other issues such as Article 6.2 (internationally transferred mitigation outcomes). Young and Cordano noted progress and that discussions had "boiled down to critical issues."

In response to a question on common time frames, Karlsen said the negotiations are now at the stage where the options are quite clear, and the next step is to find a solution. Jane Ellis, Organisation for Economic Co-operation and Development (OECD), responded to a concern about the OECD climate finance report by stressing that the report was established according to the modalities agreed upon at COP 24. Participants also discussed the Koronivia Joint Work on Agriculture (KJWA), and potential issues with the use of "nature-based solutions" over "ecosystem-based approaches."

Executive Secretary Espinosa underlined the importance of the Dialogues in maintaining momentum, stressing that "we need a success" at COP 26 in Glasgow. She called on all participants to "be generous" in building decisions that "reflect the needs, aspirations, and concerns of everyone involved."

Information Event on the Compilation and Synthesis of the 4th Biennial Reports of Annex I Parties

The Secretariat presented an update on Annex I parties' progress towards their 2020 emission reduction targets, and the provision of financial, technological, and capacity-building support to developing country parties up to 2018 (FCCC/SBI/2020/INF.10 and /Add.1).

On emission reductions, key messages include:

- developed countries are progressing towards achieving their 2020 emission reduction targets, but for some countries, greater efforts are needed;
- total GHG emissions of Annex I parties in 2018 were lower by 13% than in 1990, although there was a slight increase in emissions between 2016 and 2018;
- transformational change towards low or zero-emission economies is under way, as manifested in long-term goals and strategies for 2050;
- the energy sector represents the largest share of emissions but also the largest share of policies and measures; and
- there is a need for country-level examinations of underlying factors in decoupling emissions from economic growth.

The report also shows that: the provision of climate finance continues to increase, representing a 9.9% increase in 2017-2018 compared to 2015-2016; and although mitigation finance remains the largest type of climate-specific finance flow, the share for adaptation is growing and a number of parties allocated more than half of their annual support to adaptation.

Presenters also noted that:

- support for technology development and transfer and capacity building have significantly increased in recent years;
- support provided by developed countries aligns well with technology needs expressed by developing countries;
- adaptation accounts for the highest share of capacity-building activities; and
- energy, agriculture, and water remain priority sectors.

The Secretariat also drew attention to data available on its website, notably on 6,000 policies and measures analyzed for the report, allowing stakeholders to conduct their own analyses.

In response to a question on when developed countries would prioritize adaptation, the Secretariat noted that the report recapitulates biennial reports and does not consider future priorities. Concluding the meeting, SBI Chair Karlsen noted that reporting systems have enhanced the quality of reporting and supported domestic policymaking.

Roundtable on Pre-2020 Implementation and Ambition

This roundtable, which took place over the course of two days during the first week of the Dialogues, discussed progress made on pre-2020 implementation and ambition.

Jim Skea, Co-Chair of IPCC Working Group III, gave an overview of relevant IPCC findings on mitigation. He highlighted the need for rapid transitions away from fossil fuel-based energy systems, as well as links between response options and the Sustainable Development Goals (SDGs).

Anne Olhoff, UN Environment Programme (UNEP), presented on the gap between parties' pledges to reduce GHG emissions and the actual reductions, noting that Group of 20 (G20) countries are not collectively on track to fulfill their NDC commitments. She also noted a gap between the financial costs of adaptation in developing countries and the amount of money actually available to meet these costs.

Gebru Jember Endalew, Global Green Growth Institute, emphasized that adaptation finance lags behind mitigation finance, noting that only 15% of resources put forward for adaptation reaches communities.

Maarten van Aalst, International Federation of Red Cross and Red Crescent Societies, argued that the world is already witnessing the limits to adaptation, and that silos within institutional and financing mechanisms stop finance from reaching the most vulnerable. He urged actors to consider systemic, compound, and cascading risks, saying it appears that "the disasters are collaborating better than we are."

Stephen Hammer, World Bank, described some macro-trends in implementation, including a focus for NDC efforts to follow whole-of-government approaches, and the growing interest of private investors in risk disclosure.

Elizabeth Press, International Renewable Energy Agency (IRENA), explained that, while the number of UNFCCC parties with renewable energy policies is increasing, only 66% have quantified targets for renewable energy.

Pointing to the "Race-to-Zero" campaign, Gonzalo Muñoz and Nigel Topping, High-Level Champions for COP 25 and COP 26, respectively, stressed the need for a roadmap to link state and non-state actors to increase mitigation.

Florin Vladu, UNFCCC Secretariat, provided an overview of work on implementation and ambition, noting, among others: gradual progress for National Adaptation Plans (NAPs); and the need to integrate adaptation with the SDGs and the Sendai Framework for Disaster Risk Reduction.

In discussions, participants considered, among others: the different commitments and responsibilities of developed and developing countries; how UN institutions might optimize climate finance by removing silos; lessons learned in the renewable energy sector; and the need to put exponential transformation at the heart of every transition pathway.

The second day of the roundtable opened with inputs from four "icebreakers," all speaking in their personal capacity, reflecting on progress made by parties so far and on the state of the Climate Dialogues.

Pointing to the widening gap between mitigation ambition and actual emissions reductions, Leon Charles, Grenada, emphasized that governments must focus on actually implementing policies. He said technology transfer between developed and developing countries must be a priority now that technologies for transformative action are available. He underscored the need for urgent measures to reduce climate impacts, including loss and damage activities, and that climate finance is critical.

Maryke van Staden, Local Governments for Sustainability (ICLEI), called for more effective multilevel governance, and highlighted enhancing access to finance, particularly for local communities, and supporting climate reporting by subnational governments to feed data back to the national and global levels.

Reflecting on take-aways from the pre-2020 period, Franz Perrez, Switzerland, emphasized the need to avoid "lenses of bifurcation and polarization" but rather foster an atmosphere of common understanding, where "we see each other as partners," noting that all have to commit based on their capacity and responsibility.

Majda Dabaghi, International Chamber of Commerce, said that businesses have played a crucial role since COP 21 by taking on voluntary commitments. She listed private sector decarbonization efforts, including major companies' commitments to net zero, and highlighted the importance of "inclusive multilateralism."

In the subsequent discussion, participants highlighted lessons learned to take forward in the post-2020 period. Among others, Mexico, for the EIG, stressed the need to look at the wider social and economic contexts of implementing climate action. Sun Zhen, China, in a personal capacity, called for the "courage to be honest," noting that "the reality of science is more important than the reality of politics." Mark Lutes, for CAN-International, warned of the "alarming" trend that public money for COVID-19 recovery continues to go to high-emissions sectors.

Technical Dialogue on Common Time Frames for NDCs referred to in Article 4, paragraph 10, of the Paris Agreement

Monday, 7 December 2020

This session aimed to deepen parties' understanding of the technical aspects of this outstanding negotiation item. Emphasizing the technical nature of the discussion, facilitator Kishan Kumarsingh, Trinidad and Tobago, discouraged parties from repeating previously stated positions.

Yamide Dagnet, World Resources Institute (WRI), said that if parties have different time frames, the Global Stocktake (GST) cannot equitably reflect progress on action and support, and emissions trading would be more complex.

Benito Müller, Oxford Climate Policy, proposed, as a potential compromise solution, a rolling cycle whereby by 2025, parties should communicate a 2035 NDC and update their 2030 NDC; and that by 2030, parties should update their 2035 NDC and communicate a 2040 NDC. He argued this solution can retain all advantages of the options on the table, while avoiding their risks.

In the ensuing discussion, many parties repeated their positions on the issue of common time frames. Some, such as Switzerland for the EIG and Bangladesh for LDCs said five-year common time frames would allow parties to better adapt to new developments, align with the GST process, and avoid locking in low ambition. China for the Like Minded-Group of Developing Countries (LMDCs) and Saudi Arabia for the Arab Group supported giving parties the option to submit a 5-year or a 10-year NDC, stressing the need to respect different national circumstances. The EIG and the African Group noted the option of a 5+5-year solution whereby parties could submit a 5-year firm NDC as well as an indicative 10-year NDC.

On the most important factors to consider in arriving at a practical and workable time frame, Panama, for AILAC, pointed to the need to provide regular opportunities for the latest information to directly inform subsequent NDC commitments, and the need to give non-state actors timely information to enable investments.

Belize, for AOSIS, called for parties to meet in the middle and find a mutually agreeable solution, expressing willingness to "look at" the rolling time-frame approach suggested by Müller.

In closing remarks, Julio Cordano, for the COP 25 Presidency, said parties had reached a common understanding that this item must be solved as soon as possible. Huw Davies, for the COP 26 Presidency, said resolving the issue will help unleash the Paris Agreement's full potential. SBI Chair Karlsen stressed the need to "marry" the 5-year dynamics of the Paris Agreement with national circumstances.

Adaptation Committee – Achievements in 2020

This event provided an opportunity for the Adaptation Committee (AC) to seek input from participants on its ongoing work. Alessandra Sgobbi, AC Co-Chair, presented highlights from the AC's work in 2020. Among others, she pointed to the launch of a toolkit for engaging the private sector in NAPs and noted further work will focus on micro- and small-scale enterprises in the agriculture sector.

AC members Vladimir Kattsov and Funanani Muremi presented insights from upcoming reports on data for adaptation at different spatial and temporal scales, and on how developing countries are addressing hazards, respectively.

Mariam Allam, AC, presented the current state of the AC's draft technical paper on approaches to reviewing the overall progress made in achieving the global goal on adaptation (AC18/

TP/5A). She pointed to an analytical summary of the spectrum of approaches to assessing adaptation progress, ranging from less challenging approaches such as using existing data from parties' submissions, to more challenging ones, including aggregating in-depth country evaluations.

Feedback from participants included:

- prioritizing a qualitative synthesis of existing information;
- combining approaches so they complement each other;
- privileging approaches that do not create additional burdens for developing countries;
- adopting a flexible approach to reviewing progress, allowing discontinuation of unsuitable approaches;
- · using sector-specific approaches; and
- · using self-assessment measures.

Several speakers highlighted the need to take into account adaptation to transboundary risks and impacts.

Navina Sánchez Ibrahim, AC, presented the current state of the AC's work on methodologies for reviewing the adequacy and effectiveness of adaptation and support (AC LEG/INFO/1). She highlighted that an iterative application of such methodologies and reporting of the respective outcomes provide important opportunities for mutual learning on the global state of play on adaptation.

Feedback from participants included:

- privileging country-specific indicators over generic ones;
- not predominantly relying on quantitative data;
- examining the impacts of support received;
- leveraging IPCC assessment reports to assess changes in vulnerability; and
- using information provided in adaptation communications. In closing remarks, Cecilia da Silva Bernardo, AC Co-Chair, pointed to future activities on technology needs related to agriculture, water resource management, and coastal zones; and to an upcoming publication on linkages between adaptation and mitigation. She emphasized that "different views on how to act cannot be an excuse not to act."

Adaptation Fund Event: Serving the Paris Agreement through Financing Adaptation Action, Innovation and Learning

In opening remarks, SBI Chair Karlsen highlighted that the Adaptation Fund (AF) has developed into an important vehicle for supporting adaptation projects by using innovative funding modalities, including the pioneering of direct access.

Ibila Djibril, Chair of the AF Board, emphasized that direct access enhances country ownership and ensures funding is used where it is most needed, and pointed to the upcoming fourth review of the Fund.

Andrea Meza Murillo, Costa Rica, underscored the AF's track record in implementing successful projects in a timely manner.

Huw Davies, for the COP 26 Presidency, said making adaptation finance more predictable, accessible, and effective is a priority, and assured participants that the UK will continue to call on donors to increase support for adaptation, especially in grant-equivalent terms.

Sonam Phuntsho Wangdi, Bhutan, LDC Chair, welcomed the number of accreditations for national implementing entities based in LDCs and SIDS. He underscored the need to finalize negotiations on Article 6 (cooperative approaches) to have shares of proceeds supporting the AF and called for developed countries to scale up finance for adaptation, particularly on a grant basis.

Mikko Ollikainen, AF Board secretariat, delineated the Fund's medium-term strategy and highlighted, among others, advancement of gender equality, and innovation grants, including a designated window for proposals from non-accredited organizations such as civil society organizations.

Participants then heard views on the AF's work from the perspective of: Antigua and Barbuda, as a beneficiary country; Sweden, as a donor country; the Centre de Suivi Écologique, as a National Implementing Entity from Senegal; and the AF NGO Network, as a civil society organization.

Speakers provided a strong endorsement of the Fund, highlighting features such as:

- · direct access, which enhances country ownership;
- support for tailoring project to local needs;
- flexibility for adjusting projects during the COVID-19 pandemic;
- a strong track record in funding projects that are later scaled up with support from, among others, the Green Climate Fund (GCF) or the World Bank;
- a focus on women's empowerment, and ensuring engagement of end users;
- the standing Dialogue with Civil Society Organizations at AF Board meetings; and
- the Fund's emphasis on self-assessment and continuous improvement.

Progress Update on the work of the Standing Committee on Finance

Ismo Ulvila, Co-Chair of the Standing Committee on Finance (SCF), moderated this event, which heard presentations by a number of SCF members. He reported on the preparation of the 4th Biennial Assessment and Overview of Climate Finance Flows, noting that the mapping of information relevant to Article 2.1(c) of the Paris Agreement (making finance flows consistent with a pathway towards low GHG emissions and climate-resilient development) is a new task stemming from COP 24.

Mattias Frumerie, SCF, said the first report on the determination of the needs of developing countries related to implementing the Convention and the Paris Agreement, expected for mid-2021, will present needs from four topical perspectives: mitigation/adaptation; sectoral breakdown; means of implementation; and a geographical perspective. He noted the report will be based on a compilation of existing information from various sources, including submissions, rather than new research.

Mohamed Nasr, SCF, spoke about the preparation of the next SCF Forum on Finance for Nature-based Solutions (NbS), noting it should have been held in 2020 and that confirming a date for an in-person event in 2021 will depend on the state of the COVID-19 pandemic. He reported on virtual preparatory consultations that addressed, among others, the definition of NbS, the potential of NbS, key stakeholders in the field, linkages with other processes, and how to make the Forum meaningful to stakeholders.

