DAVID HUNTER, JAMES SALZMAN & DURWOOD ZAELKE

GLASGOW CLIMATE SUMMIT: COP26

SUPPLEMENT TO THE 6TH EDITION[1]

INTERNATIONAL ENVIRONMENTAL LAW AND POLICY (2021)

INTRODUCTION

The November 2021 Glasgow Climate Summit hosted almost 200 nations at one of the largest and most closely followed climate meetings that the world has ever seen. A march on the Saturday halfway through the two-week negotiations drew over 100,000 people onto the streets of Glasgow to call for real progress. Whether you think COP26 was successful depended heavily on who and where you were in the process.

If you were part of what the United Nations General Secretary Antonio Guterres dubbed the "Climate Activist Army," shouting "blah, blah, blah" with Greta Thunberg outside the pavilion, the Summit was undoubtedly disappointing—perhaps even a betrayal by negotiators. But if you were a longtime participant in the formal negotiations inside the pavilion, you were likely heartened by a meeting that reflected a new sense of urgency and a new architecture for climate policy, as well as other tangible progress. No one believes progress was sufficient. As the UK president of COP26, Alok Sharma, observed after gaveling the meeting to a close, the negotiations kept the goal of limiting warming to 1.5 degrees Celsius alive, "but its pulse is weak." And for the many countries already being hammered by extreme weather at today's 1.2C of warming, 1.5C is not sufficient.

Unlike previous meetings, Glasgow was propelled by the harsh recognition that we are already suffering significant (and sometimes devastating) impacts from climate change. This urgency was reflected not only in stronger rhetoric, but also in stronger commitments and stronger negotiating text than many did not think possible even a year before. Indeed, the Trump Administration had formally withdrawn the United States from the Paris Agreement just one day before the 2020 election. Meanwhile, the ongoing coronavirus pandemic virtually shut down multilateral diplomacy in 2020, presenting new and unprecedented challenges to the negotiators. *See* P. Chasek, *Is It the End of the COP as We Know It?: An Analysis of the First Year of Virtual Meetings in the UN Environment and Sustainable Development Arena*, INTERNATIONAL NEGOTIATION (2021).

One of President Biden's first actions as the new U.S. president was to rejoin the Paris Agreement. In the run-up to COP26 President Biden raised the stakes, calling climate change "the fight of our lives." The US delegation included the secretaries of State, Transportation, Treasury, Energy, Interior, and Agriculture, the administrators of the EPA, NOAA, and USAID, and the directors of the National Economic Council and White House Office of Science and Technology. Leading the delegation was Climate Envoy and former Secretary of State John Kerry,

[1] ©David Hunter, James Salzman, Durwood Zaelke. Permission to use for classroom instruction and noncommercial purposes with attribution.

supported by National Climate Advisor Gina McCarthy and dozens of other advisors and staff members. This high-level team signaled that the United States was re-engaging and willing to provide leadership after four years of being absent.

UK Prime Minster Boris Johnson claimed the Summit would be about "coal, cars, cash and trees." To understand the Glasgow Summit, one can think of the COP in six parts.

- Finishing Paris
- NDC Commitments
- The Glasgow Climate Pact
- Working Toward a Just Transition
- Sectoral Commitments Outside NDCs
- Non-State Commitments

I. FINISHING PARIS

Finalizing the rules for the Paris Agreement's Enhanced Transparency Framework was a high priority for many countries in order to ensure credible monitoring, reporting, and verification (MRV) of commitments. MRV was critical for implementing the nationally determined contributions (NDCs) because those commitments are famously "non-binding"—at least in the sense that one Party cannot formally enforce them against another Party. Lacking any provision for formal sanctions, the primary enforcement mechanism for the NDCs is "naming and shaming." This political pressure, in turn, depends on transparency—that is, the way States are able to monitor, report, and verify one another's progress or lack thereof.

To operationalize the transparency framework, the Parties agreed to a set of harmonized methodologies for comparable reporting across the wide range of national commitments. Until now, developing countries have been under no obligation to report on their emissions or commitments, and many have yet to do so. As of 2019, only 45 Parties had submitted emissions reports. Now that the Enhanced Transparency Framework rules are in place, all Parties are expected to submit annual reports beginning in 2024.

