COP26: Outcomes & the Road Ahead

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Sustainability Report

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The Al-Attiyah Foundation

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INTRODUCTION

COP26: OUTCOMES & THE ROAD AHEAD

COP26 marked the transition of the historic Paris Agreement from rulemaking to implementation. Significant outcomes were achieved during the delayed event, from agreeing to stronger 2030 emissions reduction targets, concluding the rulebook for Article 6, scale-up of finance to least developed countries (LDCs), collective commitments to curb methane emissions, reverse forest loss, accelerate the phase-down of coal, and end international financing for fossil fuels. However, financial support for adaptation and loss and damage saw lesser action.

What will be the impact of COP26? Will new commitments be enough to keep the 1.5°C target achievable? What work remains in the run-up to COP27 and COP28? And what do the outcomes mean for future oil and gas production?

Sustainability Report

This research paper is part of a 12-month series published by The Al-Attiyah Foundation every year. Each in-depth research paper focuses on a prevalent sustainable development topic that is of interest to The Foundation's members and partners. The 12 technical papers are distributed to members, partners, and universities, as well as made available online to all Foundation members.

EXECUTIVE SUMMARY

- At the COP26 summit global leaders met to come up with an action plan. This was crucial firstly to restore multilateral action following the US's return to the Paris Agreement; and secondly to get the process back on track following the disruption of the COVID-19 pandemic.
- COP26 for the first time marked an unequivocal statement that human burning of fossil fuels has resulted in the climate crisis, on par with the Intergovernmental Panel on Climate Change's (IPCC) 6th Assessment Report, published in August 2021.
- 120 world leaders, 25,000 delegates, and scores of activists, climate experts, celebrities, businesses, and campaigners attended the summit to hammer out the specifics of key issues. These included, broadly, (1) securing global net-zero by mid-century and maintaining the goal of limiting temperature rise to 1.5°C; (2) adapting to protect communities and natural habitats, and (3) mobilising finance.
- Notable absences at the summit included Chinese leader Xi Jinping, Russian President Vladmir Putin, and Saudi Arabia's Crown Prince Mohammed bin Salman. All three countries pushed back against pledges to eliminate fossil fuel subsidies and financing.
- COP26 negotiators agreed to eliminate double counting, a critical step to making real progress on reducing emissions. 5% of all carbon credit proceeds were also decided to be transferred to adaptation funding under traditional market mechanisms.
- Negotiators also "encouraged" countries to use common timeframes for their NDCs. This means that new NDCs put forward in 2025 shall have an end-date of 2035, with a review in 2030 when new commitments put forward will have an end-date of 2040.
- Developed countries "are still on the hook" to fulfil their US$ 100 billion per year goal, and must report on their progress, while funding for loss and damage received significant pushback from industrialised nations.
- The pledges and alliances formed in and around COP26, such as the Beyond Oil and Gas Alliance, and the Global Methane Pledge, are important for alignment between like-minded countries on specific issues. Their voluntary nature could limit their intended impact on carbon emissions. However, significant public, social, and stakeholder pressure could mean more rapid divestment from oil and gas assets.

COP26: BACKGROUND AND SCENE-SETTING

The 26th UN Climate Change Conference of Parties (COP26) marked the transition of the historic COP21 Paris Agreement from a rule-making event to one with plans for implementation. Hosted by the UK in the city of Glasgow, the summit marked the close of the first 5-year cycle to review countries' plans for reducing emissions by 2030 and achieve net-zero by mid-century.

The summit was delayed by a year due to the COVID-19 pandemic. The outbreak reinforced in many ways nation-first mentalities, inequalities between developed and developing countries, and a weakening multilateral system. Global cooperation on climate change shrank at the height of the pandemic, as did foreign policies in terms of substance and reach to aid and mitigate the worst impacts of climate-driven change in 2020.

In 2020, climate change and its devastating impacts on our planet have become one of the leading news stories across mainstream media channels.

News feeds were inundated with haunting images from the United States and Canada as unprecedented temperatures across the Pacific-Northwest caused hundreds of heat-related deaths at the end of June and into July. The city of Portland in Oregon hit 46.6 degrees Celsius and a Canadian record of 49.4 was recorded in British Columbia. The high temperatures also contributed to crop failures and helped spawn wildfires, one of which destroyed the town of Lytton, British Columbia.

Just a few months later, rivers in central Europe burst through their banks, submerging towns and slamming parked cars against trees. At least 230 people died across five European countries, including 184 in Germany. The flooding led to widespread power outages, forced evacuations

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and damage to infrastructure and agriculture in the affected areas.

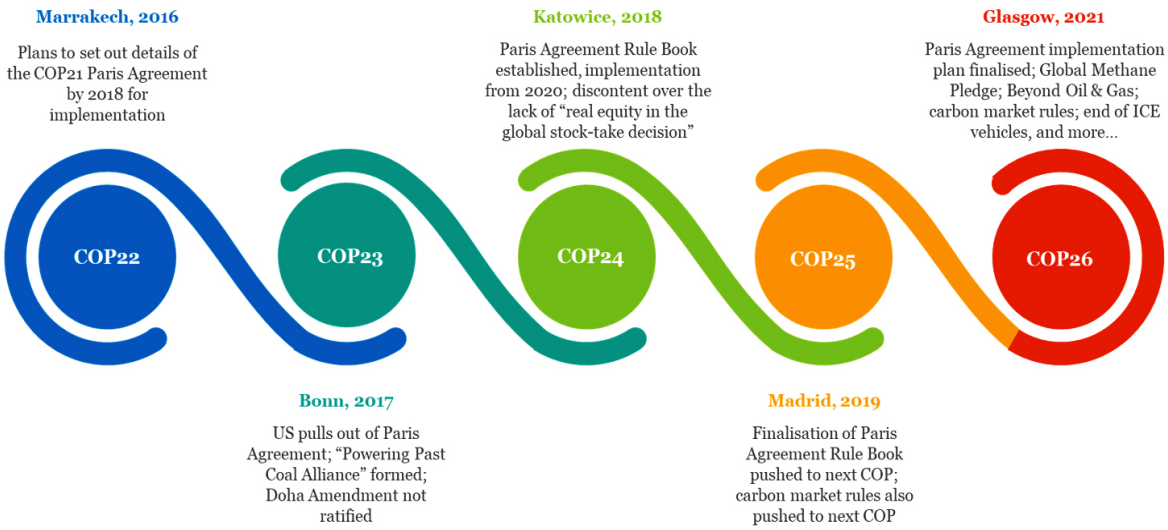
Amid this landscape, hosting the COP26 summit was crucial to convene global leaders to come up collectively with an action plan that not only implement the Paris Agreement and its key rules, but also lay the groundwork for adaptation finance, strengthened multilateralism, and advanced the deployment of carbon-neutral technologies. The COP26 was also essential for "building back better" after the pandemic, through green recoveries that could bring in jobs, trillions in investment, and ground-breaking new technology[i].

