On August 9, 2021, the UN Intergovernmental Panel on Climate Change (IPCC) released a report scientifically establishing that “[c]limate change is already affecting every inhabited region across the globe with human influence contributing to many observed changes in weather and climate extremes.”¹ The Biden administration has emphasized that climate change threatens U.S. national security interests, and it worked to ramp up global ambition for governments’ commitments at the twenty-sixth Conference of the Parties (COP26) to the UN Framework Convention on Climate Change in Glasgow in November.² COP26 prompted the announcement of a number of climate-related pledges and declarations, including the U.S.- and EU-led Global Methane Pledge, and it culminated in the Glasgow Climate Pact. The conference’s success in limiting global warming will depend on global leaders’ willingness to follow through on the commitments they made. The Biden administration has announced administrative regulations aimed at decreasing U.S. emissions of methane and hydrofluorocarbons (HFCs) and has requested that the Senate advise and consent to ratification of the Kigali Amendment to the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer. The administration is also awaiting congressional passage of significant funding for Biden’s climate agenda, while moving ahead with executive actions focused on sustainability.

At COP21 in 2015, states concluded the Paris Agreement and committed to limit global warming “to well below 2 degrees Celsius above pre-industrial levels” while “pursuing efforts to limit the temperature increase to 1.5 degrees Celsius.”³ As the world heads toward surpassing the 1.5 degrees Celsius goal in the coming decade,⁴ some global leaders, including the Biden administration, have renewed calls for increased ambition in combatting the climate crisis. Upon taking office, President Biden quickly rejoined the Paris Agreement, reversing the Trump administration’s 2020 withdrawal, and appointed John Kerry as the cabinet-level special presidential envoy for climate.⁵ The Biden administration has framed the climate crisis as a national security and foreign policy risk.⁶ The Office of the Director of National Intelligence’s first-ever National Intelligence Estimate on Climate Change determined that:

³ Paris Agreement, Art. 2(a), opened for signature Apr. 22, 2016, TIAS No. 16-1104; see Kristina Daugirdas & Julian Davis Mortenson, Contemporary Practice of the United States, 110 AJIL 374 (2016).
⁴ IPCC, supra note 1, at 14–15.
climate change will increasingly exacerbate risks to US national security interests as the physical impacts increase and geopolitical tensions mount about how to respond to the challenge. Global momentum is growing for more ambitious greenhouse gas emissions reductions, but current policies and pledges are insufficient to meet the Paris Agreement goals. Countries are arguing about who should act sooner and competing to control the growing clean energy transition. Intensifying physical effects will exacerbate geopolitical flashpoints, particularly after 2030, and key countries and regions will face increasing risks of instability and need for humanitarian assistance.7

In the lead up to COP26, the Biden administration advocated for multilateral cooperation on climate change and pushed states to be more ambitious in their emissions reduction goals. Kerry crisscrossed the globe lobbying governments,8 focusing in particular on China and India, both of which are major greenhouse gas emitters.9 China alone produces twenty-seven percent of the world’s greenhouse gas emissions, the United States comes second with eleven percent, and India is third with 6.6 percent.10 As the United States and EU push states to do more to address climate change,

China, India and other developing nations have long noted that . . . the United States and Europe grew their economies while generating massive amounts of greenhouse gases, and that requiring the developing world to clamp down on emissions as they industrialize and bring millions of citizens into the middle class is unfair.11

Moreover, after a meeting with Kerry in September, Chinese Foreign Minister Wang Yi warned that “China-U.S. cooperation on climate change cannot be divorced from the overall situation of China-U.S. relations,” which he described as “facing serious difficulties.”12

Although these tensions tempered expectations for COP26, the meeting ultimately resulted in the rollout of numerous pledges and agreements and culminated in the Glasgow Climate Pact.13