Parties had begun hammering out the rules and procedures for implementing the Paris Agreement in Katowice in 2018, but finalizing the so-called "Paris Rulebook" required resolving contentious issues to the future use of carbon credits, referred to as "internationally transferred mitigation outcomes" (ITMOs) in the Paris Agreement. Article 6 of the Agreement contemplates trading carbon credits backed by projects that either reduce emissions at their source or remove GHGs from the atmosphere. Like the trading mechanisms under the Kyoto Protocol, the Paris Agreement allows transfers directly between governments or between non-state actors attempting to meet their national commitments. To prevent "double counting" in international transfers, the Article 6 Rulebook now requires a "corresponding adjustment" in each country's GHG inventory. To make a corresponding adjustment, the source country must authorize the transfer of the carbon credit and adjust its national GHG inventory accordingly. The destination country must then adjust its own GHG inventory.

Despite high hopes for carbon-trading under the Kyoto Protocol, its Clean Development Mechanism (CDM) was widely perceived as a failure in terms of transparency, accounting, and environmental, social and governance safeguards. Critics alleged that most CDM credits (known as certified emissions reductions (CERs)) were generated by projects that would have happened anyway, and that the system had created perverse incentives that in some cases increased

emissions. *See* IELP Textbook, at 653-56 (describing CDM and other trading mechanisms under the Kyoto Protocol); see also Carbon Market Watch, *The Clean Development Mechanism: Local Impacts of a Global System* (Oct. 2018).

In contrast, the Glasgow Pact incorporates new measures to increase the "transparency, accuracy, completeness, comparability, and consistency" of carbon measurement. Under Article 6.4, the Parties had to decide whether and how to give credit for unused Kyoto CERs under the Paris Agreement. Parties compromised by recognizing only CERs earned after 2013, and allowing them to be applied only to a Party's first NDC. Though criticized by some in Glasgow as "zombie credits," the equivalent of Russian "hot air" under the Kyoto Protocol where Russia could trade credits gained because of the collapse of the post-Soviet economy immediately after the 1990 baseline, the compromise effectively limits the scale and timing of the use of credit for emissions already earned.

Despite Glasgow's progress on issues of transparency and accountability, however, the Pact does little to address environmental, social and governance issues, and more safeguards may be needed to avoid repeating some of the mistakes of the CDM. The COP has tasked the newly established Supervisory Body with recommending additional measures to avoid "negative environmental and social impacts." *See* Charles E. Di Leva & Scott Vaughan, *The Paris Agreement's New Article 6 Rules*, INT'L. INST. FOR SUSTAIN. DEVELOP. (Dec. 13, 2021).

The Parties also took important steps to enhance and sustain funding for the Adaptation Fund. The Parties agreed that a 5% "share of proceeds" on the sale of ITMOs through the multilateral mechanism would go to the Adaptation Fund, more than twice the 2% fee applied to projects under the CDM. The 5% share of proceeds does not apply to sales outside of the multilateral mechanism, for example country-to-country sales made under bilateral agreements. In addition, 2% of the ITMOs traded through the multilateral mechanism are retired as an extra measure to enhance overall emission reductions (presumably in recognition that there will be some leakage from trading carbon credits).

More generally, COP26 may also reflect an evolution (and a vindication) of the Paris Agreement's more flexible policy approach—an evolution which supported significantly higher climate ambition than was expected and certainly more than would have occurred if COP26 had been hosted in 2020, as originally intended. Four shifts in focus reflect this new architecture; first, the near-unanimous recognition of the impending climate emergency and the need to limit warming to 1.5 degrees Celsius; second, the recognition "that 2030 is the new 2050," as French President Emmanuel Macron said, and that major emission cuts have to be made in this decade (note also that the U.S.-China Joint Glasgow Declaration marked the first time that the United States and China acknowledged the urgency of climate action in this "critical decade" of the 2020s); third, the recognition that cutting non-CO_2 emissions (particularly methane) is essential for slowing warming in the next couple of decades and that cuts to CO_2 alone cannot address the near-term emergency; and fourth, the addition of sector-specific approaches in recognition that it is often more efficient and effective to address individual sectors of the economy in reaching climate solutions. *See generally* D. Zaelke & G. Dreyfus, *The good, the bad and the ugly of climate change in 2021 — but it's not too late to act*, THE HILL (Dec. 29, 2021); D. Zaelke, R. Picolotti, & G. Dreyfus, *Glasgow climate summit: A glass half full*, THE HILL (Nov. 14, 2021); P. Bledsoe, D. Zaelke, & G. Dreyfus, *How to Limit Temperature Increases in the Very Near Term*, THE NEW YORK TIMES (Nov. 8, 2021); *and* D. Zaelke, *A new UN climate architecture is emerging focused on need for speed*, THE HILL (Sept. 21, 2021).