Compared to previous COP summits since the Paris Agreement, where major polluters have squabbled over emissions' mitigation responsibilities and the impact of climate change, COP26 for the first time marked an unequivocal statement that human burning of fossil fuels has resulted in the climate crisis. This is consistent with the Intergovernmental Panel on Climate Change's (IPCC) 6th Assessment Report, published in August 2021.

The summit's key action items were centred around the three pillars of the Paris Agreement – mitigation, adaptation, and finance. They included (1) securing global net-zero greenhouse gas emissions by around mid-century[iii] (to help keep the goal of limiting temperature rise to 1.5°C within reach); (2) adapting to protect communities and natural habitats, and (3) mobilising finance. Although these goals are not exclusive to the COP26, and have been the mandates of previous COPs, COP26 had a unique urgency in this "decade of action".

Several studies contributed to the sense of unique urgency in the lead-up to COP26. These included the IPCC's 6th Assessment Report (AR6), which for the first time combined Shared Socioeconomic Pathways (SSPs) with the Representative Concentration Pathways (RCPs) to highlight the extent of climate damage, and the futures under which mitigating and adapting would be easier compared to others. The AR6 sets out five scenarios (SSP1- SSP5) and concluded that a net-zero future could be realised only under scenario SSP1-1.9.

Figure 1 High-level summary of key COP outcomes since the COP21 Paris Agreement[ii]



More extreme scenarios, such as SSP4 and SSP5, put the earth on dangerous track for >2.1°C warming, due to a growing divide between globally connected, well-educated society and fragmented lower income societies, growing unrest and conflict, and ineffective institutional capacity[iv].

Other major contributors included the IEA's Net-Zero Emissions (NZE) by 2050 scenario, released a few months ahead of the IPCC's AR6, which highlighted that to reach net-zero emissions by 2050, annual clean energy investment worldwide would have to more than triple by 2030 to ~US$ 4 trillion. This would support aggressive electrification, upscale of hydrogen, and carbon capture, utilisation, and storage (CCUS) technologies to net-out global energy CO_2 emissions and provide over 50% of total emissions savings between 2030 and 2050[vi].

Table 1 Climate impact of AR6 Climate Scenarios[v]

Scenario	Climate Requirements	Estimated Warming (2041-2060)
SSP1-1.9	Very low GHG emissions; CO2 emissions cut to net-zero around 2050	1.6°C
SSP1-2.6	Low GHG emissions; CO2 emissions cut to net-zero around 2075	1.7°C
SSP2-4.5	Intermediate GHG emissions; CO2 emissions around current levels until 2050, then falling but not reaching net-zero by 2100	2°C
SSP3-7.0	High GHG emissions; CO2 emissions double by 2100	2.1°C
SSP5-8.5	Very high GHG emissions; CO2 emissions triple by 2075	2.4°C

The IEA report made headlines for its statement that, on a net-zero pathway, no additional oil and gas field developments would be required (i.e., demand could be met from continuing production from existing fields).

DNV's Pathway to Net Zero report, also published in the lead-up to COP26, highlighted the existing gaps between climate mitigation ambitions and net-zero by 2050 aspirations, showing concern over the lack of support for crucial medium-term transition technologies like low-carbon fuels and CCUS[vii].

COP26: BACKGROUND AND SCENE-SETTING

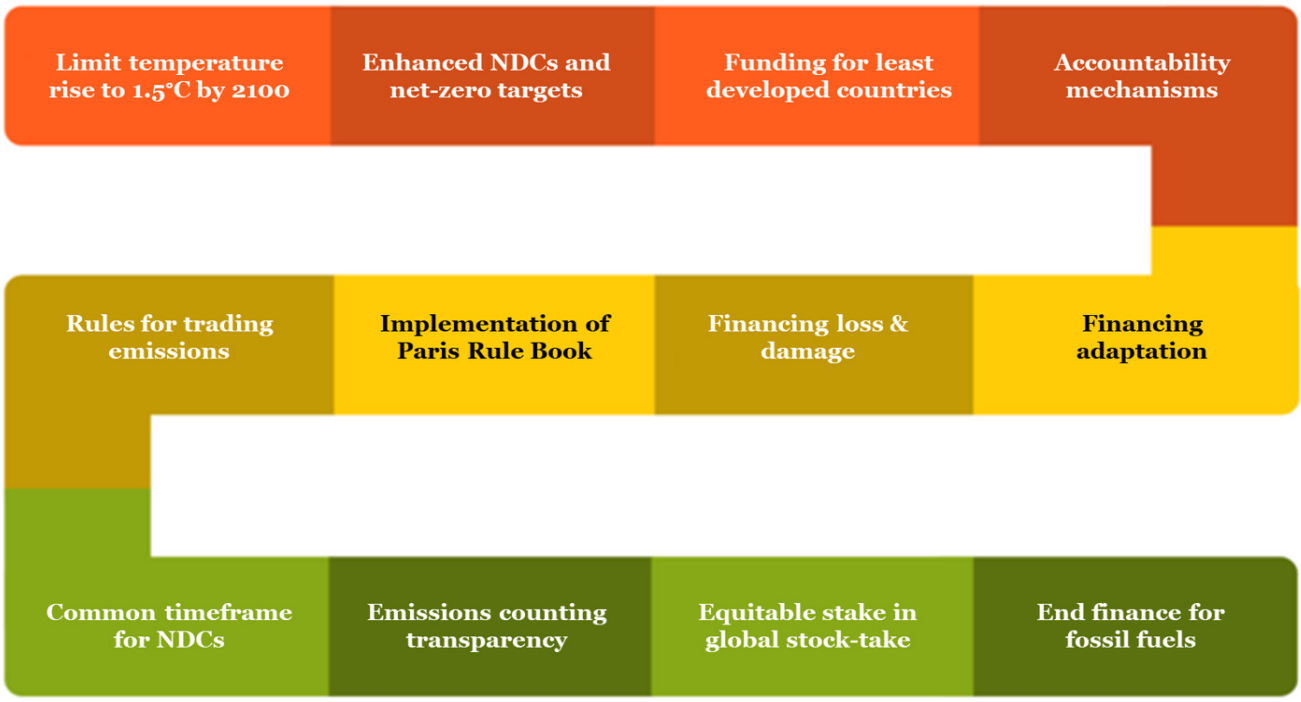
The Network for Greening the Financial System's (NGFS) Net Zero 2050 scenario, released on the heels of the IPCC's AR6, also confirmed that stringent climate policies needed to be coupled with aggressive innovation and finance for all sectors to quickly phase-out fossil fuel use and achieve net-zero CO_2 emissions by 2050[viii].