Toru Sugio, SCF, spoke on the preparation of draft guidance to operating entities of the Financial Mechanism. He emphasized that such guidance can only be adopted by the COP, meaning that parties will discuss two years' worth of reports by the operating entities at COP 26. He said the SCF will meet virtually in December 2020 and reminded parties about the invitation to submit views on elements to take into account in the guidance.

The session then featured discussants' perspectives on future SCF work. Janine Felson, Belize, emphasized the need for the SCF not to take a one-size-fits-all approach with regard to the

needs report, and noted that, although it has not made use of it so far, the SCF does have the authority to be more direct in its approach to scaling-up finance, specifically for SIDS. Lindseth Gard, Norway, welcomed the Forum on Finance as an arena to "dive into specific topics" such as NbS, and said the guidance to the GCF and Global Environment Facility (GEF) should focus on NDCs and long-term strategies.

As an opportunity for SCF collaboration with the AC, Funanani Muremi, AC, pointed to joint work with the LDC Expert Group (LEG) on methodologies for reviewing the adequacy and effectiveness of adaptation and support. Marzena Chodor, Paris Committee on Capacity-building (PCCB) Co-Chair, pointed to the launch in 2021 of an informal coordination group on capacity building under the Convention and the Paris Agreement.

Jan-Willem van de Ven, European Bank for Reconstruction and Development (EBRD), noted the alignment between SCF work on NbS and the EBRD's increased focus on natural capital, and emphasized that the Bank is planning on aligning its work with the Paris Agreement's goals, starting with screening all direct investments in 2021. Bernd-Markus Liss, German Development Cooperation Agency (GIZ), highlighted that the NDC Partnership provides support for parties to develop financing strategies for NDCs, and pointed to GIZ activities on strengthening parties' capacity to ensure better absorption of funds.

In a question and answer session, participants asked about, among others: finance for loss and damage, noting lack of progress in this regard puts the UNFCCC "at risk of becoming obsolete"; a definition of NbS; the SCF reaching out to the Executive Committee (ExCom) of the WIM and other constituted bodies ahead of preparing the guidance to the operating entities; and having both qualitative and quantitative elements in the needs report.

Research and Independent NGOs raised concerns about the lack of access by nominated observers to the draft SCF reports in 2020. Ulvila acknowledged the past practice of sharing hard copies of the Biennial Assessment and said that the Co-Chairs would liaise with the Secretariat on this topic.

In-session Workshop on Long-term Climate Finance

This event was part of a series of in-session workshops on long-term climate finance mandated by the COP to provide an overview of the state of mobilization and delivery of climate finance. Co-Chair Georg Børsting, Norway, noted that the Secretariat will prepare a report from the workshop to feed into discussions at a subsequent event during the next SB session.

In opening remarks, Julio Cordano, for the COP 25 Presidency, noted increased climate finance is critical for enhanced ambition; and emphasized the need to achieve a balance between finance for mitigation and for adaptation.

Noting that the scale of investments required to deliver on the Paris Agreement is in the trillions, Executive Secretary Espinosa highlighted the fulfillment of the pledge by developed countries to jointly mobilize USD 100 billion of climate finance per year by 2020 is a "vital signal" that will strengthen political trust between developing and developed countries. Seeing as trillions were unleashed for recovery from the COVID-19 pandemic, she said there is "no justification" for not meeting this goal.

Jane Ellis, OECD, presented insights from analyzing climate finance provided and mobilized by developed countries in 2013-18, including:

• Total climate finance provided and mobilized per year reached USD 78.9 billion in 2018, up by 11% from 2017;

- Bilateral public climate finance accounted for the largest share of the 2018 total, rising by 21% from 2017;
- Mitigation represented 70% and adaptation 21% of the 2018 total, with adaptation finance rising by 29% per year on average;
- The share of loans in total public finance provided grew from 52% to 74%;
- Private climate finance mobilized in 2016-18 was 93% focused on mitigation and was mostly aimed at middle-income countries; and
- LDCs and SIDS accounted for 14% and 2%, respectively, of total climate finance provided in 2018.

Tracy Carty, Oxfam, emphasized that "how" the USD 100 billion goal is met is as important as "whether" it is met. With loans and other non-grant instruments accounting for an estimated 80% of reported public climate finance and 40% of all reported finance estimated as non-concessional, she highlighted that the increase in climate finance largely comes from "finance provided on harder terms." She noted that the rise of non-grant instruments increases countries' debt and jeopardizes transformative action, especially in LDCs and SIDS. She emphasized the need for a grant-equivalence system of reporting to better reflect donors' real financial effort.

Responding to questions, Ellis clarified that OECD calculations are based on accounting rules agreed by the COP, and Carty noted that information on loan conditions is not readily available. Switzerland also cautioned against using Rio markers to assess consideration of gender components, pointing to distortions stemming from an overall conservative use of the markers.

In a round of reflections, Amar Bhattacharya, Brookings Institution, noted that although the grant stagnation is concerning, loans, even non-concessional loans, remain valuable, especially for middle-income countries. Looking ahead, he emphasized: increasing overlap between support for climate action and sustainable development; mobilizing private finance; and attention to the sufficiency and effectiveness of resources provided. Preety Bhandari, Asian Development Bank, called for lessons learned on mobilizing private finance through multilateral channels, noting this significantly exceeds private finance leveraged through bilateral channels. Peter Damgaard Jensen, Denmark Pensionskassernes Administration, highlighted increased interest from institutional investors and banks in green investment opportunities, primarily in developed markets but potentially also in middle-income countries; and noted the lack of income streams from adaptation projects makes it challenging to mobilize private finance for adaptation.

Mariama Williams, South Centre, said finance for adaptation should not be loan based and export credits should not be counted as climate finance; and highlighted challenges, such as the fragmentation of the international climate finance architecture, and co-financing requirements. She emphasized that the dominance of a small set of accredited entities impedes country ownership.

In closing remarks, Archie Young, for the COP 26 Presidency, said the USD 100 billion goal is of "totemic" importance. Highlighting the need to find "the right type" of finance for specific circumstances, he noted progress needed on both quantity and quality of climate finance. Recognizing parties' wish for increased focus on finance issues, he said the discussion would continue in a Heads of Delegation event during the second week of the Dialogues as well as in the Climate Summit on 12 December.

Informal Joint Presidency and Incoming-Presidency Heads of Delegation Finance Event

During the second week of the Dialogues, Julio Cordano, for the COP 25 Presidency, and Archie Young, for the COP 26 Presidency, moderated this dialogue, noting its aim to gather views, understand priorities, and advance the preparation for negotiations at COP 26. Cordano highlighted that there will be no written output from the event.

Groups and parties shared their views on, among others, the USD 100 billion pledge, the definition of climate finance, modalities for accounting of climate finance, mobilizing private finance, modalities for accessing climate finance, and challenges and opportunities related to the COVID-19 pandemic.

Views differed on the level of progress made by developed countries towards reaching the USD 100 billion goal, with some groups pointing to the findings of the latest OECD report, which indicate that developed countries are on track to deliver on their pledge. Several developing country groups emphasized the high proportion of loans compared to grants, and the question of additionality, among others.

Developing countries also noted that, while delivery on the USD 100 billion is key to build trust, the amount is not sufficient to meet their needs. Several developed countries agreed that further efforts are needed, especially on mobilizing private finance, which has proven challenging, and on increasing support for the most vulnerable countries.

AILAC said the volume of climate finance flows is significantly smaller than investments in fossil fuels, underscoring the need to generate new visions for the financial system to support low-carbon development pathways.

Parties generally aligned in emphasizing the need for more adaptation finance, aligning/making financial flows consistent with the Paris Agreement, and the recovery from the pandemic to foster the transition towards low-carbon economies.

Other points highlighted include:

- the need for a process under the UNFCCC to assess progress on the USD 100 billion per year goal;
- assessing the impacts of climate finance;
- initiating discussions on a new post-2025 collective finance goal;
- · eliminating fossil fuel subsidies; and
- debt, including COVID-19 related debt, reduces the fiscal space for developing countries to invest in climate action.

Responding to concerns expressed by the Arab Group, Young assured parties that the discussions led by the UN Special Envoy for Climate Action and Finance, which pertain to climate risk disclosure, among others, are complementary to, but separate from, the negotiations on finance within the UNFCCC.

The Executive Committee of the Warsaw International Mechanism for Loss and Damage event

Le-Anne Roper, Executive Committee (ExCom) Co-Chair, opened the session with an overview of the work of the ExCom of the WIM in 2020. She noted that the 2019 WIM review and decisions adopted in Madrid raised significant expectations of the ExCom.

Regarding the Task Force on Displacement (TFD), Dina Ionesco, International Organization for Migration (IOM) and TFD, emphasized work at the regional level, noting it is the key level to address displacement and human mobility questions, and highlighted efforts to engage stakeholders and civil society in its work.

On the Technical Expert Group on Comprehensive Risk Management (TEG-CRM), Jelena Milos, ExCom, pointed to tenets of CRM, emphasizing risk assessments as a foundation, and social protection measures, risk transfer, and catastrophe bonds as approaches to risk reduction. Maarten van Aalst, TEG-CRM, highlighted compounded risks from COVID-19 and climate change, and underscored the need to better understand how to manage risks holistically.

As an example of collaboration with other constituted bodies, Nedal Katbeh-Bader, ExCom, spoke about a policy brief on "Technologies for Averting, Minimizing and Addressing Loss and Damage in Coastal Zones" prepared with the Technology Executive Committee (TEC). Among other key messages, he highlighted the need for availability of high-quality and timely data on characteristics such as topography or hydrology to produce risk assessments, and that technologies for directly managing coastal zone risk can take several forms, including structural/engineered measures, ecosystem-based approaches, or legal and regulatory measures.

Malcolm Ridout, ExCom Co-Chair, pointed to an upcoming, open-access special issue of scientific research articles on slow-onset events.

On the new Expert Group on action and support, Dawn Pierre-Nathoniel, ExCom, said the group would develop its plan of action at its first meeting, envisaged for December 2020 or early January 2021. She recalled that decisions adopted in Madrid call for enhanced collaboration between the WIM and the SCF and GCF, and highlighted the group would play a key role in this regard. As key activities, she pointed to compiling information on available sources of support for loss and damage activities and analyzing enabling conditions for implementing risk transfer facilities.

Ismo Ulvila, SCF Co-Chair, noted the SCF's 4th Biennial Assessment and Overview of Climate Finance Flows will address loss and damage, and pointed to the mandate for the SCF to engage with the ExCom on input to the draft guidance to the operating entities of the financial mechanism. Toru Sugio, SCF, noted no guidance will be adopted this year, as only the COP can do so.

Juan Pablo Hoffmaister, GCF, shared that the guidance received by COP 25 is still under consideration by the GCF Board. He said revisions to the GCF's indicator framework are underway and should help tracking activities related to loss and damage. Highlighting that the GCF did not decide that loss and damage activities could not be funded, he emphasized that no concept note or funding submission has been rejected on such grounds.

Among other reflections by parties, Colombia, for AILAC, called for a strict application of the agreed timeframe to advance the work of the new Expert Group on action and support, ensuring its plan of action is still adopted in 2020. AILAC, supported by ENGOs, noted virtual meeting formats increased the participation of observers and encouraged the ExCom to continue supporting this. Timor-Leste asked about party involvement in the development of the plan of action and highlighted the need for support on methodologies for risk assessments.

In closing remarks, Ridout emphasized the ExCom's work is best when it is technical in nature and enables practical action. He underscored the importance of collaboration, both to understand demand and to receive technical input that increases the quality of WIM products.

Developing the Santiago Network for Loss and Damage

This session provided an informal space for parties and observers to share ideas on how to continue the development of the Santiago Network to effectively catalyze technical assistance for developing countries to avert, minimize, and address loss and damage. Interventions focused on what the Network should deliver for parties and how the Network should be structured to deliver the identified functions.

Gladys Santis, for the COP 25 Presidency, recalled the decision adopted at COP 25 to establish the Santiago Network and noted the UNFCCC Secretariat had launched a web portal for the Network in June 2020. She highlighted there would be no formal outcome from the event.

Parties highlighted that the Network needs to respond to a wide array of needs, with many developing country groups emphasizing areas such as: data analysis, risk assessment, policy development, and accessing finance for implementing loss and damage projects. Many parties underscored the need to address the topics of slow-onset events and non-economic losses. LDCs noted the Network is a first step in creating an implementation arm for the WIM, and emphasized the importance of providing urgent response support, for example after extreme weather events.

The EU and the Umbrella Group emphasized the need to avoid duplication and build on existing initiatives within and outside the UNFCCC process, for example pointing to the Sendai Framework for Disaster Risk Reduction and the work of the International Red Cross and Red Crescent Movement. They highlighted the Network should not lead to a one-way flow of information into the UNFCCC, but foster interaction among Network members.

The interventions were heavy in analogies, with speakers calling for, among others: a "wedding planner" service that provides information tailored to countries' specific needs; and a "match-making" service that would identify the most suitable experts and organizations to respond to parties' specific requests for support. One group spoke of emulating dating app/sharing economy modalities to review the quality of support received. Many referred to the Climate Technology Centre and Network (CTCN) as a good model, and some also pointed to the Fiji Clearing House for Risk Transfer. National contact points for loss and damage were highlighted as important.

Speakers noted the need to further clarify the governance of the Network. ENGOs proposed emulating the structure of the CTCN, and, noting the Network will need financial resources to be fully operational, pointed to attracting support from partner organizations. Research and Independent NGOs urged providing the Network with operational capacity, noting it is presently "only the outline of a mechanism."

Archie Young, for the COP 26 Presidency, noted discussions would continue throughout 2021, both on the function and structure of the Network.

Informal Event of the Forum on the Impacts of the Implementation of Response Measures

In opening remarks, SBI Chair Karlsen highlighted the close links between the topics of discussion at this session and the recovery from COVID-19. SBSTA Chair Mpanu-Mpanu said recovery policies provide a good basis for peer learning.

Annela Anger-Kraavi, Co-Chair of the Katowice Committee of Experts on the Impacts of the Implementation of Response Measures (KCI), gave an overview of the KCI's work at its third meeting, held virtually in October 2020, highlighting that the KCI considered a strategy to implement its 2020-2025 workplan.