II. NDC COMMITMENTS

The Paris Agreement was designed to steadily build momentum, fueling increased climate ambition with each set of revised NDCs and stocktake, much as the Montreal Protocol has accelerated phase-outs and coverage of ozone depleting substances over time. In all, 151 countries submitted updated NDCs. Likely responding to global media pressure, Australia and China submitted NDCs at the last minute. A popular goal was achieving "net zero" GHG emissions at the end of some decade in the future. The European Union, the United States, and Australia, for example, set a net-zero target for 2050; China set 2060, and India set 2070. These pledges were applauded by some, but critiqued by others as kicking the can down the road—particularly because the leaders declaring the goals would likely be retired or deceased by the time the promises come due. Adding to concern over the net-zero targets was that many countries failed to propose any intermediate goals that might ensure progress and give confidence that the 2050 goals would be met. Notable exceptions included: India's commitment to obtain 50% of their electricity from renewables by 2030; the United States' commitment to reduce emissions by 50 percent from 2005 levels by 2030; and the European Union's commitment to cut emissions by 55% from 1990 levels by 2030.

Most observers did not believe the formal commitments were sufficient. An analysis by Climate Tracker of the revised NDCs supported this view, concluding that warming would be limited to 2.7 degrees if all the NDCs were fulfilled, well above the target of 1.5 degrees even with the generous assumption of full compliance.

The size of the ambition gap led virtually every Party at the COP to recognize the urgency of the next decade and highlighted the inadequacy of the short-term commitments for 2030. Long-term net-zero goals are only achievable if GHG emissions are cut significantly—by an estimated 45% from 2010 levels by 2030. Thus the Parties noted *"with serious concern"* that

> 25. the aggregate greenhouse gas emission level, taking into account implementation of all submitted nationally determined contributions, is estimated to be 13.7 per cent above the 2010 level in 2030.

UNFCCC, Glasgow Climate Pact, Decision -/CMA.3 (Advanced unedited version), para. 15 (Nov. 13 2021) (hereinafter Glasgow Climate Pact).[2] This gap could not be ignored, and the Parties agreed to "review and strengthen their 2030 targets in their [NDCs] as necessary to align with the Paris Agreement temperature goal by the end of 2022." Glasgow Climate Pact. para 29. The new 2030 commitments will be reinforced through an "annual high-level ministerial round table" beginning at COP27 in 2022. Glasgow Climate Pact, para. 31; *see also* IELP Textbook, at 665-72.

III. THE GLASGOW CLIMATE PACT

The Glasgow Parties failed to formally adopt the 1.5°C target, choosing instead to *reaffirm* the Paris goal of holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit it to 1.5 °C. Glasgow Climate Pact, para. 20. But the Parties' actions and pledges otherwise indicated greater urgency action in the next decade

[2] There are three official versions of the Glasgow Climate Pact: the "Cover Decision" of the UNFCCC Conference of the Parties (Doc. No. -/CP26); the Decision of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (-/CMP.16); and the Decision of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (Doc. No. -/CMA.3). Because it includes important parts of the Pact not reflected in the others, all references here are to the Decision -/CMA.3, decisions made under the Paris Agreement.

and expanded ambition not only for reducing carbon dioxide but also methane and other gases. The Parties:

> 21. *Recognize[d]* that the impacts of climate change will be much lower at the temperature increase of 1.5 °C compared with 2 °C and *resolve[d]* to pursue efforts to limit the temperature increase to 1.5 °C;
>
> 22. *Recognize[d]* that limiting global warming to 1.5 °C requires rapid, deep and sustained reductions in global greenhouse gas emissions, including reducing global carbon dioxide emissions by 45 per cent by 2030 relative to the 2010 level and to net zero around midcentury, as well as deep reductions in other greenhouse gases;
>
> 23. *Also recognize[d]* that this requires accelerated action in this critical decade…;
>
> 37. *Invite[d]* Parties to consider further actions to reduce by 2030 non-carbon dioxide greenhouse gas emissions, including methane… .

Glasgow Climate Pact, *supra*.