Findings from the United Nations Emissions Gap Report for 2021, meanwhile, released a week prior to the summit, were described as "another thundering wake-up call" by UN Secretary General Antonio Guterres, who also stressed that "the climate crisis is code red for humanity[ix]." According to the report, current country pledges will fail to keep global temperatures under 1.5°C, and the world will remain on track to warming of 2.7°C, with hugely destructive impacts[x].

The scene for the summit was also set by several public appearances by celebrity climate change activists, Hollywood actors, world leaders, and non-profit organisations. These included Swedish activist Greta Thunberg, Hollywood actors Leonardo di Caprio, Matt Damon, Idris Elba, Maisie Williams, and others, and world leaders like Barack Obama and the Duke and Duchess of Cambridge. BBC documentarian and naturalist Sir David Attenborough, who was named the COP26 People's Advocate, urged the public on the opening day of COP26 to turn "tragedy into triumph", while non-profit organisations like Greenpeace conducted "climate marches" throughout the UK to show the enormous public support for urgent climate action and send a message of "stop failing us"[xi] to world leaders at the summit.

COP26: WHAT WERE THE KEY EXPECTATIONS AND WHO WERE THE KEY ATTENDEES?

Figure 2 Key expectations from COP26



Key expectations from the summit (Figure 2) included setting 1.5°C as the new temperature rise limit countries should aspire to, rather than 2°C options; a stringent review of NDCs so far and pressure for more ambitious climate plans from existing signatories to the Paris Agreement, and new-comers; closing the gap between 2030-aligned NDCs and 2050 net-zero aspirations; more money for developing countries to transition to a carbon-neutral future; accountability mechanisms to help countries turn their pledges into legally-binding domestic legislation; financing adaptation to climate change, and loss and damage from already-occurred climate change-driven events, and; establishing the mechanics of the Paris Agreement for implementation, including most importantly, the rules for trading emissions cuts between countries, an agreed common timeframe for all NDCs to span, and rules on transparency to ensure nations do not cheat on their emissions reporting.

120 world leaders, 25,000 delegates, and scores of activists, climate experts, celebrities, businesses, and campaigners attended the summit to hammer out the specifics needed to meet these expectations. Major world leaders included the President of the USA, Joe Biden, UK Prime Minister Boris Johnson, Scotland's First Minister Nicola Sturgeon, Prince Charles, Italian Prime Minister Mario Draghi, Canadian Prime Minister Justin Trudeau, Israeli Prime Minister Naftali Bennet, Indian Prime Minister Narendra Modi, Ukrainian President Volodymyr Zelensky, German Chancellor Angela Merkel, French President Emmanuel Macron, Egyptian President Abdel Fattah el-Sisi, Spanish Prime Minister Pedro Sanchez, Dutch Prime Minister Mark Rutte, Japanese Prime Minister Fumio Kishida, The Emir of Qatar H.H. Tamim Al-Thani, and Indonesian President Joko Widodo. Other high-level participants included representatives from the 27 EU member

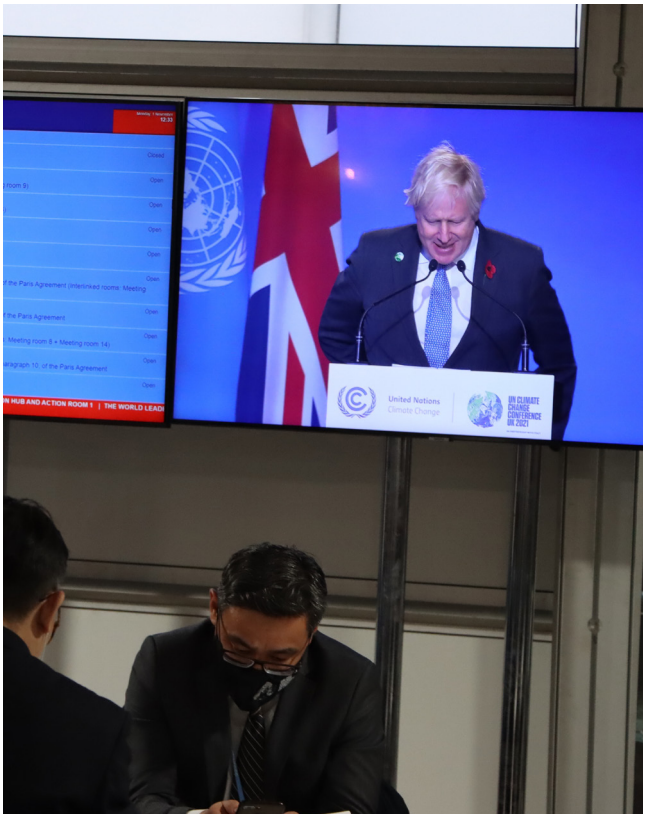
COP26: WHAT WERE THE KEY EXPECTATIONS AND WHO WERE THE KEY ATTENDEES?

Table 2 Major non-attendees at COP26

Non-attendee	Country	Delegation Sent	New/Enhanced NDC Submitted	Pledges Signed					Main expectation from COP26	Agreements signed external to COP26 Pledges, during COP26
				Deforestation	Methane	Coal	Fossil Fuel Subsidies	Fossil Fuel Financing		
Xi Jinping	China	✓	✓	✓	✗	✗	✗	✗	Enhanced NDCs and net-zero targets	US-China Joint Glasgow Declaration on Enhancing Climate Action in the 2020s
Vladmir Putin	Russia	✓	✓	✓	✗	✗	✗	✗	Enhanced NDCs and net-zero targets	
Mohammed bin Salman	Saudi Arabia	✓	✓	✗	✓	✗	✗	✗	Enhanced NDCs and net-zero targets	
Jair Bolsonaro	Brazil	✓	✓	✓	✓	✗	✗	✗	Enhanced NDCs and net-zero targets	
Recep Tayyip Erdoğan	Turkey	✓	-	✓	✗	✗	✗	✗		Love Flower Alliance[ii]

states, Argentina, Australia, Colombia, the Democratic Republic of Congo, Ghana, Iraq, Nigeria, South Korea, Sweden, Switzerland, and the UAE, among others.