Peter Govindasamy, KCI Co-Chair, highlighted that: economic diversification and just transitions are "two sides of the sustainable development coin"; and the response measures mandate must be robustly addressed.

The first panel discussion focused on climate change mitigation strategies that maximize positive and minimize negative impacts. Speakers noted, among others:

- the impacts from transitioning away from coal-fired power plants can include the need to relocate workers and their families;
- COVID-19 recovery policies involving large investments in sustainability will result in increased employment, reduced emissions, increased gross domestic product (GDP), and an improved trade balance; and
- positive impacts of mitigation policies can be maximized if mixed with appropriate supporting instruments.

The second panel discussion focused on enhancing capacity and understanding on assessment of implementation of response measures to facilitate economic diversification and just transition. Pao-Yu Oei, Technische Universität Berlin, stressed that regions that stop producing coal first will likely receive the most support and encounter the best results, while those ignoring the trend risk economic collapse with low chances for recovery.

Diann Black-Layne, Antigua and Barbuda, underscored the gender aspects of just transitions, noting that men represent 90% of the workforce that needs to "be transitioned" in Antigua and Barbuda, and outlined efforts to "bring the men along" by articulating a positive vision.

Kate Hughes, UK, outlined plans for a COP 26 Energy Transition Council, which will bring together the global political, financial, and technical leadership in the power sector, and help to ensure that every country considering the energy transition can access needed support.

Noting that informal workers are among the first to be impacted both by climate change and by response measures, Dunja Krause, UN Research Institute for Social Development, outlined how the low-carbon transition can reach the informal sector.

Paris Agreement Implementation and Compliance Committee

This session focused on lessons learned and best practices from other compliance committees as input to the Paris Agreement Implementation and Compliance Committee (PAICC). Opening the session, Christina Voigt, Co-Chair of the PAICC, said the Committee is on track with the delivery of its mandate to develop its rules of procedure for adoption at CMA 3. Haseeb Gohar, Co-Chair of the PAICC, stressed the timeliness and usefulness of hearing lessons learned from bodies under different regimes for developing the PAICC's rules of procedure.

Wael Aboulmagd, Egypt, said the PAICC stressed that despite the lack of a rules-based enforcement mechanism, the PAICC is fit for purpose, although the Paris Agreement will only succeed once parties demonstrate the necessary political will.

Janine Felson, Belize, said the concept of compliance is embedded in the Paris Agreement as a fundamental paradigm, and many mechanisms and processes under the Convention and the Paris Agreement are relevant to compliance.

Johanna Lahti, Finland, for the EU, said the PAICC has an essential role in helping parties implement the Paris Agreement.

Milan Zvara, Chair of the enforcement branch of the Compliance Committee of the Kyoto Protocol, noted the branch could apply consequences for parties not meeting their commitments under the Protocol.

Kunihiko Shimada, Vice-Chair of the facilitative branch of the Compliance Committee of the Kyoto Protocol, noted lessons learned, including improvements to the Committee's working arrangements.

Juliette Kohler, Basel Convention Implementation and Compliance Committee, highlighted lessons learned, including: the combination of representative and expert membership; the balance between transparency and confidentiality; consensus decision making; and the need to secure the engagement of the non-compliant party.

In the subsequent discussion, participants focused on: the PAICC's consideration of systemic issues; how to engage with experts; managing interactions with parties; and the possibility for non-party stakeholder participation in the PAICC.

In concluding remarks, PAICC Co-Chair Gohar stressed the need for a trust-based approach.

Informal Forum of the Consultative Group of Experts on the Measurement, Reporting, and Verification and the Enhanced Transparency Framework

This session focused on gathering feedback on the work of the Consultative Group of Experts (CGE). Jenny Mager, for the COP 25 Presidency, stressed the need to complete the CGE's terms of reference, and highlighted the importance of the CGE's work in providing technical advice and support on the implementation of the enhanced transparency framework (ETF).

Eve Deakin, for the COP 26 Presidency, said the transition to the ETF will raise new challenges for parties. She called for easier access to existing support, a step up in capacity building and support, and a clearer understanding of how the ETF will be implemented.

Alyssa Ng, CGE, highlighted knowledge products the CGE has produced in 2020. In the discussion, participants raised the need for additional training and case studies, as well as more guidance on differences between biennial update report (BUR) and biennial transparency report (BTR) guidelines.

Kadir Aksakal, CGE, outlined the CGE's knowledge delivery activities. Participants highlighted additional areas where capacity building is needed, including on BTRs and on developing NDC indicators.

On the CGE's peer exchange work, Athmane Mehadji, CGE, described a toolbox on institutional arrangements.

Virginia Sena, CGE, outlined the findings of the CGE's needs assessment work in 2020, including that: developing countries face constraints and challenges in preparing BURs and National Communications. Participants reported constraints, including data gaps, knowledge of tools and software, and developing monitoring and evaluation systems for adaptation.

On how the CGE and other stakeholders can better respond to the evolving needs of developing countries, participants pointed to training in-country experts, disseminating best practices and lessons learned, and providing sector-specific training.

Ricardo Fernandez, CGE, solicited feedback on the CGE's workplan. As key areas for the CGE's work in 2021 and beyond, participants highlighted, among others, the preparation of BTRs, verification, quantifying mitigation benefits, and support for designing transformative climate policies.

In closing remarks, CGE Chair Arif Goheer stressed much work lies ahead to assist developing countries to improve their capacities to implement the existing monitoring, reporting, and verification arrangements and prepare for the ETF.

Keeping Momentum on Capacity-building – The Work of the Paris Committee on Capacity-building in 2020

This meeting was the final virtual event in the series on "Capacity-building Momentum to Recover Better" that took place throughout November 2020. In opening remarks, SBI Chair Karlsen commended the increased alignment of the Durban Forum on Capacity-building with the annual focus area of the PCCB.

Yongxiang Zhang, PCCB Co-Chair, presented the annual technical progress report of the PCCB (FCCC/SBI/2020/13). She said despite setbacks, such as the postponement of the 3rd Capacity-building Hub, the PCCB advanced in several areas, including holding its annual meeting virtually, the development of the PCCB's second workplan, the launch of the PCCB Network, and collaborations with the AF and the UN Office of the High Commissioner for Human Rights. On the way forward, she highlighted the PCCB's 2021 focus area on building capacity to facilitate coherent implementation of NDCs in the context of national development plans.

Marzena Chodor, PCCB Co-Chair, said the PCCB's virtual regional workshop in the African region in October 2020 brought together a diverse array of stakeholders. She highlighted an informal coordination group, to be launched in 2021, and said that the PCCB Network will aim to concurrently foster synergies and coordination among interested stakeholders.

The session moved to a roundtable discussion, during which Espen Ronneberg, Secretariat of the Pacific Regional Environment Programme (SPREP), highlighted ongoing efforts to ensure widespread opportunities on capacity building in the Pacific region. Pointing to the challenges posed by high turnover in the public service, he stressed the need for the Pacific region to keep building up a cadre of climate professionals.

Mattias Frumerie, SCF, highlighted that the majority of financial flows go through multilateral development banks or bilateral agencies, rather than the GEF and GCF, which he said demonstrates the importance of integrating climate action in national engagement with development partners.

Shehnaaz Moosa, Climate and Development Knowledge Network, underscored lessons learned from shifting operations to a virtual format, including that: strong relationships with capacity-building participants are needed; the manner, frequency, and duration of engagements is more important than the information being shared; and virtual formats are useful for connecting Global South experts to the global stage for capacity building. She also highlighted that capacity building is a process, rather than a one-off event, with Frumerie adding that capacity building needs to be a demand-driven process.

In a question and answer segment, Chodor stressed the need to focus on the link between recovery from COVID-19 and enhancing NDC capacities and resource availability. On positive features of the PCCB Network, Moosa pointed to linking capacity building with action on the ground. She stressed capacity building is a two-way partnership, not a one-way flow. Ronneberg said SPREP is supporting both vertical and horizontal or peer-to-peer capacity-building exchanges.

Technical Dialogue with Parties and Observers by the SBI Chair on Experiences, Good Practices, and Lessons from LEG Work to Inform LEG Review

This session focused on emerging needs for supporting LDCs with a view to informing the review of progress and terms of reference for the LEG.

Presenting outcomes of the stocktaking meeting on the work of the LEG and related reports, Nikki Lulham, LEG, said while the LEG has effectively carried out its work so far, it will require enhanced resourcing in a subsequent mandate and by itself cannot fully meet LDCs' needs. On possible elements of a future LEG mandate, she highlighted: support for NAP implementation; facilitating dialogue on accessing funding from the GCF, AF, and LDC Fund; and advice on gender-sensitive approaches to formulating NAPs.

On the LDCs' needs related to preparing NAPs, updating NDCs, and fulfilling their other responsibilities under the Convention and Paris Agreement, parties pointed to, among others: support for institutional capacity building; and support for developing national policy linkages between the SDGs, disaster risk reduction, and adaptation.

On enabling factors to more effectively engage with and support national stakeholders in implementing climate change activities, parties highlighted, among others: engaging with customary and Indigenous practices; involving all stakeholders from the beginning of formulating NAPs; and transparency.

On expected outcomes of support to LDCs, Ephraim Mwepy Shitima, Zambia, said every LDC must have a NAP and facilitate access to predictable funding.

On strengthening the LEG's work, Nicola Di Pietrantonio, European Commission, proposed a better division of labor between the LEG and the AC, with the AC to focus on NAP-related work.

LDC 2050 Vision and Initiatives – Synergy with Support Mechanisms for the LDCs under the UNFCCC

Sonam Phuntsho Wangdi, LDC Chair, Bhutan, said LDCs have stepped forward with an ambitious vision and are leading initiatives, but need other countries to make deep cuts to domestic emissions and provide scaled-up support.

Hana Hamadalla Mohamed, LEG Chair, outlined the vision for each LDC to produce a NAP by the end of 2020, and to implement tangible adaptation projects as soon as possible.

Fekitamoeloa Katoa 'Utoikamanu, UN Under-Secretary-General and High Representative for the LDCs, Land-Locked Developing Countries, and SIDS, highlighted the need to focus on adaptation and ensure funding is stepped up, calling for partnerships and coordinated efforts.

Phento Tshering, LDC Group Lead Negotiator, Bhutan, elaborated on three LDC initiatives: the LDC Initiative for Effective Adaptation and Resilience (LIFE-AR), the LDCs Renewable Energy and Energy Efficiency Initiative (LDC-REEI), and the LDCs University Consortium on Climate Change (LUCCC).

Cecilia Bernardo, Angola, called for avoiding replication of existing work under other bodies, and working together through strengthened dialogues and coordinated approaches with existing initiatives.

A panel discussion considered the LDC Initiatives and synergies in delivering support to the LDCs. Key highlights included:

- LIFE-AR can help upscale implementation of good practices from previous projects;
- LDC-REEEI is intended to help countries leapfrog development steps by adopting renewable energy and improve access to energy;
- Universities are often among the most stable institutions in LDCs, and can help build capacity at the local level through LUCCC; and
- NAPs need to integrate gender considerations, including with a view to receive GCF support.

In closing remarks, Wangdi said the LDC initiatives can support the green recovery from the COVID-19 pandemic but need increased resources.

Preparing New/Updated NDCs in 2020 – Experiences and Lessons Learned

This session aimed to showcase the preparation and update activities for NDCs across different regions, and to share experiences around guidelines for information to facilitate clarity, transparency, and understanding (ICTU).

In opening remarks, Felipe Andrés Díaz Bórquez, for the COP 25 Presidency, outlined that Chile had submitted an updated NDC, which worked towards being more ambitious, less uncertain, more robust, and as transparent as possible.

Jamaica noted that his country's new NDC will increase mitigation ambition and consider adaptation co-benefits; and encouraged parties who have not yet submitted an enhanced NDC to do so, noting that "we do not have the convenience of time."

Mongolia outlined the priorities in its most recent NDC, notably: accounting for climate risks for key socio-economic and natural resource management sectors; a special consideration of co-benefits between mitigation and adaptation; and NbS. He noted the usefulness of the ICTU guidelines for NDC revision.

Norway described three primary drivers that led to the creation of its enhanced NDC: the agreed deadlines included in the Paris Agreement; science; and the expectations of both other parties, such as the EU, and youth and civil society. She stressed that the NDC lays out an absolute, quantified, economy-wide target, and that the ICTUs were helpful in structuring the document.

Tonga announced that its second NDC will be submitted to the UNFCCC in the coming week. She added that Tonga is currently developing a long-term strategy on GHG emissions.

Considering key lessons in enhancing NDCs, Norway stressed the need to involve all ministries in government, while Tonga stressed the need to involve stakeholders from the beginning of the process.

In the question-and-answer session, participants discussed:

- the impact of science and public consultations on enhancing NDCs:
- the interaction between mid- and long-term strategies for emissions reduction;
- · collaborations with local and regional governments; and
- the role of NbS in NDCs.

In closing remarks, Felicity Morrison, for the COP 26 Presidency, pointed to the Climate Ambition Summit taking place on 12 December 2020, noting that these discussions on transparency will help build global ambition by creating a better understanding of how the Paris rulebook can be implemented.

First Meeting of the Structured Expert Dialogue of the Second Periodic Review

During the first day of the first meeting of the structured expert dialogue (SED), participants heard from various IPCC Working Group (WG) authors on the latest scientific knowledge relevant to the Long-Term Global Goal (LTGG) of holding global average temperature change to well below 2°C above pre-industrial levels, and pursuing efforts to limit the increase to 1.5°C.

New Knowledge on the LTGG: Piers Forster and Kirsten Zickfeld (IPCC WG I) explained that parts of the world are already experiencing higher temperatures than the LTGG. To meet the LTGG, they said, humanity must rapidly reduce emissions to net-zero CO2, and deeply reduce non-CO2 GHGs; while some "overshoot" scenarios exist, whereby the LTGG is exceeded and CO2 is subsequently removed from the atmosphere, the impacts of overshoot will potentially take centuries to reverse.