Fossil Fuel Use. The long-term goals now for the first time also explicitly include curtailing fossil fuel use. The Parties agreed to "accelerate efforts towards the phasedown of unabated coal power [i.e., coal combustion without carbon capture and storage] and the phase-out of inefficient fossil fuel subsidies…." Glasgow Climate Pact, para. 36. The original text had called for a "phase out" of unabated coal combustion, but a last-minute objection by India (supported by China) watered down the phrase to "phasedown". Nonetheless, this is the first time a climate agreement specifically identified the need to reduce the use of coal and other fossil fuels (which according to Greta Thunberg "just makes you wonder what they've been talking about all these years"). These commitments, along with the consensus about net-zero emissions, send an additional signal to energy markets that the future for fossil fuels will be increasingly constrained by climate policy.

Financing. As in most international environmental negotiations, financing was a central and controversial issue. Developing countries came to Glasgow upset that the North's previous commitment to provide $100 billion annually had not been met. The OECD calculated that $79.8 billion had been provided in 2019, and much of this in the form of loans rather than grants. Countries also voiced concern that the money had not been equally distributed between mitigation and adaptation as had been promised, and that a greater proportion should come in the form of grants. Island states in particular denounced the failure to prioritize the provision of adequate adaptation funding. Indeed, Tuvalu's environmental minister addressed the conference while standing in one foot of water as he highlighted the urgency of sea level rise and admonished the North for its failure to meet its responsibilities.

In the end, the Parties "*noted with deep regret* that the goal of developed country Parties to mobilize jointly USD 100 billion per year by 2020 … has not yet been met" (Para. 26), and "*urge[d]* developed country Parties to fully deliver on the USD 100 billion goal urgently and through to 2025. Glasgow Climate Pact, para. 44. The Parties also emphasized "the need to mobilize climate finance from all sources to reach the level needed to achieve the goals of the Paris Agreement, including significantly increasing support for developing country Parties, beyond USD 100 billion per year." Glasgow Climate Pact, para. 43; *see also* IELP Textbook, at 684-89.

Part of the financial discussions concerned the share that was dedicated to adaptation. Island states and other vulnerable countries focused on the failed commitment that approximately half of the $100 billion promised in the Paris Agreement would go to adaptation. Adaptation is important to these countries, not only because they are facing the most immediate and severe impacts of climate change, but also because they typically relatively minor emitters of GHGs. These parties benefit little, if at all, from financing that goes to mitigation. This is not just

about ensuring that there is "something for everyone" in the climate deal but reflects the moral argument for helping the most vulnerable countries who did not contribute to the problem. Though developing countries did succeed in winning increased financial support for adaptation, their demands for compensation in the name of "climate justice" were largely rejected. *See* M. Jacobs, *Reflections on COP26: International Diplomacy, Global Justice and the Greening of Capitalism*, POLITICAL QUARTERLY (2021); *see also* IELP Textbook, at 634-39, 680-84.

Among the most vulnerable countries, the highest priority was to make progress on establishing a fund or "facility" to provide compensation for "loss and damage." Presumably hoping to set a tone of both action and cooperation, host-country Scotland surprised many observers on the first day by pledging a symbolic $1 million for such a fund. Despite Scotland's initiative, the proposal for a "Glasgow Facility" to distribute loss and damage funds was opposed by developed countries and dropped from the text. Instead, the countries agreed to start a "Glasgow Dialogue between Parties, relevant organizations, and stakeholders to discuss the arrangements for the funding of activities to avert, minimize and address loss and damage associated with the adverse impacts of climate change, to take place in the first sessional period of each year of the Subsidiary Body for Implementation, concluding at its sixtieth session (June 2024)." Glasgow Climate Pact, para. 73. Gearing up for the Dialogues, vulnerable island states have dubbed the 2022 COP "the Loss and Damage COP". *See also* IELP Textbook, at 689-94.

IV. WORKING TOWARD A 'JUST TRANSITION'

Although many Parties remained wary of discussing climate justice, the concept of a "just transition" received broad support in Glasgow. Six years earlier, the preamble to the Paris Agreement had described a "just transition of the workforce and the creation of decent work and quality jobs." The Glasgow Pact employs the term twice, expanding its context to include sustainable development, technology-transfer, poverty-alleviation, and other activities. The Pact:

> 20. *Call[ed] upon* Parties to accelerate the development, deployment and dissemination of technologies, and the adoption of policies, to transition towards low-emission energy systems, including by rapidly scaling up the deployment of clean power generation and energy efficiency measures, including accelerating efforts towards the phasedown of unabated coal power and phase-out of inefficient fossil fuel subsidies, while providing targeted support to the poorest and most vulnerable in line with national circumstances and recognizing the need for support towards a just transition; [and]
>
> …
>
> 52. *Recognize[d]* the need to ensure just transitions that promote sustainable development and eradication of poverty, and the creation of decent work and quality jobs, including through making financial flows consistent with a pathway towards low greenhouse gas emission and climate-resilient development, including through deployment and transfer of technology, and provision of support to developing country Parties….