More notable, however, were the absences at the summit, as indicated in Table 2. Prior to the summit, in October, Chinese leader Xi Jinping announced he would not be attending the conference in person and would instead deliver a written address to COP26. Prime Ministers and heads of state from South Africa, Russia, Saudi Arabia, Iran, Mexico, Brazil, Turkey, Malaysia, Afghanistan and Myanmar also did not attend the meeting.



COP26: THE DIALOGUES AND THE OUTCOMES

Outcomes from the different dialogues were varied, with some resulting in concrete, actionable steps, although these still entailed elements that were not fully clarified. For example, one of the more pressing issues at the start of the summit was setting the rules for international emissions' trading under the Paris Agreement's Article 6. Negotiations between governments at previous COPs fell short of striking a balance between setting rules and preventing undermining of climate ambition, but COP26 succeeded in getting attendees to settle the most contentious issue of carbon markets: double counting.

Negotiators agreed to eliminate double counting, a critical step to making real progress on an effective system of international carbon trading and offsets. This ensures that when a country sells offsets to another for GHG reductions, those reductions cannot also be counted against its Paris commitments. 5% of all carbon credit proceeds were also decided to be transferred to adaptation funding under traditional market mechanisms (Paris Agreement Article 6.4[xiii]), but this was not clarified against Article 6.2, which only "strongly encouraged" contributing funds towards adaptation.

Table 3 summarises the outcomes from key dialogues at the COP26.

A related issue to double-counting of emissions was the carry-over of old carbon credits generated since 2013 under the Kyoto Protocol's clean development mechanism (CDM). LDCs and the African Group countries have vied for strict limits on the carry-over of Kyoto Protocol-era credits and activities, as a carry-over places them at a disadvantage, while other developing countries, that have benefited the most from CDM projects, such as Brazil, and other LMDCs[xvii], have pushed for the carry-over of credits.

COP26: THE DIALOGUES AND THE OUTCOMES

Table 3 Outcomes of key dialogues at COP26

Dialogue	Action	Is it Sufficient?	Outcome
ZLimit temperature rise to 1.5°C by 2100 through deep 2030 emissions' cuts (enhanced NDCs) and net-zero targets	151 countries submitted new / enhanced NDCs to slash emissions by 2030	Not nearly Major emitters' 2030 targets are weak. These include Australia, China, Saudi Arabia, Brazil, and Russia ▪ Australia: Has not reduced total GHG emissions in 2030; not strengthened or added GHG targets and sectoral targets, and; not strengthened adaptation. ▪ China: Has altered the language of its NDC to now say CO2 emissions will peak before 2030, compared to previous NDC which said CO2 emissions will peak around 2030; plan to achieve net-zero by 2060, but although it has strengthened its previous non-fossil share and carbon intensity targetsiii, its policies still remain more consistent with a global warming of 3°Civ ▪ Saudi Arabia: Doubled annual emissions' reduction target from 2020 to 2030 to 278 MtCO2e, however, no baseline projection is included to which the emissions' reduction target can be applied; reduction target is contingent on international action under the Paris Agreement not causing an "abnormal burden" on the Saudi economy; new NDC still mentions that emissions reductions are based on the scenario under which hydrocarbons exports continue to provide a "robust contribution" to the Saudi economy ▪ Brazil: No adaptation components; climate neutrality by 2060, conditional on the receipt of financial transfers; change in language with regards to 2030 emissions target (43% reduction from 2005 levels) from "indicative" to "committed"; however, update in base year emissions has led to substantial weakening of both targets ▪ Russia: Updated NDC does not strengthen Russia's 2030 target in any real sense, as it is higher than Russia's own 2030 emissions projections under current policies; lack of sectoral targets; ambition not consistent with Paris Agreement's 1.5°C temperature limit Challenge ▪ Lack of credible pathways from major emitters' to achieve targets ▪ Credibility gap between 2030 targets and net-zero targets	Glasgow Climate Pact calls on countries to "revisit and strengthen" their 2030 targets by the end of 2022 to align them with the Paris Agreement's temperature goals Glasgow Climate Pact asks all countries that have not done so to submit long-term strategies to 2050, aiming for a just transition to net-zero around mid-century Glasgow Climate Pact asks nations to "consider" further actions to curb methane, and includes language emphasising the need to "phase down unabated coal" and "phase-out fossil fuel subsidies"
Funding for LDCs and climate adaptation	Developed countries agreed to fulfil the goal of US$ 100 billion a year for LDCs, and also agreed to double funding for adaptation by 2025	Not nearly Developed countries had in 2009 committed to mobilise US$ 100 billion a year by 2020 through 2025 to support climate efforts in LDCs. However, the Glasgow Climate Pact noted "with deep regret" that developed countries had failed to meet that goal. ▪ Total climate finance reached in 2019 was US$ 79.6 billion, only 2% higher than 2018 levels. ▪ US$ 100 billion of financial support looks likely to be mobilised by developed countries only in 2023 ▪ Developed countries will have to sustain this level of finance through 2025, after which they need to develop a new, larger climate finance goal to go into effect ▪ The new goal will have to support sustainable development and poverty eradication, as well as the Paris Agreement's long-term goal of making finance flows consistent with a pathway towards low GHG emissions and "climate-resilient" development ▪ Countries will have only three years to set the new goal before 2025 ▪ The established Ad Hoc Work Programme will convene technical experts and ministers to flesh out the details, and set the goal by 2024 ▪ Developed countries will also double funding for adaptation by 2025, amounting to at least US$ 40 billion, but the Adaptation Fund only received new pledges for US$ 356 million ▪ Global Goal on Adaptation (GGA) will take place between 2022 and 2024 to help improvement assessment of progress towards adaptation finance needed, but framework and methodologies remain unclear	Glasgow Climate Pact establishes an Ad Hoc Work Programme of developed countries to convene technical experts and ministers to flesh out details of the post-2025 climate finance goal for LDCs Glasgow Climate Pact asks developed countries to double funding for adaptation by 2025, amounting to at least US$ 40 billion to address the persisting imbalance between funding for mitigation and adaptation efforts The Adaptation Fund receives new pledges for US$ 356 million. The Least Developed Countries Fund received US$ 413 million in new contributions