Scenarios compatible with the LTGG: Joeri Rogelj (IPCC WGs I and III) and Roberto Schaeffer (IPCC WG III) explained that while various scenarios are compatible with the LTGG, each has different implications for reaching net-zero emissions of both CO2 and other GHGs. They noted that reliance on carbon dioxide removal (CDR) is more pronounced the more emissions reductions are delayed; moreover, relying on CDR may negatively affect sustainable development and land use. They also highlighted that global models and national GHG inventories take different factors into account, with the latter including indirect human effects and natural effects in such a way that they will likely report fewer emissions.

Information and knowledge gaps addressed in the IPCC 2018-19 Special Reports: Zinta Zommers and Michael Oppenheimer (IPCC WG II) gave an overview of knowledge gaps highlighted in the recent Special Reports on 1.5°C of global warming, ocean and cryosphere, and land, respectively. They listed increasing evidence that changes to the cryosphere and ocean, as well as to land systems, have accelerated in previous decades: the 21st-century contribution to global sea-level rise is now irreversible, and land degradation, desertification, and negative impacts to food security have increased. They outlined that for both land and ocean systems, the impacts and risks of climate change are disproportionately borne by the most vulnerable, who have contributed least to GHG emissions. They clarified that while adaptation to impacts such as sea-level rise may reduce risks, it may not eliminate them.

Challenges and opportunities for achieving the LTGG: Debora Ley (IPCC WG II) and Pamela McElwee (IPCC Special Report on Climate Change and Land) noted that delayed action on achieving the LTGG will increase risk, which will decrease options and increase cost as well as dependence on CDR over time. Noting the need for immediate risk reduction and adaptation, they warned that a warming world may also make the SDGs less attainable. Turning to opportunities, they noted that climate-resilient development pathways can help balance challenges and opportunities, and that mitigation and adaptation options have different co-benefits, which can be maximized.

Questions and comments from participants considered, among others, the importance of climate literacy and the critical importance of reducing emissions in the next ten years.

The second day focused on the overall effect of steps taken by parties regarding mitigation, adaptation, and means of implementation. Participants heard presentations from a number of constituted bodies, including the UNFCCC secretariat, KCI, AC, SCF, and PCCB. Highlights of the presentations included:

- There is a clear declining trend in emissions from developed countries in the past twenty years, but total emissions are only projected to decline by 2% between 2020 and 2030; this is because, although many countries have announced ambitious action, implementation is lacking.
- Developing countries are increasingly moving toward widerscope policy to slow emissions growth, but significant data gaps remain, which do not allow emissions data to be quantified at an aggregated level.
- While long-term adaptation planning can reduce vulnerability to climate impacts, there remain gaps in planning, including in translating climate scenarios to local contexts; accessing data in developing countries; and including Indigenous peoples and local communities' knowledge and insights in the second Periodic Review.
- Integrating adaptation with the SDGs and the Sendai Framework is critical for long-term resilience, and coordination between different bodies must be improved in order to do so.
- There is an increasing trend in the availability of climate finance, especially with regard to multilateral development banks; more research is needed, however, in understanding how that financing is implemented in practice.

Many bodies suggested that while they do not have a direct mandate to address the LTGG, they can contribute to the second Periodic Review by providing assessments of their respective work programmes.

Responding to questions, presenters clarified that mitigationrelated gaps include, at the national level, estimating the effect of policies and measures; and, at an international level, a lack of comprehensive data from developing countries. They also suggested that the LTGG can be understood as the best proxy for the limit to how far adaptation can be helpful, given that temperature rise exceeding the LTGG would be catastrophic for many.

Twelfth Meeting of the Research Dialogue – Science for Global Net-zero

This meeting of the research dialogue took place over the course of two days and featured a special event. The first dialogue session focused on advancements in research and modelling.

Michael Sparrow, World Climate Research Programme, emphasized the importance of science for society and consultation and co-design with the global community. As key factors informing the Programme's updated strategy, he noted the increased need and expectation for robust and useful regional and local climate information, and the need for meaningful measurements of the likelihood and impact of specific events over different time scales.

Minpeng Chen and Anand Patwardhan, World Adaptation Science Programme (WASP), said the Programme's research and action needs to respond to the emerging context of the pandemic world, increasingly visible climate impacts, and new technologies. They outlined WASP activities including policy briefs on science for adaptation, an adaptation futures conference series, and the Adaptation Gap Report.

Bas van Ruijven, International Institute for Applied Systems Analysis, highlighted that only a small fraction of global pandemic recovery stimulus investments have gone towards advancing the clean energy transition, and underscored that best practice policies can help bridge the emissions gap towards a lowcarbon future. Andy Reisinger, Ministry for the Environment, New Zealand, said carbon dioxide removal (CDR) is necessary for both net-zero CO2 emissions and net-zero GHG emissions, although the timing and scale differ for each. He highlighted that reliance on CDR grows with every tonne of emissions, and that current investments in research and development, pilots, upscaling, institutions, and governance do not match our level of reliance on CDR.

Chris Vivian, Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP), presented on the work of GESAMP on ocean interventions for climate change mitigation. He highlighted key governance challenges for marine carbon dioxide removal, including ensuring appropriate safeguards for research, monitoring and attributing impacts, and meaningful and effective engagement of stakeholders.

Hesiquio Benitez Diaz, Chair of the Subsidiary Body on Scientific, Technical and Technological Advice, Convention on Biodiversity, said the 5th Global Biodiversity Outlook shows that despite progress, none of the Aichi Targets have been met, and that putting nature on a path to recovery towards the 2050 Vision for Biodiversity requires transformative change through a portfolio of actions.

The second dialogue session focused on factors for enhancing understanding to accelerate adaptation and mitigation.

Paul Durant, IRENA, said renewable energy will play a significant role in reaching net-zero emissions globally, and can provide 90% of global energy demand under 2°C scenarios. Discussing options for decarbonizing hard-to-decarbonize sectors, such as iron and steel and road freight, he said priorities for action across these sectors include support for further innovation, international collaboration, improved business models, enabling conditions, and shared understanding of vision and goals. In response to questions, he said some energy from other sources will be needed, carbon capture and storage will be necessary to plug gaps, and hydrogen will be important in some sectors.

Joyashree Roy, Asian Institute of Technology, said a combination of research on degrowth and just consumption is needed going forward, including on macroeconomic effects of large-scale switches to sufficiency lifestyles, and on the ethics of measures aimed at embedding large reductions in consumption in everyday life. In response to a question, she said enabling conditions, societal structures, and policy are more important than individual choices.

Silvia Kreibiehl, UNEP Collaborating Centre for Climate and Sustainable Energy Finance, said although investors and finance have started acting on climate change, misallocation of capital remains a key barrier and public stakeholders are still massively underestimating climate-related financial risk. She stressed stranded assets will become a major economic burden for taxpayers, not just shareholders. She said regulation of both the financial sector and the real economy, rather than the financial sector alone, can lead to strong synergies for climate action.

The session continued with presentations on:

- regional action on climate adaptation and mitigation in the Asia-Pacific region;
- · complexity in adaptation research, policy, and action; and
- engaging with the practical, political, and personal spheres of transformation.

World Adaptation Science Programme special event:

Opening this special event under the 12th Research Dialogue, Jean Palutikof, National Climate Change Adaptation Research Facility, Australia, emphasized the need to create an evidence base for adaptation decision-making and policy-making, saying members of the WASP are uniquely positioned to deliver the requisite knowledge.

Roger Street, University of Oxford, said successful tools to support decision-making on adaptation are characterized by being relevant, comprehensive, reliable, accessible, authoritative, attractive, and engaging. He outlined challenges to creating successful tools, including misalignment between user expectations and developer capabilities, and lack of resources.

Magnus Benzie, Stockholm Environment Institute, highlighted that adaptation is not necessarily benign, but rather can redistribute vulnerability and create or magnify risk for others. He noted that very little is currently known about future exposure to transboundary climate risk, and said adaptation science should support policymakers to adopt a transboundary lens.

Richard Betts, University of Exeter, highlighted projected climate impacts, including heat stress, drought, river flooding, and coastal flooding. He said 4°C global warming by 2100 would lead to severe impacts and risks worldwide, and underscored that limits to adaptation mean transformational changes may be needed

In a question and answer session, Benzie stressed that co-production is not a silver bullet, noting that "demand should not always define the supply of research," especially for issues such as transboundary climate risks, which are not as well understood by institutions and where although there is a need for research, demand might not emerge. He suggested that, as an international instrument for gathering research, the Global Stocktake could provide an interesting opportunity for collaboration on transboundary risks.

Earth Information Day 2020

This session provided an update on the state of the global climate in 2020 and discussed recent advances in Earth observation technology and data processing to support decision making.

John Kennedy, UK Met Office, presented key messages from the World Meteorological Organization (WMO) State of the Global Climate Report 2020, including that many regions experienced heatwaves, wildfires, flooding, and droughts.

Karina von Schuckmann, Mercator Ocean, presented findings on the distribution of the total global heat gain in the Earth system from 1971-2018, noting 89% went into the ocean, 6% into land, 4% into the cryosphere, and 1% into the atmosphere.

Pierre Friedlingstein, University of Exeter, highlighted that due to COVID-19 measures, emissions are projected to decrease by 6-7% in 2020 relative to 2019.

Anne Olhoff, UNEP, outlined the emissions gap, stressing that countries need to significantly raise the ambition of their NDCs.

Erik Pihl, Future Earth, presented new insights in climate science in 2020, including on: the effect of climate change on mental health; equilibrium climate sensitivity; and the exacerbating water crisis.

Anthony Rea, Global Climate Observing System, outlined gaps and challenges in ocean observation, including lack of long-term operational funding to sustain ocean observing systems.

Prabir Patra, Japan Agency for Marine Earth Science and Technology, stressed that high quality long-term surface observations are necessary for accurately tracking mitigation policies.

The session then focused on earth information for mitigation. David Crisp, Committee on Earth Observation Satellites, outlined how bottom-up and top-down emissions inventories can be combined to support the Global Stocktake.

Richard Engelen, Copernicus, said combining observations with modelling in an integrated system approach provides added value. He stressed that implementation requires international coordination and active interaction with parties.

Phil DeCola, University of Maryland, elaborated on the WMO's Integrated Global Greenhouse Gas Information System as a common framework for the provision of systematic services for stakeholder communities working to reduce their GHG emissions.

María José Sanz Sánchez, Global Forest Observations Initiative (GFOI), outlined GFOI's achievements, including capacity-building activities in over 60 developing countries, and fostering a strong global network of experts and practitioners.

The session turned to focus on earth information for adaptation. Mariane Diop Kane, WMO, stressed further attention and investment in several elements of climate services is needed, including data rescue, observational networks, and early warning systems.

Catherine Nakalembe, Group on Earth Observations (GEO) Global Agricultural Monitoring Initiative, outlined its Crop Monitor, which provides timely, science-driven information on crop conditions.

Louis Celliers, GEO Blue Planet, outlined the GEO Blue Planet initiative and noted how coastal and ocean observations can support NAP development.

Dialogue on the Relationship between Land and Climate Change Adaptation Related Matters

This event, mandated by COP 25, took place over two days during the second week of the Dialogues. Opening discussions on the first day, Zac Goldsmith, UK Minister for Pacific and the Environment, for the COP 26 Presidency, said it is critical to address land degradation, highlighting the need to provide incentives for sustainable land management and secure land tenure rights. He emphasized the potential of NbS to address climate change and help minimize the threat of loss and damage.

José Ignacio Pinochet Olave, Vice-Minister of Agriculture, Chile, for the COP 25 Presidency, noted that climate change negatively affects farmers' livelihoods and highlighted his country's objective to promote adaptation and increase awareness of mitigation within the agriculture sector.

Ibrahim Thiaw, Executive Secretary, UN Convention to Combat Desertification (UNCCD), emphasized that land and climate are intrinsically linked, highlighted the need for collaboration across the Rio Conventions, and welcomed the G20 initiative on reducing land degradation.

UNFCCC Executive Secretary Espinosa called on governments to maximize efforts to build linkages between adaptation action and land management, underscoring the provision of support for implementation by developing countries. She highlighted "we do not have another five years to wait to be ambitious," noting the window of opportunity will likely be closed by then.

In a keynote, authors of the IPCC Special Report on Climate Change and Land shared key insights from the report, including:

- As more land is degraded, more people are exposed to climate risks such as water scarcity, soil erosion, increased fire frequency, and crop yield decline.
- Many responses throughout the food system are ready to be deployed and scaled up, and several have co-benefits for mitigation, adaptation, and sustainable development.
- Response options are often linked, and while there are options that do not increase competition for land, some responses are more feasible than others.

- Promising options include agroforestry, improved cropland management, agricultural diversification, and integrated water management.
- Non-land-based approaches include risk management options such as index-based weather insurance.
- Indigenous and local knowledge can contribute to enhancing food system resilience.

Breakout group discussions addressed lessons learned on land and climate change adaptation practices, and lessons learned in delivering support for land and climate change adaptation actions. Participants noted, among others:

- spatial planning guidelines in Norway that require municipalities to justify their decision not to use NbS in infrastructure projects;
- · protecting wetlands;
- · limiting conversion of arable land;
- increased community resilience through agroforestry;
- better linking global and local policies;
- · land tenure problems; and
- ensuring gender equity and participation of Indigenous and local communities in decision making.

The International Union for Conservation of Nature (IUCN) drew attention to the upcoming launch of the Global Fund for Ecosystem-based Adaptation, funded by Germany, noting it is a rolling programme through which all official development assistance (ODA) countries can seek seed capital for innovative ecosystem-based adaptation projects.

Noting that the format of parallel breakout groups is not conducive for small delegations, SBSTA Vice-Chair Kakhaberi Mdivani said recordings of the sessions will be available online and parties will be able to send further comments through a dedicated email account over the next few weeks, before the SBSTA Chair prepares a summary report. The EU recalled the agreed mandate for the event, and requested clarification on the proposed follow-up communication, noting it is not common procedure.

The second day of the workshop opened with a keynote by Mohamed Handaine, Indigenous Peoples of Africa Co-ordinating Committee, who stressed the need to act for and with Indigenous peoples, noting the challenge posed by non-recognition of Indigenous peoples by states.