11 Id.
One area in which the United States took a leadership role was methane emissions. On September 18, 2021, the United States and EU announced an initiative to reduce global methane emissions and officially launched the Global Methane Pledge at COP26 on November 2.\textsuperscript{14} Relying on the IPCC’s report, the White House emphasized that “[m]ethane is a potent greenhouse gas and . . . accounts for about half of the 1.0-degree Celsius net rise in global average temperature since the pre-industrial era,”\textsuperscript{15} and that “[r]apidly reducing methane emissions is . . . the single most effective strategy to reduce global warming in the near term and keep the goal of limiting warming to 1.5 degrees Celsius within reach.”\textsuperscript{16} By the official launch, “over 100 countries representing 70% of the global economy and nearly half of anthropogenic methane emissions”\textsuperscript{17} had signed the pledge, which requires signatories to commit to “a collective goal of reducing global methane emissions by at least 30 percent from 2020 levels by 2030,” a benchmark that, if achieved, “would reduce warming by at least 0.2 degrees Celsius by 2050.”\textsuperscript{18} Notably, China, Russia, and India, the world’s three largest methane emitters,\textsuperscript{19} have not signed the pledge.\textsuperscript{20} Russia’s lack of a commitment follows a recent large methane release from a gas leak attributed to a majority state-owned energy corporation, a leak detected by new satellites developed to locate and measure greenhouse gases.\textsuperscript{21}

To fulfill its Global Methane Pledge commitment, the Biden administration announced a Methane Emissions Reduction Action Plan to reduce U.S. emissions, which rank fourth in the world.\textsuperscript{22} As a central part of this plan, the U.S. Environmental Protection Agency (EPA) issued a proposed rule that would extend methane regulations to the oil and natural gas industry,\textsuperscript{23} which “is the largest industrial source of methane emissions” in the United States.\textsuperscript{24} According to the EPA, the proposed rule would reduce methane emissions by “41 million tons” from 2023 to 2035.\textsuperscript{25}


\textsuperscript{15} White House, supra note 14.

\textsuperscript{16} Id.

\textsuperscript{17} U.S. Dep’t of State, supra note 14.

\textsuperscript{18} Id.


\textsuperscript{20} U.S. Dep’t of State, supra note 14.


\textsuperscript{25} Id.
At COP26, the United States signed onto a number of other pledges as well. For example, the United States signed the Glasgow Leaders’ Declaration on Forests and Land Use, a pledge to end deforestation by 2030. The declaration’s signatories contain over ninety percent of the world’s forests, which absorb carbon dioxide and slow the pace of global warming. The United States also signed the UK-led Statement on International Public Support for the Clean Energy Transition, a commitment to “end new direct public support for the international unabated fossil fuel energy sector by the end of 2022,” which could shift an estimated $17.8 billion a year out of fossil fuels and into clean energy. This transition away from fossil fuel finance is bolstered by “recent announcements from China, Japan and South Korea to end overseas coal financing which now means all significant public international financing for coal power has effectively ended.” The state of California went a step further in this area by joining the new Beyond Oil & Gas Alliance, which “launched at COP26” and “bring[s] together national and subnational governments committed to advancing a just transition away from oil and gas production.” The private sector also made significant commitments, with the Glasgow Financial Alliance for Net Zero, “[a] coalition of the world’s biggest investors, banks and insurers that collectively control $130 trillion in assets,” announcing that its members would “use that capital to hit net zero emissions targets in their investments by 2050.”

Despite uncertainties before the conference and ongoing tensions in their bilateral relationship, the United States and China reached agreement at COP26 on the U.S.-China Joint Glasgow Declaration on Enhancing Climate Action in the 2020s. Noting that the countries are “the world’s two biggest economies and emitters,” the White House described the Declaration as a commitment “to collaborate on increased ambition to keep 1.5 degrees Celsius warming within reach,” and highlighted that “China for the first time committed to develop a plan to address methane emissions and accelerate its coal phase-down.”

27 Id.
33 White House, supra note 13.
China called the declaration “an important solution to bridging differences among parties.”

On November 13, 2021, COP26 culminated in the signing of the Glasgow Climate Pact. The Pact, which is a nonbinding instrument, calls upon parties to the Paris Agreement “to accelerate the development, deployment and dissemination of technologies . . . to transition towards low-emission energy systems” and “accelerate efforts towards the phase-down of unabated coal power and phase-out of inefficient fossil fuel subsidies.” Although the treatment of fossil fuels is significant, it does not go as far as an earlier draft, which called for countries to “phase out” the use of unabated coal power. The final language was changed to “phase-down” after India “backed by China and other coal-dependent developing nations” objected.