		Challenge ▪ Countries may or may not report their progress in meeting the US$ 100 billion finance goal for LDCs ▪ Details of the Ad Hoc Work Programme to set post-2025 climate goal unclear ▪ Review of financial needs for adaptation could hinder actual finance ▪ Lack of balance between procedural and substantive elements? Key milestones need to be set for the deliberations to set post-2025 goals ▪ Current funding for mobilisation targets extremely low ▪ Weak language towards multilateral institutions – "encouraging" to further concessional financial resources for LDCs, rather than "mandating"	Glasgow Climate Pact adopts the Glasgow-Sharm el-Sheikh work programme for the Global Goal on Adaptation (GGA) to enable implementation of adaptation goals
Funding for loss and damage	New dialogue dedicated to discussing possible arrangements for loss and damage funding	**Grossly insufficient** While the critical issue of climate change-driven loss was highlighted as one of the more important items on the COP26 agenda, a proposal by climate-vulnerable countries to create a new finance facility dedicated to loss and damage faced significant pushback by developed nations such as the US and Australia. ▪ The US, Australia and other developed countries have long pushed back against the possibility that industrial countries with high historic levels of carbon pollution might need to compensate others for the damage they have caused ▪ Industrialised nations demand work should first be undertaken to understand how money for loss and damage should be best delivered, after assessing unique requirements of climate-vulnerable countries ▪ A dialogue has been created in lieu of the finance facility proposed by countries including the Marshall Islands, Fiji, and Antigua and Barbuda, to discuss possible "arrangements" for loss and damage funding ▪ So far, ideas to fund loss and damage costs include taxation of fossil fuel sales or aviation Challenge: ▪ Unwillingness by industrialised nations to pay loss and damage reparations ▪ Political interests ▪ Lack of technical assistance for climate-vulnerable countries	Glasgow Climate Pact establishes the Glasgow Dialogue between Parties to discuss the arrangements for the funding of activities to avert, minimise and address loss and damage associated with the adverse impacts of climate change Glasgow Climate Pact agrees to operationalise the Santiago *Network on Loss and Damage* to catalyse the technical assistance developing countries need to address loss and damage in an effective manner COP26 saw financial pledges from Scotland and Wallonia (Belgium) of US$ 2.6 million and US$ 1.1 million respectively to address loss and damage, alongside similar commitments by various philanthropies
Rules for trading emissions / International carbon markets	Rules for the global carbon market under the Paris Agreement set	Somewhat After five years of negotiation, countries settled on the rules for the global carbon market under the Paris Agreement's Article 6. ▪ Double-counting eliminated; double-counting allowed more than one country to claim the same emissions reductions as counting toward their own climate commitments ▪ This is a critical step to make real progress on reducing emissions ▪ Countries also decided that 5% of proceeds must go toward funding adaptation under traditional market mechanisms (Article 6.4 of Paris Agreement) ▪ Unfortunately, carry-over of old carbon credits generated since 2013 under the Kyoto Protocol's CDM is still allowed Challenge: ▪ Although Article 6.4 of the Paris Agreement states 5% of proceeds from carbon credits must go toward funding adaptation, Article 6.2 (bilateral trading of credits between countries) states that contributing funds toward adaptation was only "strongly encouraged", which may reduce this potentially secure source of finance for adaptation	Glasgow Climate Pact settles rules for international carbon markets by eliminating double-counting from the Paris Agreement

Rules for common timeframes for NDCs; more transparency	Countries encouraged to use common timeframes for their NDCs	Somewhat	Glasgow Climate Pact adopts common timeframes for NDCs referred to in Article 4 of the Paris Agreement
		The Glasgow Climate Pact encouraged countries to use common timeframes for their NDCs to keep pace with the Paris Agreement's five-year review cycle to strengthen their plans. ▪ New NDCs that countries will put forward in 2025 shall have an end-date of 2035, and those put forward in 2030 will have an end-date of 2040 and so on ▪ Aligning NDC targets' dates around five-year cycles could help spur ambition and action in the near-term, facilitate better understanding of global progress, and ensure countries take action over the same period ▪ Countries also agreed to submit information about their emissions and financial, technological and capacity-building support using a standardised set of tables to make reporting more transparent, consistent and comparable	
		Challenge: ▪ The use of the term "encouraged" rather than stronger language may weaken the impact of this decision ▪ No strict mandate for transparency can weaken countries' efforts in reporting their emissions' data, which is integral to emissions' reductions	

Allowing the use of older credits matters because this would increase the supply, a potentially bearish signal for carbon credit prices. Carbon credit prices have surged in 2021 as demand grows from corporates wanting to offset their GHG emissions to achieve net-zero emissions by 2050 or sooner. Credits for aviation[xviii] have surged by 856% since January, with nature-based credits[xix] gaining 132% since June[xx]. EU ETS prices, meanwhile, have also gained 175% since January, peaking at €89/tonne on December 08, 2021 (Figure 3). Negotiators at COP26 ultimately decided that all credits issued between 2013 and 2020 would be "good to be sold in the market[xxi]", although no stringent guidelines were established to ensure these would represent real emissions reductions, and not just "hot air"[xxii].

Rules for a common timeframe to review countries' NDCs and increased transparency in emissions reporting also saw some success during the COP26 negotiations. Since the Paris Agreement, 192 countries have submitted NDCs, but the end-dates of these plans are different. Some cover the period through 2025, while others run through 2030. Most have also not specified their beginning date, which made it difficult to review them periodically.

According to the Paris Agreement rule book, if an NDC is submitted in 2015, a new NDC should be communicated every five years, but a time period for these NDCs[xxiii], whether they should all cover the same time period, and if so, starting when, and the length of the common timeframe, remained unspecified[xxiv].

At COP26, negotiators finally settled on the issue, by "encouraging" countries to use common timeframes in a 5+5 approach. This means that new NDCs put forward in 2025 shall have an end-date of 2035, with a review

Figure 3 EU ETS prices[xxv]

in 2030 when new commitments put forward will have an end-date of 2040. Aligning NDC targets' dates around 5-year cycles should better spur ambition and action in the near-term, and ensure countries keep pace with the Paris Agreement's 5-year review cycle to strengthen their plans.

There was also discussion over a shorter NDC update period than five years, given the urgency and fast-evolving situation, but this was not adopted.

Dialogue around financing and deeper emissions' targets (2030 and 2050), however, were not as successful, although a number of notable pledges were signed to tackle the climate crisis. Since committing at COP15 in Copenhagen to mobilise US$ 100 billion annually for developing countries by 2020 through 2025, total climate finance managed to reach only US$ 79.6 billion in 2019, with developed countries failing to support LDCs climate efforts. The Glasgow Climate Pact noted "with deep regret" that developed countries had failed to meet that goal in 2020, and a collective Delivery Plan led by Canada and Germany at the July Ministerial meeting preparing for COP26 set further commitments to increase bilateral public climate finance by around US$ 10 billion annually on average over the period of 2022-2025, with the US$ 100 billion target likely to be reached in 2023[xxvii].