Significant specific projects were also announced in support of a just transition. In a major announcement, South Africa, France, Germany, the United States, United Kingdom, and European Union launched an $8.5-billion Just Energy Transition Partnership to support decarbonization in South Africa. *See* Press Release, *France, Germany, UK, US and EU launch ground-breaking International Just Energy Transition Partnership with South Africa*, European Commission (Nov. 2, 2021). South Africa will also benefit, along with India, Indonesia and the

Philippines, from a $2.5 billion coal-transition investment vehicle designed by the Climate Investment Funds to support coal workers and their communities. Mafalda Duarte, *Dispatches from COP26: Just Transition or Just Talk?*, Climate Investment Funds (Dec. 9, 2021).

The International Energy Agency's Global Commission on People-Centred Clean Energy Transitions reported befpre COP26 on the need for inclusiveness to avoid economically "stranding" workers and communities in the rush to renewable energy. International Energy Agency, RECOMMENDATIONS OF THE GLOBAL COMMISSION ON PEOPLE-CENTRED CLEAN ENERGY TRANSITIONS (Oct. 27, 2021). Just-transition principles were also highlighted at the Just Zero conference organized by the London School of Economics in the week before the COP.

The Multilateral Development Banks also recommitted to the concept of a just transition. In 2019, the banks had announced their intention to develop a just-transition strategy. In Glasgow, they published the results: a set of five Just Transition High-Level Principles that affirmed the banks' support of the Paris Agreement and Sustainable Development Goals, the need for equity and sustainable livelihoods, the need to mitigate decarbonization's negative socio-economic effects, the need for "'just' processes, as well as outcomes," and the need for "engagement and ownership" at all levels of development. The banks also suggested using their influence to incentivize others—such as governments and businesses—to pursue more inclusive policies. Multilateral Development Banks, *MDB Just Transition High Level Principles* (Oct. 29., 2021).

Meanwhile, a report by the World Benchmarking Alliance suggested that such influence was sorely needed. Its 2021 Just Transition Assessment, a survey of 180 oil and gas, electric, and automobile companies found that they had failed to support their workers, left workers out of critical decision-making, and largely ignored the risk of a workforce stranded by decarbonization. World Benchmarking Alliance, JUST TRANSITION ASSESSMENT 2021 (Nov. 1, 2021).

Though the details of the "transition" itself remain subject to contention, the plethora of agreements, announcements, and reports unveiled at COP26 suggest a burgeoning consensus that decarbonization must account for the welfare of fossil-fuel dependent communities and workers. *See* N. Robins & S. Muller, *Lessons from COP26 for financing the just transition*, London School of Economics and Political Science (20 Dec. 2021).

V. GOVERNMENT COMMITMENTS OUTSIDE THE PARIS FRAMEWORK

The governments were also active in making multilateral pledges that were not withn the Paris Framework of NDCs. These pledges focused actions on discrete pieces of the climate puzzle, including methane, forests, and certain industrial sectors.

In an important shift from previous climate COPs, there was significant progress made to address climate change in pieces with a focus on reducing emissions of gases beyond carbon dioxide and from specific economic sectors. These included:

Methane. During the first week of the CoP, Parties formally launched the *Global Methane Pledge* to cut methane emissions by *at least* 30% below 2020 levels by 2030. The Pledge had previously been announced by the United States and European Union at the Major Economies Forum on Energy and Climate in September. More than 100 countries joined the Pledge at the COP, representing 70% of the global economy and nearly half of anthropogenic methane emissions. *See* Press Release, *Joint US-EU Press Release on the Global Methane Pledge*, White House (Sept. 18, 2021); Press Release, *Launch by United States, the European Union, and Partners of the Global Methane Pledge to Keep 1.5C Within Reach*, European Commission (Nov. 2, 2021). A $350 million fund to support the methane reduction efforts in the Global Methane Pledge was also announced by private philanthropic organizations.