In a breakout group moderated by Miriam Medel, UNCCD, participants discussed assessing and monitoring land adaptation to climate change. Yuko Hoshino, Japan, stressed the need for scientific knowledge to form the basis of adaptation assessments, and for promoting synergies between climate change adaptation and disaster risk reduction.

Steven Ramage, GEO, outlined GEO's programmes to support adaptation, including on national forest management systems, a monthly crop monitor, land degradation, and Earth Observations for Ecosystem Accounting.

Everlyne Nairesiae, UN-HABITAT, highlighted the need to consider land ownership, tenure rights, and accessibility of land.

In a round of reflections on enhancing the assessment of land adaptation, parties stressed the need for access to data, science, and finance, and indicators that adequately capture local conditions. On needed actions, parties highlighted capacity building, knowledge sharing, increased collaboration between constituted bodies and funding entities, reinforcing links between existing instruments and efforts, and the abolition of subsidies for unsustainable land management.

Back in plenary, participants discussed the potential contribution of existing processes under the UNFCCC in

enhancing land adaptation. Among others, parties pointed to the importance of actively including stakeholders in developing national plans; increasing communications among different processes; and the importance of the land sector for food security. On linkages with other international frameworks and processes, parties highlighted the need to strengthen joint action with UNCCD and the Convention on Biological Diversity, including by holding more joint events.

In closing, in response to concerns raised by some groups of developing country parties, SBSTA Vice-Chair Mdivani said the SBSTA Chair will incorporate, in his report on the dialogue, any submissions on the issues raised in the dialogue made up to one month from now.

Ocean and Climate Change Dialogue to Consider How to Strengthen Adaptation and Mitigation Action

This dialogue, which took place over two days during the second week, enabled parties and non-party stakeholders to reflect on how to strengthen mitigation and adaptation in the context of the ocean, both within the UNFCCC and across UN agencies.

High-Level Segment: Noting that the world's ocean captures one-third of emitted CO2, Andrés Allamand, Minister of Foreign Affairs, Chile, stressed Chile's role in building "blue ambition," as well as the need for the dialogue to help share experiences and good practices to strengthen the ocean-climate connection.

Laurent Anselmi, Minister of Foreign Affairs and Cooperation, Monaco, highlighted initiatives supported by Monaco, including the Because the Ocean initiative and the Ocean-Climate Platform; and called for the sustainable use of the ocean to drive NbS.

Zac Goldsmith, Minister for Pacific and the Environment, UK, expressed his country's commitment to amplifying the voices of SIDS and the most vulnerable, and said that COP 26 must present an increased focus on nature.

Peter Thomson, UN Secretary-General's Special Envoy for the Ocean, reiterated the call that there is "no healthy planet without a healthy ocean." He underlined the ocean's role in heat control and GHG capture, as well as the potential for an ocean-based economy to deliver a significant portion of emissions reductions.

Executive Secretary Espinosa called for parties to practice "inclusive multilateralism" and to include the voices of local communities and Indigenous peoples in considering ocean-related mitigation and adaptation in their NDCs.

Keynote presentations: Hans-Otto Pörtner and Elvira Poloczanska, IPCC WG II, presented key messages from the IPCC Special Report on the Ocean and Cryosphere in a Changing Climate, noting, among others, that:

- Shifting ocean physics and chemistry due to warming are affecting marine life, especially warm-water coral reefs.
- Ecosystems degradation can result in serious economic consequences and threaten food security and livelihoods.
- Current projections for sea-level rise by 2300 range from under one meter to several meters, depending on mitigation levels.
- Ambitious mitigation is essential to avoid the worst effects of climate change for ocean ecosystems and livelihoods.

Vladimir Ryabinin, Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization (IOC-UNESCO), noted the upcoming UN Decade of Ocean Science for Sustainable Development (2021-2030), and announced that IOC-UNESCO will organize a global stakeholder forum, as well as assemble an Ocean Decade Alliance to help build behavior change towards oceans.

Breakout groups: In breakout sessions, participants considered how best to strengthen existing processes for action on adaptation and mitigation, both within the UNFCCC and across other UN agencies. Key points discussed included:

- breaking silos and strengthening engagement across different bodies:
- aligning adaptation and mitigation measures both within and beyond the UNFCCC;
- engaging stakeholders and building on local and Indigenous knowledge; and
- creating an opportunity to formally present the summary of the Ocean and Climate Change Dialogue at COP 26.

The second day opened with a keynote from Jane Lubchenco, Co-Chair of the High Level Panel for a Sustainable Ocean Economy. She highlighted that ocean-based actions provide powerful, but mostly untapped opportunities for both mitigation and adaptation. As promising solutions, she pointed to: investing in ocean-based renewable energy; protecting and restoring blue carbon ecosystems; incentivizing the transition to decarbonized shipping; shifting diets toward low-carbon marine sources; and supporting a global target to fully protect 30% of the ocean by 2030.

Dalee Sambo Dorough, Inuit Circumpolar Council (ICC), spoke about the deep relationship of Indigenous communities with, and reliance upon, the marine environment. She called for Indigenous knowledge to drive research production and co-production, and highlighted the contribution of the ICC to the IPCC Special Report on the Ocean and Cryosphere.

Noting that marine protected areas (MPAs) are a tool for ocean protection, Ruth Mthembu, WILDOCEANS, testified to the role of youth in pushing for governmental action. She highlighted the "Youth for MPAs" campaign in South Africa, which successfully campaigned for the protection of 5% of marine areas in the country. She challenged leaders to "stop stalling" and to enact serious ocean protection measures.

Fanny Douvere, UNESCO, discussed the Resilient Reefs Initiative, which seeks to attract "chief resilience officers" at the local level to bring together community and scientific viewpoints in order to build strategies to preserve ocean-based communities and livelihoods.

Daniela Fernandez, Sustainable Ocean Alliance, spoke to young people's priorities around acting with urgency, making innovation a key component of ocean-climate action, and "giving young people a voice."

In breakout groups, participants discussed options for strengthening ocean-climate action at the national level and strengthening cross-cutting support for action.

They highlighted the need for, among others:

- solutions based on the best available science, including on ecosystems approaches;
- promoting linkages between the Convention on Biological Diversity and the UNFCCC;
- making fisheries climate smart and resilient, and to link them with food security; and
- creating practical guides on finance for ocean-climate actions to inform parties and non-state actors.

The SBSTA Chair will compile an informal summary report.

Koronivia Joint Work on Agriculture

Workshop on Improved Livestock Management Systems, including Agropastoral Production Systems and others: SBI Chair Karlsen opened the first of two workshops under the KJWA by noting the role of improved livestock systems in addressing the

negative impacts of agriculture on ecosystems, mitigating against climate impacts, and reducing the risk of global pandemics.

Participants heard from two keynote speakers. Anibal Pordomingo, National Agricultural Technology Institute of Argentina, discussed the role of livestock systems in building sustainability. He pointed out two changes that could increase sustainability in livestock systems: restructuring pasture land into intensive rotation and adding perennial crops to forage, which will require fewer inputs; and improving calving rates for cows, which would reduce the demand for biomass. He stressed the need to manage pasture lands as potential carbon stores.

Carolyn Opio, Food and Agriculture Organization of the United Nations (FAO), stressed that livestock systems are heterogeneous; hence, any adaptation options for livestock systems need to be tailored to local conditions. She underlined the need to protect natural resource bases to improve resilience and called for NbS, which "multitask" across Rio Conventions by serving both mitigation and adaptation goals.

Participants then discussed the following topics: the impacts of livestock systems on small households; the possibility of building heterogeneous indicators for sustainability, given that livestock systems are so diverse internationally; technology transfer; and the role of the private sector. Participants then heard from parties on their experiences with improving the livestock sector, including:

- Bhutan, for the LDCs, pointed out the need to strengthen national capacities for managing genetic resources;
- The EU, which is responsible for 5% of global methane emissions, summarized its methane strategy;
- New Zealand stressed using existing financial mechanisms to support agriculture activities and enable access to finance;
- Uruguay emphasized that technology transfer to small family farmers remains challenging;
- Indonesia highlighted lack of both capacity and capital as challenges, noting this impedes adoption of technologies such as digestion tanks that serve to reduce emissions; and
- Egypt emphasized water scarcity and the quality of accessible water as a key challenge.

Among observer comments, Business and Industry emphasized the role of collaboration with businesses, especially those that can implement measures at scale, citing the Dairy Sustainability Framework as an example. ENGOs urged for support to shift away from industrial agriculture towards agroecological practices that support farmers' economic diversification. Research and Independent NGOs noted a need for policies fostering an agropastoralist transition; Women and Gender called for developed countries to shift towards more plant-based diets, and criticized live animal exports as "an abomination of the current industrial agriculture model." Youth NGOs emphasized lack of land tenure as a challenge, the need to account for the true costs of food, and called for developing conflict of interest policies to improve the work of the KJWA.

The second workshop day started with a keynote address by Harry Clark, New Zealand Agricultural Greenhouse Gas Research Centre, who presented about the impacts of livestock on warming, measurement implications, and pathways to mitigation. He noted that almost a quarter of the Earth's warming is due to livestock-related emissions, and that the potential co-benefits from shifting management practices to reduce emissions include enhanced nutrient cycling and carbon storage, preserving biodiversity, and supporting livelihoods. Clark also explained that current metrics on global livestock emissions are subject to high levels of uncertainty because certain countries have difficulty in measuring

sector emissions. He highlighted potential mitigation pathways for livestock-related emissions, including restoring and maintaining degraded lands; new technologies around animal health; and national carbon prices for agricultural sectors.

An extensive question-and-answer session followed. Parties and observers discussed, among others, the implications of using different global warming potential models on setting targets for emissions reductions. They discussed the potential challenges of directing dietary change away from livestock-produced food, with Clark clarifying that he considered reducing dietary meat intake to be an important mitigation driver. They addressed the difference between urgent cuts to atmospheric CO2, which Clark characterized as "an absolute imperative," and cuts to methane emissions, which should be done additionally, but cannot substitute reductions in CO2 emissions. Participants also considered the potential co-benefits between mitigation, adaptation, livelihood security for those who raise livestock, and food security measures.

A further segment focused on work undertaken by constituted bodies and financing entities. Among other presentations, Hindou Oumarou Ibrahim, Facilitative Working Group (FWG) of the Local Communities and Indigenous Peoples Platform (LCIPP), shared experience of Indigenous pastoral nomads in the Sahel, and argued that Indigenous management methods and knowledge are essential to preserving biodiversity, informing NAPs, and supporting mitigation initiatives.

Mahamat Assouyouti, Adaptation Fund, discussed the Fund's work in the livestock sector, noting challenges due to, among others, unpredictable funding; shifting priorities due to COVID-19; and the need for management at all levels in the livestock sector complicating funding distribution.

Ioannis Vasileiou and Pierre Gerber, World Bank, stressed the Bank requires all of its investment operations in livestock to complete five climate-related processes: climate and disaster risk screening; GHG accounting; a shadow price of carbon; climate finance tracking; and climate indicators. They underscored that investing in adaptation and mitigation in livestock operations makes economic sense, for both the private and public sector.

In a question and answer session, participants addressed, among others: co-financing requirements; the GEF's System for Transparent Allocation of Resources (STAR); debt-for-nature swaps; constituted bodies and financing entities taking into consideration outcomes of the KJWA's work; and coherence and collaboration between the financial mechanisms.

Workshop on Socio-economic and Food Security
Dimensions of Climate Change in the Agriculture Sector: The first day of the second KJWA workshop at the Climate Dialogues opened with a keynote presentation by Maryam Rezaei, FAO. She highlighted mega-trends driving food system dynamics, including growing urbanization and its associated effects, such as labor constraints and increasing demand for processed foods. She noted that traditional food security programmes tend to adopt production-focused approaches aiming at increasing food supply, while overlooking post-harvest aspects. She emphasized the need for: holistic approaches that address the root causes of under-performance of food systems in delivering food security; addressing different governance levels; and being mindful of trade-offs

Prajal Pradhan, Lead Author of the IPCC Special Report on Climate Change and Land, highlighted that climate change makes "an already challenging situation worse" and undermines food security, noting risks differ between projected socio-economic pathways. He emphasized that there are available options to address food insecurity that present mitigation and adaptation synergies and sustainable development co-benefits. As response options, he pointed to, among others: sustainable production practices, noting that they can help reduce crop and livestock emissions, enhance carbon sequestration in soils and biomass, and decrease emissions intensity; balanced diets as a consumption-side option for reducing emissions and improving health outcomes; and reducing food loss and waste.

In the discussion, participants addressed, among others: equity and justice issues underlying patterns of undernourishment and overconsumption; the role of trade in maintaining food security; the need to achieve net-zero emissions in food systems; and the need for stakeholders to be involved in a participatory manner, regardless of approaches to socio-economic equity in food systems. Brazil noted there are many factors to address before advocating for changing diets.

Participants then heard presentations from Brazil, the EU, India, South Africa, South Sudan for LDCs, and Switzerland. Highlights included:

- Brazil's Low-Carbon Agriculture Plan, which aims to restore land and lower emissions through technologies such as no-till cropping, biological fixation, and manure management and treatment;
- the EU's "From Farm to Fork" initiative, which aims to transition to a sustainable food system while providing social protection and a sustainable livelihood for primary producers;
- India's vulnerability to climate risk, especially given the dependence of much of its agriculture on monsoons;
- the link between the impacts of climate change on agricultural productivity and existing socio-economic inequality in South Africa:
- South Sudan's aim to promote local seed purchasing and improve access to livestock markets; and
- Switzerland's target to reduce GHG emissions of the agriculture sector by 40-50% compared to 1990, while maintaining at least 50% self-sufficiency.

Key messages from observer constituencies included: incentivizing farmers' adoption of sustainable farming practices; addressing gender bias, including in agriculture policies; supporting extension networks; addressing inefficiencies in food distribution; translating global objectives on climate-smart agriculture into national policies; and strengthening focus on nutrition.