An OECD analysis setting two forward-looking scenarios of climate finance to be provided and mobilised by developed countries between 2021 and 2025, however, noted that near-term macroeconomic risks in developing countries and capacity constraints exacerbated by the COVid-19 pandemic could result in lower-than-targeted levels of climate finance. Private finance mobilised by public finance could help increase finance towards LDCs but shifts in the composition of providers' portfolios based on economic externalities could limit this growth.

Negotiations at COP26 made it clear that developed countries "are still on the hook" to fulfil their US$ 100 billion per year goal and must report on their progress. A post-2025 climate finance goal was decided to be set by an Ad Hoc Work Programme by 2024, which will convene technical experts and ministers to strike the appropriate balance between procedural and substantive elements, although an operating methodology is yet to be established.

Figure 4 Common timeframes for NDCs, implementation and targets[xxvi]

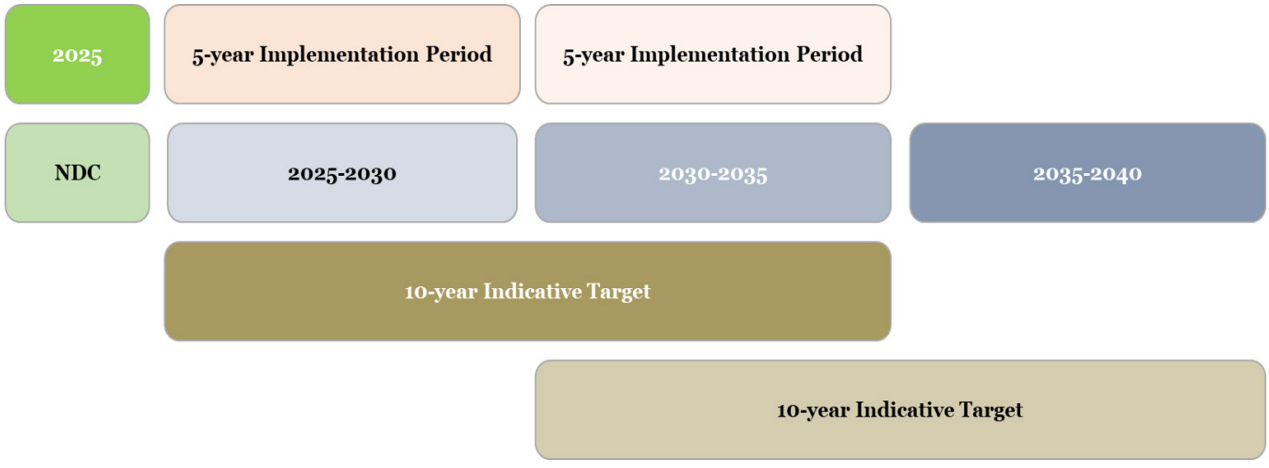


Figure 5 NDC submittals in the run-up to COP26[xxx]

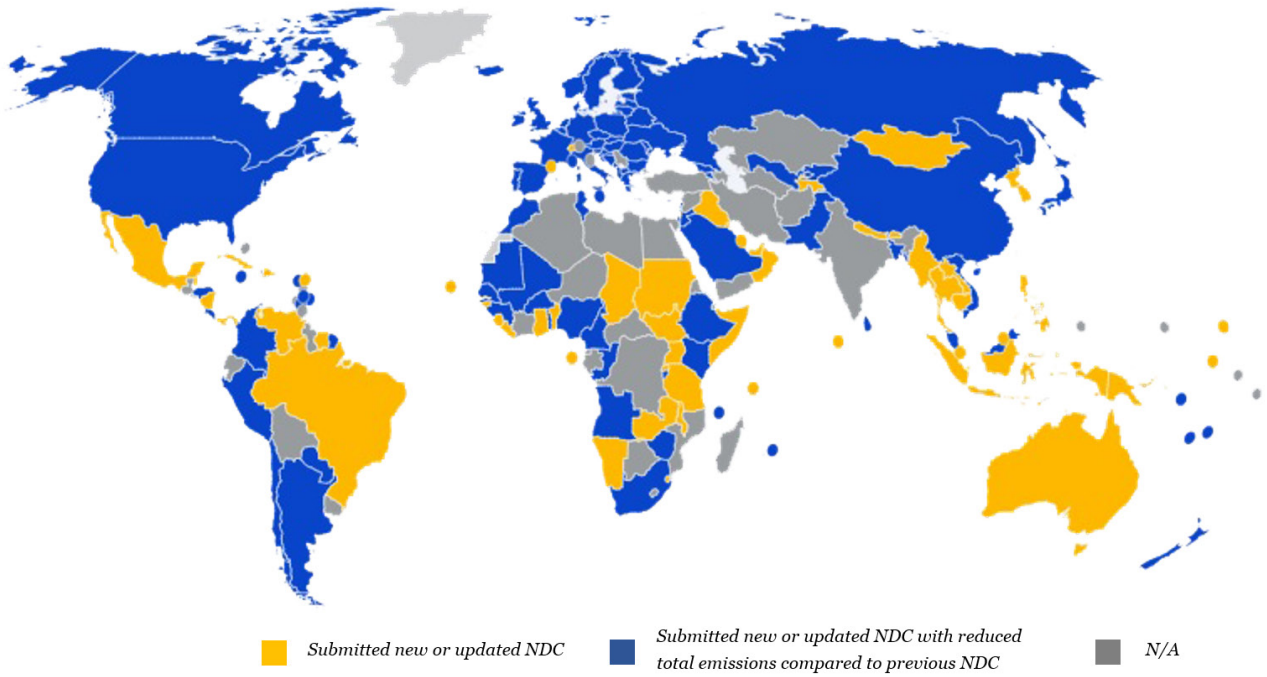


Table 4 Future ranges of climate finance by developed countries, US$ billion[xxviii]

Scenario	Component	2021	2022	2023	2024	2025
Scenario 1	Public Finance	70.5	77.7	85.3	91.1	94.5
	Export Credits	2.6	2.6	2.6	2.6	2.6
	Private finance mobilised	15.2	16.7	18.4	19.6	20.4
	Total	88	97	106	113	117
Scenario 2	Public Finance	66.5	74.6	82.5	89.3	94.0
	Export Credits	2.6	2.6	2.6	2.6	2.6
	Private finance mobilised	14.0	15.0	16.0	16.5	16.6
	Total	83	92	101	108	113

By the end of the summit, the Adaptation Fund received new pledges for US$ 356 million, while the LDCs Fund received US$ 413 million, both woefully insufficient to assist in managing the impacts of climate change.