Forests. The *Glasgow Leaders' Declaration on Forests and Land Use*, also announced the first week of Glasgow, agreed to "halt and reverse forest loss and land degradation by 2030 while delivering sustainable development and promoting an inclusive rural transformation." As of December 2021, 141 countries covering nearly 91% of the world's forests (more than 14,000,000 square miles) had endorsed the Declaration, including Brazil, China, Russia, and the United States. The signatories supported the Declaration with pledges of $12 billion for forest-related climate finance between 2021 and 2025. The *Glasgow Global Forest Finance Pledge.* Nonetheless, the Forest Declaration was met with some cynicism, given that the parties had made similar promises in both Copenhagen and Paris and little progress has been made on the ground. In particular, Brazil was criticized for its hypocrisy amid reports of Amazon deforestation reaching its highest rates since 2006. *See* D. Biller, *Brazil's Amazon deforestation surges to worst in 15 years*, AP NEWS (Nov. 18, 2021); M. Andreoni, *Once a Climate Leader, Brazil Falls Short in Glasgow*, THE N. Y. TIMES (Nov. 2, 2021). Perhaps intended this time would be different than past promises on forests, the Parties also outlined a global roadmap to make 75% of forest commodity supply chains sustainable and announced two public-private initatives including a promise of $1.5 billion to enhance forest stewardship in the Congo basin and a commitment to respect indigenous claims to land tenure supported by $1.7 billion in pledges. *See* IELP Textbook, at 1184-88 (discussing forests and climate change).

Shipping. The United States and 13 other countries agreed to emission-cutting goals for shipping starting in 2023, with the target of achieving net-zero emissions by 2050. To facilitate the shipping industry's transition to net zero emissions, the Parties also announced a goal of creating by 2025 six "green shipping corridors"—zero emission maritime routes between two or more ports. *Clydebank Declaration on Green Shipping Corridors* (November 11, 2021).

Fossil Fuels Financing. More than 30 countries and financial institutions committed to halting all financing for fossil fuel development overseas and diverting the funds to green energy

Bilateral Agreements. The *U.S.-China Joint Glasgow Declaration on Enhancing Climate Action in the 2020s* was announced in the first week of COP26. This agreement brings the two largest economies and climate emitters to cooperate on "accelerated actions in the critical decade of the 2020s … to avoid catastrophic impacts." This cooperation includes efforts to reduce methane emissions, halt illegal deforestation, and establish a Working Group on Enhancing Climate Action in the 2020s. China also agreed to develop a "comprehensive and ambitious" National Action Plan to reduce methane emissions in the 2020s. The United States and European Union had announced previously at the G20 that they were launching negotiations to reduce carbon emissions from steel and aluminum, which could serve as a model for cement and other sectors.

VI. NON-STATE COMMITMENTS

Not all the significant agreements were negotiated by diplomats. COP26 featured a massive presence of non-state actors, ranging from environmental and human rights groups to industry associations and company executives. They used the global media attention to announce climate-focused initiatives such as public-private partnerships and commitments by various industries. In the *Glasgow Financial Agreement for Net-Zero,* for example, banks and investment funds holding more than $130 trillion agreed to go carbon-neutral by 2050. In an announcement that attracted significant press attention, six large automakers (Ford, GM, Volkswagen, Mercedes-Benz, Jaguar, and Land Rover) pledged to transition to 100% zero-emission passenger cars and vans no later than 2035 in leading markets, and by 2040 elsewhere. This pledge was supported by over 30 nations, including the United Kingdom, Canada, India, and Poland. The

large auto-manufacturing countries of Japan, the United States, Germany, and China did not join the pledge, but the states of New York, Washington, and California did. These states have the potential to shape the entire US automobile market. Despite its potential to reduce emissions, the auto pledge was seen by some as "underwhelming," and drew broad criticism for focusing on electric vehicles and leaving out more sustainable modes of transport like bicicles and public transport. *See* I. Gerretsen, *As Cop26 car pledge underwhelms, delegates ask: where are the bikes?*, CLIMATE HOME NEWS (Nov. 10, 2021).