The second day of the workshop opened with keynote remarks from Emile Frison, International Panel of Experts on Sustainable Food Systems (IPES-Food). He stressed that transformational change is needed towards diversified agroecological systems, which he said are just as productive as conventional agricultural systems and usually generate more income, while also capturing carbon in the soil, improving biodiversity, and restoring degraded land. He said barriers to uptake of agroecological systems include the concentration of power in a small number of agrifood companies. On how to support the transition, he called for true cost accounting, facilitating young farmers' access to land to start diversified agroecological farms, and supporting short value chains.

Highlights from the ensuing discussion included:

- the potential of the KJWA to bring about the necessary change;
- the appropriateness of agroecological systems at all scales, not just small farms;
- the technology applied in agroecological farming will depend on the geographic location, climate, and level of mechanization, among other factors;

- incremental steps, such as precision agriculture and replacing crops with drought-resistant varieties, are not sufficient;
- the soil microbiome is important for increasing carbon in the soil;
- increasing communication on the needed food system transformation, going beyond addressing farmers; and
- the need to increase investment in research on agroecological practices, which is currently "ridiculously small."

Participants then heard presentations from constituted bodies and financing entities.

The LCIPP FWG emphasized that food sovereignty is a prerequisite for food security and highlighted restoring and trading traditional seeds to enhance resilience.

The KCI noted that increased land demand for bioenergy with carbon capture and storage could have adverse effects for adaptation and food security.

The AC highlighted work on, among others: economic diversification, including in relation to the Nairobi Work Programme's (NWP) 2021-2022 focus on agriculture and food security; and engaging the private sector in adaptation action focused on small- and micro-sized enterprises in the agriculture sector.

The AF noted that challenges include limited and unpredictable funding, initial support needed for project design, and that maximizing benefits requires integration across sectors.

The GCF shared insights from its upcoming sectoral guide on agriculture and food security, and highlighted three investment pathways for GCF action in the sector: promoting resilient agriculture; facilitating climate-informed advisory and risk management services; and reconfiguring food systems. Examples included promoting agroforestry, financial literacy training, low-cost communication tools, and better food storage and transportation.

The GEF highlighted a shift from a focus on production towards addressing value chains, noting that this includes improving rural roads for better market access.

The World Bank delineated its theory of change for food system transformation and highlighted: incentivizing sustainable practices, including through payment for ecosystem services; crowding-in private investment and de-risking green investment for small- and medium-sized enterprises; and overcoming bottlenecks in monitoring, reporting, and verification to identify impactful interventions.

Informal Joint Presidency and Incoming-Presidency Technical Adaptation Event

This event focused on "rising to the challenge of climate risk." In opening remarks, Julio Cordano, for the COP 25 Presidency, highlighted adaptation is far behind mitigation in terms of technical knowledge, capacity building, and technology availability.

In a panel discussion participants discussed how climate risk, and actions to reduce it, can be evaluated; how the international system can best act to assist in delivering and communicating adaptation progress; and how communities can ensure that adaptation activities are relevant and effective.

Christoph Gornott, Potsdam Institute for Climate Impact Research, stressed the need for: a comprehensive view of the risks and multi-criteria assessments, rather than using single indicators; local ownership to ensure solutions are sustainable; and bringing together stakeholders, donors, implementers, and scientists to guide adaptation planning. Srilata Kammila, United Nations Development Programme (UNDP), highlighted the need for linking adaptation action to the SDGs; adaptation action to be driven by science; and de-risking investments in adaptation. She noted the lack of commonly agreed indicators to calibrate progress on adaptation, stressing progress is context-dependent and requires a baseline.

In a panel discussion, Bob Natifu, Uganda, spoke on the unique circumstances of LDCs planning adaptation. Noting that Uganda defines itself as an "adaptation-first country," he highlighted the benefits of participating in LIFE-AR; and emphasized that climate action must take place at the local level and create effective systems to improve individual livelihoods.

Angela Patricia Rivera Galvis, Colombia, described her country's national climate change information system, which serves in part to monitor adaptation efforts and outcomes, and described how it will serve to inform Colombia's Biennial Transparency Reports and contribution to the Global Stocktake. She also commented on lessons learned from preparing a National Adaptation Plan, including that implementation bodies must be involved in the process, and that developing such plans is an ongoing, iterative process.

Henk Ovink, Netherlands, discussed his country's work to build a collaborative, inclusive, and transparent process toward building an enabling adaptation environment. He noted that recovery from COVID-19 teaches the important lesson that single-focus approaches are not as effective as multi-focus approaches that empower people, business, and institutions.

Participants also discussed the role of loss and damage in informing adaptation planning, despite its low profile in countries' NDCs .

In closing, Archie Young, for the COP 26 Presidency, noted that adaptation and loss and damage are important to the Presidency's planning for the Glasgow Climate Conference.

Technology Mechanism – Fostering Innovation to Help Countries Build Climate Resilience and Reduce GHG Emissions

In opening remarks, SBI Chair Karlsen said the "Race to Zero" event held earlier in November 2020 demonstrated that investors, banks, and businesses are increasingly allocating resources to the development of technologies aligned with a low-emission and climate resilient future. She noted governments play a crucial signaling role to these actors and emphasized the importance of technology transfer to fully realize the goals of the Paris Agreement.

Mareer Husny, TEC Chair, highlighted regional workshops on climate-smart cooling solutions, and collaborative work with the CTCN on gender mainstreaming.

Zhong Ping, CTCN, pointed to webinars on the environmentally sound management of COVID-related waste as a response to immediate needs. He said the CTCN launched a programme targeting small and medium enterprises, and delineated collaborative action with the operating entities of the financial mechanism, including work on GCF readiness proposals. He highlighted trends in support requests, on circular economy in Latin America and the Caribbean, and on e-mobility and energy efficiency in Asia and the Pacific, among others.

Claudia Octaviano, National Institute of Ecology and Climate Change, Mexico, moderated a panel discussion during which the presenters were joined by: CTCN Director Rose Mwebaza; Elfriede More, Austria; and Alastair Marke, Blockchain and Climate Institute.

Discussions addressed:

- · matchmaking needs with technical expertise;
- challenges in aligning priorities of recipient and donor countries;
- blockchain applications for deforestation monitoring and automated cash payments in disaster risk insurance;
- new legal challenges related to blockchain and artificial intelligence applications;
- up-front stakeholder engagement to ensure ownership; and
- incentives and support measures for fostering technological innovation.

In closing remarks, Daniele Violetti, UNFCCC, highlighted the need to "recover better" from the COVID-19 pandemic and foster innovations for sustainability. He emphasized that dissemination and upscaling of climate technology is key for raising both mitigation and adaptation ambition.

From Technology Needs to Climate Action

In opening remarks, Zitouni Ould-Dada, FAO, highlighted that technology needs assessments (TNAs) have been an important tool for countries to identify their needs and the actors that can support them.

Presenting the fourth synthesis report on technology needs identified by non-Annex I parties, Vladimir Hecl, UNFCCC Secretariat, said key barriers to technologies for mitigation include economic and financial, technical, policy, informational, and organizational capacity.

On lessons learned from the TNA process and implementation of the Technology Action Plan (TAP) in Armenia, Diana Harutyunyan, UNDP Armenia, stressed the need for broad stakeholder involvement, dialogues between specialists from different sectors, and early involvement of the private sector and local financial institutions.

Sara Trærup, UNEP-DTU Partnership, described examples of countries that had used TAPs as foundations to prepare successful project proposals to the GCF and the GEF.

In a panel discussion, participants heard insights on supporting implementation of TAPs from the CTCN, GCF, GEF, NDC Partnership, and Uganda. Key insights included:

- Based on its TNA, Uganda has made strong gains on solar and hydroelectric technology, as well as upland rice cultivation and electric vehicles.
- Increased coordination between focal points of different UNFCCC workstreams in the context of GEF replenishment is important for maximizing delivery of follow-up actions to TNAs.
- The GCF has approved many projects with a technological element identified through the TNA process.
- NDCs should make use of experiences gained from TNAs.
- The CTCN has a strong track record of delivering technological assistance and technology transfer and is helping countries to revise their TNAs.
- Sustainable local institutions that promote green technology innovation are important.

Achievements of the Technical Examination Processes 2016-2020

SBSTA Chair Mpanu-Mpanu recalled that the technical examination process (TEP), with its mitigation and, later, its adaptation components, consists of regular in-session thematic technical expert meetings complemented by regional technical expert meetings and is aimed at facilitating the sharing of good

practices and lessons learned. He noted the process is scheduled to end in 2020.

Alice Gaustad, AC, noted that the TEP-Adaptation moved from a broad focus on reducing vulnerabilities and mainstreaming adaptation to considering more specific issues, such as the private sector's role in adaptation finance or the contribution of education and training to enhanced adaptation action. She lauded the TEP-Adaptation as a dedicated space for stakeholder engagement, and for its regional activities.

Stephen Minas, Vice-Chair of the TEC, pointed to mitigationrelated work on renewable energy and energy efficiency, and highlighted the responsiveness of the COP to information brought forward through the TEP. He said the TEP gave stakeholders a leading role and demonstrated the value of expert-driven discussions.

Participants then heard pitches by the finalists of the 2020 Adaptation Youth Policy Case competition. The youth-led projects related to coffee production, urban food resilience, matching volunteers with adaptation projects in their area, river restoration, online adaptation training for candidates in municipal elections, and climate education through local radio shows.

Nigel Topping, UK High-level Champion for Climate Action, emphasized the value of "radical models of collaboration" such as the TEP or the Race-to-Zero events held in November 2020, and noted the importance of addressing both mitigation and adaptation/resilience.

Among other points, speakers also: commended the TEP's inclusiveness; underscored it succeeded in giving specific guidance on engaging the private sector; and lauded the TEP's role in highlighting key issues and sectors that need attention, and in connecting experts and decision makers.

In closing remarks, SBI Chair Karlsen highlighted that the TEP shows that we have solutions available and noted that it provided an important platform for linking the "action space" with the formal negotiations. She expressed confidence that parties would find an appropriate way to recognize the TEP's achievements at COP 26.

Technology Day – Innovative Approaches on Adaptation Technologies

This event shared best practices for climate-smart agriculture (CSA). In opening remarks, Executive Secretary Espinosa stressed that "the twin crises of COVID and climate change are crying out for technological solutions and innovation."

Bruce Campbell, CGIAR, presented on the state of play of CSA, noting that: implementation is urgent; a number of climate-smart technologies have mitigation and adaptation co-benefits; and scaling such technologies require transformative thinking in digital services, policymaking, and finance.

Hans Hoogeveen, Co-Chair of the Global Alliance for Climate Smart Agriculture, stressed the need to match farmers with scientists, civil society, and financial institutions, among others.

Participants heard from a panel of presenters. Highlights included:

- the importance for the livestock sector of reducing methane emissions;
- the need for farmers to be included and empowered in meeting the challenges of climate change, and in building a "just agricultural transition" through public-private partnerships;
- the benefits that may emerge for smallholder farmers of using more resilient crop varieties and livestock breeds;

- the Adaptation Fund's "enhanced direct access" modality, which devolves decision making on adaptation grants to national implementing entities;
- the role of digital technologies in enhancing early warning systems and building resilience; and
- the need for farmers to have access not only to technology, but also to financial means with which to implement it.

Participants also discussed net-zero cold-storage chains; how to build appropriate CSA guidelines; and the importance of "marrying" Indigenous and farmer knowledge with technological innovation.

Addressing Knowledge Gaps – Biodiversity and Climate Change Adaptation

SBSTA Chair Mpanu-Mpanu highlighted that the engagement of the NWP with adaptation and biodiversity experts has strengthened knowledge on NbS.

In a keynote presentation, Veronica Lo, NWP Expert Consultant, shared key messages from the NWP's work on knowledge gaps related to biodiversity and climate change adaptation. She provided examples for technical, social and institutional, hybrid, and ecosystem-based adaptation options. She emphasized combining strategies to maximize effectiveness, noting the use of vegetated buffer zones to increase the longevity of seawalls as an example. Looking forward, she highlighted: gathering evidence on hybrid options and NbS; participatory planning; safeguards to ensure the rights of Indigenous peoples; and considering trade-offs, such as benefits from NbS unevenly distributed among stakeholders.

A panel discussion followed. Reporting on a project in Kenya, Hannah Reid, International Institute for Environment and Development (IIED), emphasized the role of customary rangeland management institutions and the potential for NbS to strengthen social resilience. Nakul Chettri, International Centre for Integrated Mountain Development (ICIMOD), spoke on participatory conservation planning in the Hindu Kush-Himalayas. He highlighted co-management with herder communities and emphasized that even global warming of 1.5°C would be detrimental for the region. Balkisou Buba, Network of Indigenous and Local Communities for the Sustainable Management of Forest Ecosystems in Central Africa, highlighted challenges, including: the view held by many that traditional knowledge is "primitive" and cannot produce effects at scale; and lack of documentation of knowledge systems that rely on traditions of oral transmission. Veronica Lo emphasized the need for adaptive management systems and avoiding maladaptation.

In an interactive session with the audience, Margarita Caso, National Institute of Ecology and Climate Change, Mexico, highlighted the need to mainstream biodiversity considerations both horizontally across national ministries and vertically to the subnational level. Houria Djoudi, Center for International Forestry Research, emphasized biodiversity as a safety net for the most vulnerable in times of crises, pointing to Sahelian women's increased reliance on forest products during the COVID-19 pandemic. Ali Raza Rizvi, IUCN, called for greater coherence between global targets. Participants also highlighted the need not to "oversell" NbS.

In closing remarks, Andrés Landerretche Moreno, for the COP 25 Presidency, emphasized that healthy ecosystems are critical to the objectives of all three Rio Conventions. Jonathan Stern, for the COP 26 Presidency, lauded the timeliness of the NWP's

work on forests' contribution to adaptation, and pointed to the incoming Presidency's campaigns on nature, and on adaptation and resilience.

Scaling up Adaptation Actions through Partnerships – Addressing Knowledge Gaps

Stella Gama, Malawi, opened the session, highlighting that the NWP contributes to scaling up action in developing countries through partnerships. She officially launched the new UN Climate Change and Universities Partnership, in the context of which the NWP collaborates with universities and developing country partners to have master's students undertake demand-driven research as part of their graduation theses. She noted the partnership will support closing knowledge gaps and that research findings will be shared within the UNFCCC process.