Funding for loss and damage, meanwhile, received significant pushback from industrialised nations like the US and Australia, which resulted in a new dialogue dedicated to "discussing possible arrangements" for loss and damage funding, without any concrete, or even indicative figures, offered for consideration[xxix].

However, a couple of financial pledges by Scotland and Belgium, and some philanthropies, helped cut through the political debate and put responsibility for loss and damage finance firmly on the table.

Dialogue surrounding deeper emissions targets (2030 and 2050) had more mixed results. By the end of the summit, 151 countries had submitted new nationally determined contributions (NDCs),

keeping the goal of limiting temperature rise to 1.5°C by the end of the century just about achievable.

Of these, 91 (representing 63.7% of global emissions) submitted new or updated NDCs with reduced total emissions compared to their previous NDCs. These included some of the largest contributors to world GHG emissions like China, US, Russia, Saudi Arabia, and some EU member states.

COP26: SIGNIFICANT RELATED ANNOUNCEMENTS AND AGREEMENTS

Major milestones were achieved in the form of pledges against fossil fuels, signed by a record number of countries. For example, nearly 200 nations agreed to phase-down unabated coal-fired power plants and most fossil fuel subsidies while pledging to submit more ambitious emissions' reduction targets a year from now. Onlookers have spelt this as the "end" of coal, with major international banks committing to effectively end all international public financing of new unabated coal power by the end of 2021.

The Powering Past Coal Alliance, launched at COP26 and co-chaired by the UK and Canada, has now more than 160 signatories (countries, sub-nationals and businesses) to phase-out coal globally. Twenty new countries, including Vietnam, Morocco, and Poland, have committed to building no new coal plants, matching similar announcements over the past year by Pakistan, Malaysia, and the Philippines, and building on the No New Coal Power Compact[xxxi] launched in September by Sri Lanka, Chile, Montenegro, and EU countries.

COP26: SIGNIFICANT RELATED ANNOUNCEMENTS AND AGREEMENTS

A new Global Coal to Clean Power Transition Statement saw countries commit to scaling up clean power and ensuring a just transition away from coal, as part of the Just Transition Declaration[xxxii]. These included Indonesia, Vietnam, Poland, South Africa, Egypt, Spain, Nepal, Singapore, Chile, Ukraine, China, Japan, and South Korea, among others. Bank and financial institutions also made landmark commitments at COP26 to end the funding of unabated coal, including major international lenders like HSBC, Fidelity International and Ethos[xxxiii].

In addition, a group of 31 countries including Italy, Canada, the US, and Denmark together with public finance institutions signed a UK-led joint statement committing to ending international public support for the unabated fossil fuel energy sector by the end-2022. Collectively, this could shift an estimated US$ 17.8 billion annually in public support out of fossil fuels and into the clean energy transition. 34 countries also signed the Glasgow Accord on Zero Emissions Vehicles, which unites governments, auto manufacturers, and fleet vehicle owners to phase out internal combustion engine (ICE) vehicles by 2035. The Accord aims to have zero emissions vehicles (ZEVs) displace up to 80% of the transport sector's CO_2 emissions, presenting a valuable pathway to keep global warming under 1.5°C[xxxiv].

7 countries, led by Costa Rica and Denmark, also formed a new alliance committed to ending oil and gas extraction/exploration and production, Beyond Oil and Gas Alliance. However, the alliance has not received backing from the world's largest producers, and also the UK, who noted that oil and gas would be necessary for the country as it worked to accelerate its renewable capacity, and that "no other significant oil and gas producing nation had gone as far as the UK in supporting the sector's gradual transition to a low carbon future."[xxxv]

109 countries signed up to the Global Methane Pledge, committing to slash methane emissions by 30% by 2030, which could eliminate over 0.2°C warming by 2050[xxxvi]. These included countries like Saudi Arabia and Brazil, although the absence of China and Russia, some of the world's largest methane emitters, limits potential emissions' savings. Over 140 countries signed the Deforestation Pledge (or the Glasgow Leaders' Declaration on Forests and Land

Use) to halt and reverse forest loss and land degradation by 2030, backed by US$ 19.2 billion in funding, including US$ 1.7 billion dedicated to support indigenous peoples. Companies and investors also pledged to reduce forest loss and support a transition to more sustainable land-use within their supply chains and financial portfolios, particularly those with a major global market share in commodities such as soy, palm oil, cocoa, and cattle[xxxvii].

The UK announced the Glasgow Breakthroughs, a series of commitments relating to different economic sectors, including power, road transport, steel, hydrogen, and agriculture[xxxviii]. These sectors will dramatically innovate and accelerate the use of clean technologies. Over 2000 companies have committed to develop science-based targets for reducing their emissions, with new guidance for setting credible net-zero targets.

Other notable pledges included the Solar Investment Action Agenda, launched by the World Resources Institute, the International Solar Alliance (ISA), and Bloomberg Philanthropies to scale up solar investment and reach the ISA's goal of mobilising US$ 1 trillion in solar investment by 2030[xxxix].

Over 450 financial firms, which control over US$ 130 trillion in assets, also committed to aligning their portfolios to net-zero by 2030, under the Glasgow Financial Alliance for Net Zero (GFANZ). These commitments can deliver an estimated US$ 100 trillion of finance needed to achieve net-zero over the next three decades. The Alliance will address some of the finance sector's biggest challenges, including defining net-zero pathways for carbon-intensive sectors, aligning on what constitutes a robust transition plan for corporates and financial institutions, and a sector-wide plan to mobilise capital needed for decarbonisation in emerging markets. Collectively, this work will accelerate the implementation of net-zero commitments and help to rapidly scale capital flows to support the net-zero transition. 90 of the founding companies of GFANZ are already delivering on setting short-term targets, including 29 asset owners that have committed to reducing portfolio emissions by 25-30% by 2025, as well as 43 asset managers that have published targets for 2030 or sooner[xl].

However, the voluntary nature of many of these pledges puts a question mark over their actual realisation.

COP26: FOLLOW-UP ISSUES FOR THE NEXT EDITIONS OF COP

Major issues leading up to COP27 in Sharm el-Sheikh and COP28 in the UAE include adaptation finance, loss and damage finance, carbon trading rules, and to a certain extent NDC timeframes. Table 5 summarises the key facets that need to be clarified at the next COP sessions to ensure the world remains on target to limit global warming below 1.5°C.