QUESTIONS & DISCUSSION

1. Double counting has been a major concern ever since the Parties began to embrace carbon-trading under the original UNFCCC, but several factors make it particularly important to the Paris Agreement approach. Double-counting threatens our ability to judge and compare the ambition of countries and their implementation of their NDCs. Second, the future climate regime under the Paris Agreement not feature one global trading market operating under a global cap with one set of trading rules. Instead, multiple, separate national and subnational trading markets will operate with potentially different rules for ensuring additionality and curtailing leakage. Double-counting will be harder to avoid. The problem is even greater with regard to voluntary commitments. Not only will the implementation of the voluntary commitments of private-sector players be included in meeting the NDCs (thus, not likely to provide additionality over what is promised by the NDCs), but also multiple commitments in the same supply chain or between lenders and borrowers will mean that their commitments overlap. For example, two banks with commitments to net-zero emissions from their investments co-finance a solar project for a utility that has also committed to 50% reductions in emissions and 50% new renewables. Does everyone get to take credit for the whole carbon savings from the project? Glasgow addressed double-counting of carbon credits bought and sold through the multilateral mechanism endorsed in paragraph 6.4 of the Agreement (the successor to the CDM), but double-counting created through voluntary private sector commitments remain outside the system. How would you address the double-counting issue in the private sector? Do we need to address it at all?

2. The Glasgow Financial Agreement for Net-Zero initiative includes an impressive collection of banks and investment funds. It sets out "17 Investment Opportunity Roadmaps," including Wind Power in Europe and North America, Off-Grid Power in Africa, and Alternative Proteins in Asia Pacific. The initiative's members and approaches are set out at the website, https://www.gfanzero.com. Spend some time surfing the site. If you were hired as an outside assessor, how would you measure success and safeguard against greenwashing?

3. Australia came under international criticism for not providing an updated NDC for COP 26. Likely in response, the country submitted an NDC that pledged an economy-wide target of net zero emissions by 2050 covering all sectors and gases included in Australia's national inventory. Just days after returning from Glasgow, however, the Prime Minister, Scott Morrison, stated that the country's coal industry (a major exporter) will be operating "decades to come." Emphasizing his point, he declared, "I make no apologies for Australia's standing up for our national interests, whether they be our security interests or economic interests. We have a balanced plan to achieve net zero by 2050, but we're not going to make rural and regional Australians pay for that." Maite Fernandez Simon, *Australian Prime Minister Scott Morrison doubles down on coal after COP26,* WASHINGTON POST, Nov. 15, 2021. Should the UNFCC secretariat ask Australia to explain how it will achieve net zero by 2050 with a fully operating coal industry? More generally, what strategies can address national leaders who make ambitious pledges on the international stage at COPs but seem to backtrack or even reverse in statements back home?

4. If it wasn't clear that technology innovation, development and distribution would be critical to solving the climate crisis, the Glasgow Summit left no doubt. Many of the government and non-government initiatives depended explicitly on employing new technology—the commitments to electric vehicles, net-neutral shipping, and the investment pathways referenced in note 2 above are just several examples. The COP also showcased the Tech for Our Planet program, which supported tech startups to develop technology aimed at reaching net zero targets. The startups featured at the COP covered a wide range of issues and included AgriSound (developing a digital insect database), BrainBox AI (optimizing heating and ventilation systems), Commonplace (enabling community feedback in local policy making), and Hummingbird Technologies (analyzing farm management practices to help move towards sustainable agriculture). How important do you think it is for the climate conferences to showcase innovative technologies? What advantage are there in facilitataing the technology-policy interface?

5. COP26 revealed a significant 'generation gap' in the approach to climate change. Youth voices were some of the loudest and most critical at COP26, demanding better action from world leaders and chanting "No more blah, blah, blah." Youth activists felt betrayed by the summit outcomes, in particular the final draft text, which did not meet the demands of the youth movement that called for aggressive cuts to carbon emissions. Many climate policy veterans, on the other hand, considered the summit successful, citing the Global Methane Pledge and other strong global commitments that showed greater urgency and a potential shift in the governments' approach to addressing climate change. *See* D. Zaelke, R. Picolotti, & G. Dreyfus, *Glasgow climate summit: A glass half full*, THE HILL (Nov. 14, 2021). The perspectives are fairly divergent, but both are important for pushing future summits toward faster and more aggressive action. Do you understand both perpsectives? Which perspective do you share?