In a panel discussion, Sophie Morgan, Seychelles, described a collaboration with students from the University of Michigan focusing on assessing risks from sea-level rise. She highlighted the risk assessment maps produced by the students as valuable input for infrastructure planning, noting that the Seychelles lack capacity for data collection and analysis.

Neera Shrestha Pradhan, ICIMOD, highlighted that ICIMOD received the UNFCCC's 2014 Momentum for Change Lighthouse Activity Award for its community-based flood early warning system, and emphasized that this helped disseminate lessons learned and spearheaded the system's upcoming implementation in Malawi. She underscored the need for "win-win partnerships."

Evelin Tóth, United Nations Foundation, spoke about her experience participating in a research partnership, and emphasized that students derive great motivation from linking their graduate research to projects on the ground and making a meaningful contribution to partners' actions. She emphasized the NWP's role in showcasing communities' adaptation knowledge and disseminating the findings of academic research.

Mohammed Angawi, UNEP, underscored the need for active knowledge management to ensure that lessons learned on the ground are shared, and that others' insights are taken into account in project development.

In a round of reflections, Sindy Singh, Trinidad and Tobago, speaking for AOSIS, emphasized the need to: translate knowledge to the local level, noting that knowledge outputs tend to be suited to larger countries which have greater human capacity; and allocate enough time to nurture partnerships.

Avik Basu, University of Michigan, noted that sometimes the problem is not "too little" data, but the lack of a comprehensive overview of data available across government agencies. He noted the importance for universities to understand partners' specific needs as early as possible to identify a project timeline that fits with students' graduation schedules.

Participants further highlighted, among others: keeping end users of adaptation action in mind; and alignment between local partners' needs and students' interests.

Local Communities and Indigenous Peoples Platform Special Event

This session focused on advancing safeguards, protocols, and good practices for knowledge sharing and exchange of experiences for climate change adaptation, resilience, and mitigation. It opened with a ceremonial song from Roberto Borrero, Taíno Tribal Nation.

SBSTA Chair Mpanu-Mpanu said that without safeguards and protocols, sharing Indigenous and traditional knowledge

can infringe on the rights of knowledge holders and diverse knowledge systems can be misappropriated.

Executive Secretary Espinosa stressed that the sharing of knowledge is critical to "save the planet," and respect for that knowledge is of the utmost importance. She said Indigenous peoples and local communities will play a key role in building a more sustainable and resilient planet.

Andrea Carmen, Co-Chair of the LCIPP FWG, stressed Indigenous peoples' rights as delineated in the UN Declaration on the Rights of Indigenous Peoples, including rights to self-determination, traditional knowledge, traditional health practices, subsistence rights, participation in decision making, and lands, territories, and resources. She said ensuring Indigenous peoples' rights are respected in climate action is an ongoing challenge.

José Francisco Calí Tzay, UN Special Rapporteur on the rights of Indigenous peoples, said climate impacts are detrimental to Indigenous peoples' life systems, identities, languages, spirituality, housing, education, and traditional knowledge, among others. He highlighted Indigenous peoples carry a very refined system of knowledge and he elaborated on the role of traditional knowledge in assisting to recover agricultural lands exhausted by the use of agrichemicals.

Hindou Oumarou Ibrahim, LCIPP FWG member representing Indigenous peoples from Africa, spoke about the necessary safeguards around land rights, which she argued must provide land security for Indigenous peoples. She also emphasized free, prior, and informed consent, which she described as a "long-term process" based on mutual respect and local circumstances rather than any one single consultation; and preserving Indigenous peoples' intellectual property rights.

Dalee Sambo Dorough, LCIPP FWG member representing Indigenous peoples from the Arctic, described the various international legal instruments that refer to Indigenous rights, including the United Nations Declaration on the Rights of Indigenous Peoples and the Convention on Biological Diversity's Article 8(j). She stressed that Indigenous knowledge must be integrated and harmonized in the context of cooperative research with western science, and that merely understanding it as knowledge to be "extracted" would be a deep misunderstanding of the relationship between its holders and their environment.

Global Gender Event - Recap on 2020 and Way Forward

This event reviewed efforts to implement the enhanced Lima Work Programme on Gender (LWPG) and its Gender Action Plan (GAP)

Executive Secretary Espinosa opened the event by applauding the efforts of those working on the LWPG. She expressed hope that the convergence of the climate crisis and a global health crisis has opened opportunities to "work forward" on gender-responsive climate action.

Fleur Newman, UNFCCC Secretariat, gave a high-level overview of the implementation of the enhanced LWPG and the GAP. She noted that 81 parties have already nominated at least one Focal Point on Gender and Climate Change, and that work remains to be done on balancing gender composition in the constituted bodies of the UNFCCC as well as in negotiations generally.

Wiebke Bender, UNFCCC Secretariat, outlined regional virtual workshops, which aimed to share lessons learned on challenges and opportunities parties faced in integrating gender into national climate policies.

Parties shared insights into national activities on gender and climate change, including gender mainstreaming in NAPs. On regional workshops on the GAP, participants shared that major lessons learned included the need to focus on an intersectional perspective; the benefits of countries sharing information and capacity-building tools; and the need to generate sexdisaggregated data in climate policy and research.

Pilar Román Galán, UNFCCC, gave an overview of the Secretariat's work to define the role of focal points, and to build capacity for those focal points. She noted that the Secretariat conducted workshops on communication, advocacy, and engagement with focal points.

Reflecting on their roles, National Gender and Climate Change Focal Points highlighted challenges, including: limited resources; insufficiently clear guidance on the role's scope and responsibilities; working out how best to engage across multiple parts of a system; and building capacity in a flexible and adaptable way.

Participants highlighted intersectionality, communication, negotiation, leadership, and advocacy, among others, as topics for future training. Newman listed actions to be taken in 2021, including regional fora and enhancing the availability of sexdisaggregated data.

In closing, Carolina Schmidt, COP 25 President, commended parties on nominating 29 national focal points in 2020.

8th Dialogue on Action for Climate Empowerment

This event reviewed the results of the 8th Dialogue on Action for Climate Empowerment (ACE), which is meant to enhance work in the areas of climate change education, training, public awareness, public participation, public access to information, and international cooperation on these matters.

A moderated discussion brought together participants from the four regional ACE dialogues that took place earlier in 2020. They discussed, among others, key lessons from the dialogues, remaining gaps and needs across regions, and the need for crosssectoral collaboration.

Common threads across regions included:

- the need to work towards carbon neutrality, empower stakeholders, and enhance political commitment toward ACE;
- a lack of public awareness of ACE and buy-in from high-level political players; and
- the need to link policy, science, and Indigenous and local knowledge in the ACE process.

In closing the session, Archie Young, for the COP 26 Presidency, noted that the transition to a digital environment embodies the spirit of ACE.

Presidency's Open Dialogue between Observers and Parties

This event, which took place on the second to last day of the Climate Dialogues, focused on promoting an exchange of ideas, experiences, and lessons learned between observers and parties on facilitating ambition within a green recovery.

Alok Sharma, COP 26 President, stressed achieving net zero and building resilience is only possible through joint efforts between parties and non-party stakeholders, noting the latter are vital for encouraging parties to raise ambition.

Executive Secretary Espinosa highlighted the importance of exploring ways to enhance participation of non-party stakeholders.

Key insights from the ensuing discussion between observer constituencies and parties included:

- governments must work with all stakeholders in formulating their enhanced NDCs;
- the need to address the COVID-19 recovery in a way that also advances the green transition and the necessary structural transformation of economies;
- while, according to the Production Gap Report 2020, fossil fuel production must decline by 6% per year until 2030 for Paris goals to be met, G20 governments have committed over USD 230 billion to fossil fuels since the start of the COVID-19 pandemic;
- it is beneficial for a COP host country to "have its own house in order" to better encourage others to raise ambition;
- COVID-19 and climate change are gendered crises, and both the recovery and climate action must be ambitious, inclusive, and gender-responsive;
- multilevel action is key to raising national ambition, and efforts by subnational and regional governments should be formally recognized;
- enhanced NDCs must focus on decent and good job creation, protect human and labor rights, and include workers and organizations at the table in their creation; and
- young people have continued to organize despite the pandemic, and call upon parties to give space and resources for youth to self-organize.

In closing, Young reiterated key messages that inequality, climate change, and pandemic recovery are challenges that must be met with ambition and inclusivity.

Closing Segment

The concluding segment provided space to reflect on progress made during the Dialogues and look ahead to COP 26.

Key insights from constituted bodies included:

- The pandemic prompted a move to virtual meetings, which helped broaden stakeholder participation.
- Some bodies had trouble facilitating the secure sharing of draft documents with nominated observers.
- Innovations put in place in the pandemic context should inform practices even after in-person meetings become possible again.
- In the absence of negotiations, expectations for progress under the constituted bodies is heightened, but resources remain limited.

SBI Chair Karlsen highlighted that despite the absence of formal negotiations, 2020 was not a "lost year." She congratulated constituted bodies for delivering on their mandates and thanked the countries that were willing to engage in the Multilateral Assessment and the Facilitative Sharing of Views virtually, noting that this will free up time at the next SBI session. She nevertheless acknowledged that virtual events cannot replace in-person meetings, emphasizing the importance of informal discussions in the corridors for advancing negotiations.

SBSTA Chair Mpanu-Mpanu said he thought parties had engaged "seriously and constructively" in discussions, noting that implementation needs to quicken on the six-year workplan for response measures. He noted that a sense of urgency and willingness to engage was apparent in the discussions of Article 6 and transparency, and proposed organizing more expert meetings in 2021, particularly on Article 6.

Julio Cordano, for the COP 25 Presidency, said that 2021 should "build on lessons learned" from 2020 and use every possible way to improve on parties' common understanding on

critical issues. He pointed to a "packed" agenda in 2021 and stressed that the COP 25 and 26 Presidencies and the Secretariat are "extremely well-coordinated" in their planning.

Archie Young, for the COP 26 Presidency, highlighted the UK's new NDC, which commits to a 68% reduction in GHG emissions from 1990 levels by 2030. Stressing the need for a "fair and inclusive process," he announced that the UK Presidency intends to provide "maximum transparency" in the coming year, and announced that it will host a series of bilateral and multilateral conversations with negotiating groups and parties in 2021.

Guyana, for the Group of 77 and China, stressed: the virtual format is not appropriate for negotiations; a "deficit of ambition" on pre-2020 commitments, which developed countries should address; and adaptation is lagging behind mitigation in the negotiations. She called for COP 26 to deliver concrete deliverables on action and support for loss and damage.

Belize, for AOSIS, highlighted the virtual format has democratized the process by enabling the talks to reach more people than in-person formats can; and said more intersessional work on finance and on Article 6 will be critical. She highlighted Article 6 is not just about markets, but also about ambition and scaling up finance for adaptation.

The EU called for an inclusive, productive, and ambitious set of discussions between now and COP 26 on transparency and Article 6. She expressed openness to continuing informal work in 2021 and encouraged the presiding officers to capture the status of discussions prior to the next round of negotiations.

Panama, for AILAC, underscored the need to take messages from science, such as those raised in reports by the IPCC and the structured expert dialogue, to inform action. He called for relating enhanced NDCs to the long-term goal of carbon neutrality; and called for further expert engagement on Article 6 in 2021.

Egypt, for the Arab Group, emphasized, among others: his group's opposition to a formal output from the informal discussions on Article 6; concern over the advancement of work on response measures; the importance of not imposing conditions on countries' approaches to COVID-19 recovery; and balance in focus between land and ocean. He underscored that discussions with non-state actors on finance and on the enhanced transparency framework need to be distinct from the intergovernmental work under the UNFCCC.

Switzerland, for the EIG, noted that we are now in a better position than three weeks ago, but that much work remains, including on transparency, Article 6, and post-2025 finance. He called for: capturing discussions at the Dialogues, although not in an agreed outcome; and continuing discussions throughout 2021, noting the need to avoid parallel meetings and to hold discussions in a variety of time zones.

Bhutan, for the LDCs, stressed that many parties continue to face logistical challenges, and called for the recovery from COVID-19 to be consistent with the aims of the Paris Agreement and the SDGs. Among others, he called for beginning deliberation on a new climate finance goal in 2021, and noted the Thimphu Ambition Summit on 9 December.

Ecuador, for the LMDCs, called for the new climate finance goal to effectively take into account the financing needs of developing countries. He also emphasized that developed countries should not shy away from their finance and mitigation commitments and pressed for operationalizing the long-term goal on adaptation.

Papua New Guinea, for the Coalition for Rainforest Nations, underscored that negotiations on Article 6 need to secure environmental integrity by, among others, including national GHG accounting by sector.

China, for BASIC, stressed the limitations of virtual meetings and expressed dissatisfaction at the way in which the principle of common but differentiated responsibilities and respective capabilities (CBDR-RC) was taken into account in talks on adaptation finance.

Venezuela, for ALBA, stressed the importance of climate finance and means of implementation, highlighting that developed countries must adopt a more ambitious post-2025 finance goal to cover the gap in their commitment not achieved in the pre-2020 period, and that loss and damage should be treated equally with mitigation and adaptation.

Women and Gender stressed that women, youth, Indigenous peoples, and other marginalized groups are benefiting the least from economic recovery programmes. They called on leaders to "stop bailing out corporations," warning that "this is the time to act differently."

Local Governments and Municipal Authorities pressed for climate and social justice to be a central theme of COP 26 in Glasgow.

Indigenous peoples called for recognizing the integral role that Indigenous peoples play in preserving biodiversity and ecosystems across the world.

CAN welcomed the sense of urgency to reach a decision on common time frames at COP 26. She urged that no Clean Development Mechanism credits should be used to meet targets after 2020 and called for much stronger 2030 targets on mitigation and support.

SBSTA Chair Mpanu-Mpanu said discussions on Article 6 and transparency have made progress, and the feedback received will help to engage constructively on these issues in 2021.

Julio Cordano, for the COP 25 Presidency, highlighted the humanizing, informal atmosphere created by the virtual setting. Noting parties have found new ways to communicate, he underscored the opportunity to accelerate work.