The Pact requests that states accelerate their plans for emissions reductions by 2022. The Paris Agreement requires that every five years states party prepare national plans, known as Nationally Determined Contributions (NDCs), describing how much they will reduce their emissions. The IPCC previously highlighted that the world needed to reach net zero carbon emissions by 2050 to avoid the worst consequences of climate change, and major states have moved to announce their net zero carbon goals. In April 2021, the United States submitted an NDC that “exceeds the pace required . . . to achieve net-zero emissions, economy-wide, by no later than 2050.” In 2020, Chinese President Xi Jinping announced that China would “achieve a peak in carbon dioxide emissions before 2030 and carbon neutrality before 2060” and reconfirmed this commitment in its updated NDC in October 2021. Leading up to COP26, India had rejected calls to announce a net zero carbon emissions target, but then at the conference, India pledged to reach net zero by


36 Id., para. 36.


38 Id.

39 Paris Agreement, supra note 3, Art. 4(9).


While the terms of the Paris Agreement require updated NDCs in 2025, the Glasgow Pact speeds up the timeline and “requests Parties to revisit and strengthen the 2030 targets in their nationally determined contributions as necessary to align with the Paris Agreement temperature goal by the end of 2022.”

Lastly, the Pact suggests that additional funding for developing countries, and funding for climate change reparations in particular, could be determined in the near future. Beginning in 2009, developed countries committed to “a goal of mobilizing jointly USD 100 billion per year by 2020” to help developing countries tackle climate change. Although funding has increased in recent years, developed countries have not yet met the $100 billion commitment, a fact that the Pact “[n]otes with deep regret,” while also “welcom[ing] the increased pledges made by many developed country Parties.” Further, although the Pact “acknowledges the important role of a broad range of stakeholders . . . in averting, minimizing and addressing loss and damage associated with the adverse effects of climate change,” it does not create a dedicated fund for redressing harms done to climate vulnerable countries, and instead establishes a dialogue to discuss such funding. From the U.S. perspective, Biden announced in a speech to the UN General Assembly in September that the United States would quadruple its “public international financing to help developing nations tackle the climate crisis,” but fulfilling that pledge requires congressional approval.

Leaders’ reactions to the outcomes of COP26 were tempered. At the conclusion of the conference, COP26 President Alok Sharma said, “we can now say with credibility that we have kept 1.5 degrees [Celsius] alive. But, its pulse is weak and it will only survive if we keep our promises and translate commitments into rapid action.” The White House touted progress at COP26, but emphasized that “it is not enough” and that “[m]ore work remains as
we leave Glasgow to get where science tells us we need to be.”  

UN Secretary-General António Guterres similarly noted that although COP26’s outcomes “are welcome steps, . . . they are not enough,” calling them “a compromise” that “reflect[s] the interests, the conditions, the contradictions and the state of political will in the world today” and urging that “[i]t is time to go into emergency mode.”  

According to the Climate Action Tracker think tank, “[e]ven with all new pledges and . . . sectoral initiatives for 2030, global emissions are still expected to be almost twice as high in 2030 as necessary . . . for a 1.5°C compatible pathway.”  

Looking longer term, the International Energy Agency concludes more optimistically that COP26 commitments “would be enough to hold the rise in global temperatures to 1.8°C by the end of the century” should they be implemented successfully.

In addition to its efforts at COP26, the United States is also taking significant action on HFCs, which are “potent greenhouse gases that can be hundreds to thousands of times more potent than carbon dioxide.” The American Innovation and Manufacturing (AIM) Act, which passed Congress with bipartisan support in December 2020, “mandates the phase-down of [HFCs] . . . by 85 percent over a period ending in 2036” and “directs the [EPA] to implement the phasedown by issuing a fixed quantity of transferrable production and consumption allowances, which producers and importers of hydrofluorocarbons must hold in quantities equal to the amount of hydrofluorocarbons they produce or import.”  