6. Less than a month before the Glasgow Summit, the UN Human Rights Council voted to recognize "the right to a safe, clean, healthy, and sustaining environment." *See* A/HRC/48/L.23/Rev.1 (Oct. 5, 2021); IELP Textbook, at 1326-1332 (discussing a human right to a clean environment). On the same day, the Council also announced the establishment of a special rapporteur "on the promotion and protection of human rights in the context of climate change." A/HRC/48/L.27 (as orally revised). Among other things, the Special Rapporteur's mandate includes:

> (a) To study and identify how the adverse effects of climate change, including sudden and slow onset disasters, affect the full and effective enjoyment of human rights and make recommendations on how to address and prevent these adverse effects, in particular ways to strengthen the integration of human rights concerns into policymaking, legislation and plans addressing climate change;
>
> (b) To identify existing challenges, including financial challenges, in States' efforts to promote and protect human rights while addressing the adverse effects of climate change, and make recommendations regarding respect for, and promotion of, human rights, including in the context of the design and implementation of mitigation and adaptation policies, practices, investments and other projects;
>
> (c) To synthesize knowledge, including indigenous and local traditional knowledge, and identify good practices, strategies and policies that address how human rights are integrated into climate change policies and how these efforts contribute to the promotion and protection of all human rights and poverty alleviation;

> (d) To promote and exchange views on lessons learned and best practices related to the adoption of human rights-based, gender-responsive, age-sensitive, disability-inclusive and risk-informed approaches to climate change adaptation and mitigation policies, with a view to contributing to the achievement of the Paris Agreement and the United Nations Framework Convention on Climate Change …;

The momentum from the UN Human Rights Council did not carry over to the Glasgow Climate Summit, and human rights advocates were generally disappointed with the outcome. The Glasgow Pact mentioned human rights only twice. The preamble repeated language from the Paris Agreement that "Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights … ." The only other reference was in the context of the Action for Climate Empowerment which aims at expanding public participation and access to information as reflected in Article 12 of the Paris Agreement. The Parties were urged to "swiftly implement the Glasgow work programme on Action for Climate Empowerment, respecting, promoting and considering their respective obligations on human rights, as well as gender equality and empowerment of women." Global Climate Pact, at para. 91.

Human rights advocates were understandably disappointed that the treatment of human rights was limited to process rights. What difference do you think it will make when (or has it made since) the Special Rapporteur on Climate Change has been in place? What recommendations would you suggest regarding the Special Rapporteur's approach to the climate regime and the annual Conferences of the Parties? What priorities generally would you suggest for the Special Rapporteur?

7. Bitterly disappointed in the negotiations at Glasgow, particularly the slow progress on loss and damage, several vulnerable island states announced they were going to take a more litigious approach in the future. The implicit goal is to switch the conversation from one of voluntary contributions to the victims of climate change and fossil fuel use to a one of obligations under law for polluters to compensate those they harm. Tuvalu, and Antigua and Barbuda took the additional step of forming a new Commission on Climate Change and International Law authorized among other things to seek an Advisory Opinion under the Law of the Sea Convention. These announcements help set the stage for COP27—what the island states have dubbed the "Loss and Damage" summit. Track the progress of the vulnerable island states, both in their efforts at negotiation and in their legal strategies to gain compensation for the damages they suffer from climate change. Is either approach getting closer to providing climate justice for the island states"? What recommendations would you give if you were advising the island states?

8. Revisit the problem exercise at page 721 of the textbook regarding the future of climate policy. In light of developments at Glasgow (and any subsequent COPs), which options are more likely? Less likely? Are there new developments

***

ADDITIONAL RESOURCES

List of COP26 outcomes:

- UNFCCC COP 26 Outcomes
- UN Climate Change Conference UK 2021, *COP26 World Leaders Summit – Presidency Summary* (Nov. 3, 2021)

COP26 summaries:

1. International Institute for Sustainable Development, *Glasgow Climate Conference: 13 October – 13 November 2021*, 793 EARTH NEGOTIATIONS BULLETIN 12 (Nov. 16, 2021)
2. L. Maizland, *COP26: Here's What Countries Pledged*, COUNCIL ON FOREIGN RELATIONS (Nov. 15, 2021)
3. S. Evans, *et al.*, *COP26: Key outcomes agreed at the UN climate talks in Glasgow*, CARBONBRIEF (Nov. 15, 2021)
4. Center for Climate and Energy Solutions, *Outcomes of the UN Climate Change Conference in Glasgow* (Nov. 2021)
5. The Law Society of England and Wales, *Reflecting on COP26: what were the key outcomes?* (Nov. 19, 2021)
6. Baker McKenzie, CLIENT ALERT: OUTCOMES FROM GLASGOW COP 26 (Nov. 2021)
7. H. Mountford, *et al.*, *COP26: Key Outcomes From the UN Climate Talks in Glasgow*, WORLD RESOURCES INSTITUTE (Nov. 17, 2021)
8. E. Grinsby, *et al.*, *The Results of COP26*, 333 NATIONAL LAW REVIEW XI (Nov. 29, 2021).