Archie Young, for the COP 26 Presidency, stressed the need to move from dialogue to negotiations, and from a round of interventions to more genuine discussion. He underscored the commitment of the COP 26 Presidency to reaching a positive, comprehensive, and inclusive negotiated outcome at COP 26, highlighting that no issue should be left behind.

In closing remarks, Executive Secretary Espinosa stressed success at COP 26 means "going beyond the hunt for one or two big decisions" and instead achieving a balanced package. She urged parties to "work like [they] never have before" to complete the necessary work at COP 26.

A Brief Analysis of the UN Climate Change Dialogues 2020

Making peace with nature is the defining task of the 21st century. It must be the top, top priority for everyone, everywhere.

– UN Secretary-General António Guterres

While the Climate Dialogues were in their second week, United Nations Secretary-General António Guterres spoke about the state of the planet. "Apocalyptic fires and floods, cyclones and hurricanes are increasingly the new normal," he highlighted. "It is time to flick the 'green switch."" The days before the opening of the Dialogues were rife with media talk of COVID-19 vaccines, but overcoming one crisis does not mean dismissing the other. As Patricia Espinosa, Executive Secretary, United Nations Framework Convention on Climate Change (UNFCCC), gravely noted during the opening of the Dialogues, "There is no vaccine for the global climate emergency."

The COVID-19 pandemic has forced the postponement of the 26th meeting of the UNFCCC Conference of the Parties (COP 26) until 2021, but governments and stakeholders agreed that climate action must continue regardless of the pandemic. There are several outstanding issues due to be resolved at COP 26, including guidance for Article 6 of the Paris Agreement (cooperative approaches), common time frames for nationally determined contributions (NDCs), and transparency of reporting. The Subsidiary Bodies and constituted bodies are also under pressure to advance on their mandates, including holding workshops and preparing anticipated reports. As participants were starkly reminded by the Subsidiary Body for Implementation (SBI) Chair Marianne Karlsen, "We must continue to make progress in the only formal process we have."

The Climate Dialogues were intended to bridge the gap to COP 26 by giving parties an opportunity to exchange views on outstanding issues, as well as providing a space for holding mandated events and informational sessions. This brief analysis explores how the Climate Dialogues fared in fulfilling these functions and reflects on the lessons learned from a virtual approach to multilateral engagement.

A (Video) Call to Action

Solidarity is humanity. Solidarity is survival. – António Guterres

It was a tall order: creating a virtual space for an event that normally sees tens of thousands congregate in major convention centers. While the UNFCCC has experience in hosting online events, including the June 2020 Momentum event, the Climate Dialogues were an unprecedented experiment in scale. The Secretariat, subsidiary bodies, parties, and non-party participants were effectively testing out new grounds as they proceeded: as Subsidiary Body for Scientific and Technological Advice (SBSTA) Chair Tosi Mpanu-Mpanu said early on, "We are building the plane as we are flying it."

Inequities in participation opportunities that affect in-person events fell into sharp resolution at this virtual event. The meeting mostly took place during working hours in Central European Time (UTC+1), and time zone issues placed a heavy burden on delegations that had to participate in meetings during the night for the better part of the Dialogues. Internet connectivity issues were also a problem. Some speakers, particularly those from least developed countries (LDCs) and small island developing states (SIDS), were unable to connect during their scheduled speaking slots, or suffered from delays and poor-quality audio. Moreover, the connection between the meeting platform used by participants and the livestreaming platform through which most observers accessed the dialogues also malfunctioned at times, leaving observers in the dark. These technological problems did not prove fatal to the Dialogues, but no doubt muffled the voices of smaller and less developed constituencies. One observer wondered, "Why were these obvious issues not better anticipated and corrected

Observers also expressed concerns about access to documentation, limited places for active participation sessions, and lack of monitoring of the livestreaming platform for

questions. Meanwhile, without a physical meeting space, observers lacked the opportunity to carry out the colorful, attention-grabbing actions that many associate with UNFCCC meetings, not to mention the major protests that disrupted COP 25 in Madrid. Some observers acknowledged inherent limits of the virtual setting; others wondered whether this was a missed opportunity to be exposed to input from outside the bubble of the UNFCCC process. The lack of media attention compared to in-person meetings was also very apparent: even climate-focused media did not really cover the Dialogues.

The flip side of the virtual format was its "democratizing" impact: the Dialogues, as well as the virtual meetings by the constituted bodies that took place in 2020, were able to reach many individuals and communities who would not have been able to attend in-person meetings. Many emphasized this good practice should be fostered even after the pandemic.

Progress and the State of Discussions

We cannot go back to the old normal of inequality, injustice and heedless dominion over the Earth. Instead we must step towards a safer, more sustainable and equitable path. – António Guterres

Despite the challenges and hurdles faced in 2020, there was progress across many areas. Most constituted bodies managed to adjust to the pandemic and deliver on their mandates. There were, of course, gaps and shortcomings: some countries, for example, worried about the pace of work on loss and damage, notably with regard to adopting a plan of action for the new expert group on action and support.

Capturing progress from the Dialogues themselves is more difficult. Observers were unable to see the extent of progress on the informal discussions on outstanding Paris Rulebook issues as the sessions were held in a closed format. While the informal discussions undoubtedly had the merit of preventing parties from becoming "rusty," as one delegate put it, he added they appeared to make "little progress on the whole."

Without the substantial pressure for the COP to come to a conclusion, discussions on Article 6 remained at an abstract level, although this may be changing. According to some delegates, the looming expiration date of the Clean Development Mechanism—and the associated threat of a void in project funding—may create external pressure that will lead to a decision at COP 26 in Glasgow.

Similarly, in the technical discussion on common time frames, country groups largely repeated their well-known positions rather than engaging with the technical questions under discussion.

Finance evidently remained a source of disagreement. Thorny questions on modalities for climate finance accounting resurfaced, as always. Yet the topic of loan concessionality, especially for vulnerable countries, is increasingly acknowledged, including by donor countries. Although there is not much progress in terms of substance, it seems increasingly likely that parties will not wait until the last minute to initiate discussions on post-2025 climate finance.

All in all, the Dialogues may have fared better at keeping parties talking than at moving the talks forward. But how should virtual discussions be captured, and how should they feed into the negotiations? Some parties insisted that virtual discussions cannot replace negotiations and were adamant that no reports from the informal discussions be produced—or have any status in future negotiations if they were produced. Other parties called for continuing informal work in 2021 to deliver results at COP

26 and encouraged the presiding officers to capture the status of discussions prior to the next round of negotiations.

Ambition vs Reality

The science is crystal clear: to limit temperature rise to 1.5°C above pre-industrial levels, the world needs to decrease fossil fuel production by roughly 6% every year between now and 2030. – António Guterres

The question of ambition was ever-present in the Climate Dialogues, even if the notion of what such stated ambition may bring into being is still uncertain. In the wake of several high-profile net-zero or carbon neutrality announcements by major economies, the pressure rose for other countries to present new or enhanced NDCs. The Race-to-Zero campaign, launched at COP 25, had a high profile at the Dialogues, championed by the UK COP 26 Presidency. Executive Secretary Espinosa expressed this collective hope: "We are seeing leadership and momentum that didn't exist even a few months ago."

Parties may be moving closer to the goals that science demands. During the Dialogues, Climate Action Tracker broke news that if all net-zero pledges made by countries were fulfilled, global warming by the end of the century would reach 2.1°C—a substantially lower figure than the 2.9°C expected under current policies. For some, this represented evidence that the Paris Agreement's ratcheting-up mechanism had worked, if only in terms of ambition.

Yet ambition is not action, or even implementation. Questions remain about whether some parties' distant pledges for 2050 will be reflected in current national policies and legislation. Confidence is not high. As activist Greta Thunberg commented on Twitter, "If only words, pledges and setting distant hypothetical targets actually lowered our emissions, then we wouldn't still be in this mess." The gap between parties' stated ambition and the science, as well as the track record of implementation, raise concerns. In the course of the Structured Expert Dialogue, scientists made it clear that emissions reductions are nowhere near where they need to be—and that relying on "overshoot" scenarios of exceeding temperature goals to later draw down emissions would lock in irreversible impacts for vulnerable communities. The upcoming Climate Ambition Summit is billed as another venue to create momentum for increased ambition. The question nevertheless remains: will this continue to be all promise, no implementation, or will real progress shine through?

Looking Ahead to COP 26

Human activities are at the root of our descent towards chaos. But that means human action can help solve it. – António Guterres

While the Climate Dialogues undoubtedly advanced the climate regime's various mandates and work, it is debatable to what extent it paved the way to success in Glasgow.

What will discussions and negotiations look like in 2021? While the evolving COVID-19 vaccine situation makes it appear more likely that COP 26 will be able to proceed in late 2021 as planned, the format of intersessional meetings is still very much up for discussion. Conjuring a hopeful vision, Patricia Espinosa promised that "as soon as we can meet [in person], we will." But uncertainty remains.

One delegate urged parties to "get over" their concerns about perfection, saying the Dialogues were not intended to replace the more formal setting, and that parties need to use every opportunity to make progress. Further informal discussions will be key to ensure these discussions move toward more concrete exchanges. According to some, having future co-facilitators who will handle matters in Glasgow in the room during virtual talks could be a promising way to avoid duplication of work. This foreshadows that continued experimentation with virtual discussions will continue in 2021, building on lessons learned from the Dialogues.

The visible and active presence of the UK COP 26 Presidency at the Dialogues assuaged concerns in the wake of what many viewed as a bumpy year. One long-time observer pointed out that the combination of the active COP 25 and 26 Presidencies bodes well for success at COP 26. Some had concerns, however, as to whether what one participant termed the UK Presidency's "gazillion campaigns"—including on adaptation and resilience, energy transition, and clean road transport—would relate to the key negotiation issues on the table at COP 26, and whether they might spread resources too thinly.

With the Climate Ambition Summit commemorating the anniversary of the adoption of the Paris Agreement just a week away, participants at the Dialogues anticipated a slew of new and updated NDCs in the coming weeks and months. Did the Dialogues move the dial on the necessary ambition to put the world on track to meet the Paris goals? Will that ambition translate into scientifically rigorous action? As Patricia Espinosa pointed out, the increasing optimism and momentum increases the already high expectations for COP 26. If they are to meet the challenge of the moment and make peace with nature, parties will need—in the words of the Executive Secretary—to "work like [they] never have before."

Upcoming Meetings

GEF 59th Council Meeting: The Council meets twice annually to develop, adopt, and evaluate the operational policies and programs for GEF-financed activities. It also reviews and approves the work program (projects submitted for approval), making decisions by consensus. dates: 7-11 December 2020 location: virtual www: https://www.thegef.org/events/59th-gefcouncil-meeting

Thimphu Ambition Summit: The Thimphu Ambition Summit will showcase LDC leadership on climate action and make a clear call for countries to submit updated national climate plans by the end of the year in line with the goals of the Paris Agreement. date: 9 December 2020 location: virtual www: https://www. wiltonpark.org.uk/event/ldc-summit-thimphu-ambition-summitwp1868v/

Climate Ambition Summit 2020: The Climate Ambition Summit 2020 will mark the fifth anniversary of the Paris Agreement, and will provide a platform for government and non-governmental leaders to demonstrate their commitment to the Paris Agreement and the multilateral process. date: 12 December 2020 location: virtual www: https://www. climateambitionsummit2020.org/

23rd Standing Committee on Finance Meeting: This meeting will address the fourth Biennial Assessment and Overview of Climate Finance Flows, and the first report on the determination of the needs of developing country parties related to implementing the Convention and the Paris Agreement. It will also address the preparation of the Forum on Finance for Nature-based Solutions, as well as draft guidance to the GCF and the GEF. dates: 16-17 December 2020 location: virtual www: https://unfccc.int

For additional meetings, see https://sdg.iisd.org/

| Glossary | | |
|----------------|--|--|
| AC | Adaptation Committee | |
| AF | Adaptation Fund | |
| AILAC | Independent Association for Latin America and | |
| | the Caribbean | |
| ALBA | Bolivarian Alliance for the Peoples of Our | |
| | America | |
| AOSIS | Alliance of Small Island States | |
| BASIC | Brazil, South Africa, India, and China | |
| CAN | Climate Action Network | |
| CDR | Carbon dioxide removal | |
| CMA | Conference of the Parties serving as the | |
| COP | Meeting of the Parties to the Paris Agreement Conference of the Parties | |
| CTCN | Climate Technology Centre and Network | |
| EIG | Environmental Integrity Group | |
| ENGOs | Environmental non-governmental organizations | |
| FWG | Facilitative Working Group | |
| G20 | Group of 20 | |
| GCF | Green Climate Fund | |
| GEF | Global Environment Facility | |
| GHG | Greenhouse gases | |
| IPCC | Intergovernmental Panel on Climate Change | |
| IRENA | International Renewable Energy Agency | |
| IUCN | International Union for Conservation of Nature | |
| KCI | Katowice Committee of Experts on the Impacts | |
| | of the Implementation of Response Measures | |
| KJWA | Koronivia Joint Work on Agriculture | |
| LCIPP | Local Communities and Indigenous Peoples' | |
| LDC | Platform | |
| LDCs | Least developed countries | |
| LEG LIFE-AR | LDC Expert Group LDC Initiative for Effective Adaptation and | |
| LIFE-AK | Resilience | |
| LMDCs | Like-Minded Developing Countries | |
| LTGG | Long-term Global Goal | |
| NAPs | National adaptation plans | |
| NDCs | Nationally determined contributions | |
| NWP | Nairobi Work Programme | |
| OECD | Organisation for Economic Co-operation and | |
| | Development | |
| PCCB | Paris Committee on Capacity-building | |
| SBs | Subsidiary Bodies | |
| SBI | Subsidiary Body for Implementation | |
| SBSTA | Subsidiary Body for Scientific and Technological Advice | |
| SCF | Standing Committee on Finance | |
| SDGs | Sustainable Development Goals | |
| SIDS | Small island developing states | |
| TEC | Technology Executive Committee | |
| UNDP | United Nations Development Programme | |
| UNEP | United Nations Environment Programme | |
| UNFCCC | United Nations Framework Convention on | |
| | Climate Change | |
| WG | Working Group | |
| WIM | Warsaw International Mechanism on Loss and | |
| | Damage associated with Climate Change | |
| | | |