EPA issued a final rule in September 2021 implementing the phase down, and the agency estimates that from 2022–2050, the rule “will avoid cumulative emissions of 4,560 million metric tons of exchange value equivalent of HFCs in the United States.”

Notably, the EPA’s HFC rule appears to “align” U.S. HFC reductions with commitments in the Kigali Amendment to the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer. The United States ratified the Montreal Protocol in 1988, but the rise of HFCs as a popular alternative to the ozone-depleting substances previously used in cooling equipment and increasing demands for “refrigeration and air conditioning, particularly in

54 White House, supra note 13.  
61 Id.  
developing countries,” led to negotiation of the Kigali Amendment to phase down HFCs. Under U.S. leadership, countries adopted the Kigali Amendment in 2016 “to cut the production and consumption of HFCs by more than 80 percent over the next 30 years,” allowing the world to “avoid . . . up to 0.5° Celsius warming by the end of the century.”

The Kigali Amendment entered into force on January 1, 2019, but the Trump administration did not submit it to the Senate. In Executive Order 14,008 in January 2021, President Biden directed the secretary of state to prepare to send the Kigali Amendment to the Senate, and on November 16, Biden formally transmitted the Amendment to the Senate, marking the first time the Biden administration has asked the Senate to consent to ratification of an Article II treaty. Senate Foreign Relations Committee Chairman Sen. Bob Menendez (D-NJ) pledged to move the ratification process forward “in the coming months,” and noted that he expects the Amendment to “receive strong bipartisan support” in the Senate.

Congress is also considering Biden’s Build Back Better Act, which provides for up to $555 billion in financing for climate programs, and if adopted would be “the largest action ever taken by the United States to address climate change.” The bill, which passed the House in November, “would provide tax incentives for expanding clean energy generation, electric vehicles, transmission lines and other infrastructure to curb greenhouse gas emissions,” while also fostering “climate-friendly investments in clean energy technology development, manufacturing and the supply chain.” The Sierra Club called the bill “transformative,” but it must now face the Senate, where its final form and passage are uncertain.

In the meantime, on December 8, Biden signed an executive order directing the federal government to

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65 Coral Davenport, Nations, Fighting Powerful Refrigerant That Warms Planet, Reach Landmark Deal, N.Y. TIMES (Oct. 15, 2016), at https://www.nytimes.com/2016/10/15/world/africa/kigali-deal-hfc-air-conditioners.html (“The Kigali deal came about in part because Mr. Obama, as he sought to build a legacy of tackling climate change, elevated the obscure effort to amend the Montreal Protocol to a top White House priority.”).
“use its scale and procurement power to” meet sustainability goals, including “100 percent carbon pollution-free electricity” by 2030 and “100 percent zero-emission vehicle acquisitions by 2035.”

In July 2021, the U.S. Department of Justice announced two indictments charging Iranian and Chinese government officials and others acting at their behest with a variety of crimes stemming from two separate plots to coerce U.S. residents to return to those countries. The first involved four Iranians and a U.S. resident who took steps to kidnap a U.S. citizen of Iranian origin and transport her to Iran to answer for regime criticism. The second charged nine individuals, including a Chinese prosecutor and a policeman, with crimes relating to an operation to surveil, harass, and threaten U.S. residents with the aim of compelling their return to China. U.S. officials denounced the operations as contrary to human rights and the rule of law.

The U.S. indictments follow several recent high-profile examples of authoritarian states targeting dissidents abroad in operations that have drawn international condemnation. For example, on February 13, 2017, two unwitting assassins directed by North Korean agents doused Kim Jong-nam, the “estranged elder brother” of North Korean leader Kim Jong-un, with a VX nerve agent in the Kuala Lumpur International Airport, leading to his death.1 The incident damaged relations between North Korea and Malaysia and prompted the United States to sanction North Korea.2 In another case, on March 4, 2018, two members of Russia’s G.R.U. military intelligence agency applied the Novichok nerve agent to the door-knob of former Russian spy and corruption whistleblower Sergei Skripal in Salisbury, England resulting in the near fatal poisoning of him and others, as well as at least one

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