Table 5 Follow-up issues for the next editions of COP

Follow-up Issue	Facets to be Clarified / Established at COP27 and COP28
Adaptation Finance	• US$ 100 billion finance mobilised and provided by developed countries to developing countries by 2023; Adaptation Fund financing • Ad Hoc Work Programme methodology for establishing post-2025 climate finance goal • Transparency and reporting from developed countries on their finance progress • Concessional financial resources for developing countries through grants to avoid debt burdens
Loss & Damage Finance	• Progress on the Glasgow-Sharm el-Sheikh work programme for adaptation and loss and damage finance • Technical assistance from Santiago Network on Loss and Damage for developing countries • Translation of COP26 "dialogue" on loss and damage to actual, concrete action
Carbon Trading Rules	• Clarification of Paris Agreement Article 6.4 versus Article 6.2 on contributing portion of proceeds from carbon credits to adaptation finance • Stringent guidelines for old credits (under the Kyoto Protocol's CDM) to represent real emissions reductions
NDC Timeframes	• Aligning NDC targets' dates around Paris Agreement's 5-year cycles • Specification of common baseline for NDCs starting date • Target in 2022 for deeper emissions' reductions in 2030: aligning with 10-year indicative targets

IMPLICATIONS FOR LEADING OIL & GAS PRODUCERS

- For hydrocarbon giants, COP26 highlights the extent to which stakeholder pressure is increasing for a low-carbon path. More ambitious NDCs means added pressure on corporates to act, including commitments to reduce indirect Scope 3 emissions.
- Scope 3 emissions can ultimately only be reduced by selling less product – not an appealing prospect for oil- and gas-producing countries and companies, CCUS in combustion, conversion to low-carbon fuels combined with CCUS, or by fully offsetting end-use emissions.

- Offsetting carbon emissions could offer a lifeline to the oil and gas sector, now that COP26 has established an international framework for emissions trading, but significant work remains to be done to enable the operationalisation of Article 6. The cost of high-quality offset will likely rise substantially from the current $10-20 per tonne of CO_2, while low-quality offsets (typically renewable energy projects or weakly verified bio-offsets), available around $1-2 per tonne, will cease to be acceptable.
- Oil and gas producers can thrive through this accelerated transition by making equivalent returns from renewables, as they have made from oil and gas, commensurate with the lower risk. New alliances and pledges to escalate financing for clean energy technologies open up a novel opportunity for energy companies to build future low-carbon businesses in renewables, blue and green hydrogen, EV charging, biofuels, and related areas.
- The pledges and alliances formed at COP26, such as the Beyond Oil and Gas Alliance, and the Global Methane Pledge, could coupled with significant public, social, and stakeholder pressure could result in more rapid divestment from oil and gas assets.

CONCLUSION

Despite several remaining grey areas, COP26 offered some bright spots and a reasonable foundation to build collective global action to address the climate crisis. The summit also marked the transition of the historic COP21 Paris Agreement from a rule-making event to one with action and demonstrated that its mechanisms to strengthen ambition and finance are working, albeit imperfectly and not yet at the pace the world needs.

Significant milestones included the resolution of the Paris Agreement's Article 6 on carbon markets, the establishment of common timeframes for assessing and implementing NDCs, and financing for loss and damage being placed front and centre at the negotiating table. Notable pledges to end reliance on coal and fossil fuel financing, and to cut deforestation and methane leakage were also signed, although last-minute appeals by certain countries to tone-down final text language of the Glasgow Climate Pact meant that their impact would be limited.

Following editions of the COP conferences will have to settle outstanding issues left unresolved at COP26 (see Table 5). Vague language, lack of rules, and unclear methodologies surrounding critical issues will deter confidence in the international cooperation required. With less than a year left in the lead-up to COP27 in Egypt, world leaders have to act swiftly and decisively to keep the Paris Agreement's 1.5°C target alive before time runs out.

APPENDIX

i. UKCOP26, https://ukcop26.org/wp-content/uploads/2021/07/COP26-Explained.pdf; See also Al-Attiyah Foundation Sustainability Digest Issue 35: November 2021
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iii. Although net-zero target dates of major emitters' like China, Russia, and Saudi Arabia (all post-2050) puts a question mark over whether net-zero emissions can be achieved by 2050
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x. Matt McGrath, "Climate change: UN emissions gap report a 'thundering wake-up call'", October 26, 2021, https://www.bbc.com/news/science-environment-59049770
xi. Greenpeace International, "A message to world leaders at COP26: Stop Failing Us", November 2021, https://www.youtube.com/watch?v=LuGr-OBoe4A
xii. The Love Flower Alliance is a new environmentalist initiative launched by the leaders of various NGOs from Turkey at COP26 to sustain a "liveable ecosystem" to meet environmental goals through humanitarian concepts of respect, empathy, human rights, welfare, conscious consumption and tolerance, among others.
xiii. The Article 6.4 Supervisory Board has replaced the Clean Development Mechanism Executive Board
xiv. China aims to increase the share of non-fossil fuels in primary energy consumption to around 25%, increase the forest stock volume by 6 billion m3 from the 2005 level, and bring its total installed capacity of wind and solar power to over 1.2 billion kW
xv. https://climateactiontracker.org/countries/china/
xvi. The Santiago Network was established at COP25 to catalyse the technical assistance of relevant organizations, bodies, networks and experts, for the implementation of relevant approaches for averting, minimize and addressing L&D at the

local, national and regional level, in developing countries that are particularly vulnerable to the impacts of climate change

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xviii. Under the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)

xix. Nature-based carbon offsets can be generated through schemes such as planting trees, agricultural projects or protecting forests that would otherwise be destroyed

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xxxi. The No New Coal Power Compact aims to keep the Paris Climate Accord's 1.5°C global warming target 'within reach' and achieve the seventh Sustainable Development Goal of providing affordable and clean energy by encouraging other countries to halt their construction of coal-fired power plants.

xxxii. The Just Transition Declaration, agreed at COP26, recognises the need to ensure that no one is left behind in the transition to net zero economies – particularly those working in sectors, cities and regions reliant on carbon-intensive industries and production.

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Governments in Europe and the USA want the recovery from the Covid-19 pandemic to be the springboard for environmentally and socially progressive policies. The EU has proposed the 'European Green Deal' and 'Fit for 55', while the administration of President Biden has put forward a 'Green New Deal' and the strategy of 'Build Back Better'.

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October – 2021

Strategies for Sustainable Production and Consumption of Natural Resources

An increasing number of countries have committed to reach net-zero carbon emissions, usually between 2050-70. Any remaining emissions of carbon dioxide or other greenhouse gases would be cancelled out by increased forestry or other methods to remove atmospheric CO_2.

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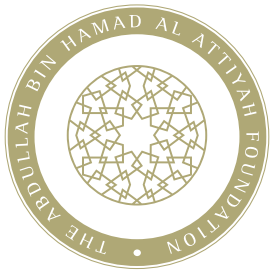

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